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CHALLENGING CORRUPTION: A VIOLATION OF HUMAN RIGHTS IN INDONESIA

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Abstract: *Corruption in the public sector can have a sever negative impact upon human dignity, however in the context of corruption as a violation of human rights is relatively new. Corruption is now recognized as the most challenging governance problem afflicting many countries. The crisis focused people's attention on the staggering impact of corruption in Asia particularly in Indonesia. This paper examined how corruption can threaten human rights; how weak human rights promotion and protection can create conditions increasing corruption. The important and timely work adopts a new approach for analysing corruption as a violation of human rights. Highlighting the inherent deficiencies in the existing institutions, mechanism, laws and law enforcement. The conceptual approach is used to study the views and doctrines that develop within the jurisprudence, to determine the challenge of controlling corruption in both public and private sectors remains formidable. The paper proposes the adoption of a multi strategy for eliminating corruption in Indonesia as one of Asean's most repressive, centralized and democratic nation*

Keyword: *Challenging, Corruption, A Violation of Human Rights, Indonesia.*

Introduction

C. Raj Kumar wrote, "corruption is a problem that has serious implications for both protecting the rule of law and ensuring acces to justice, corruption also promotes mis-governance as it affects the integrity of the legal, judicial, and administrative apparatus." In the context of the human rights implications of corruption, the right to access to justice and its linkages with corruption, the rights of an individual to have access, and the obligations of the government to provide it.¹ The present paper intends to examine the human rights implicatons of corruption in Indonesia. It will discuss the existing legal and institutional frameworks for controlling corruption in Indonesia and in particular the implication of corruption for protecting and promoting human rights. While preparing this paper, the author is mindful of the inherent weaknesses of legislative reforms in Indonesia, as well as the crises of law enforcement.

There have been many challenges for the judiciary in dealing with corruption since a number of governance indicators reveal that corruption remains a significant obstacle to development in Indonesia. A challenge faced in all sectors of administration in this country. Indonesia has transformed from one of Southeast Asia's most repressive and centralized

¹ Kumar C. Raj (2011), *Corruption and Human Rights in India: Comparative Perspectives on Transparency and Good Governance* Oxford:Oxford University Press , p 2-4

political system to its most decentralized and democratic.² Post Soeharto 1998 until present, Civil liberties are central to the Indonesian criminal justice process. Comprehensive human rights instruments make a massive contribution to understanding the essential dynamics of the process.³ Yet, while not entirely hidden, human rights have rarely been centre state in Indonesia legal system. This paper is the product of ideas by the lives of Indonesian People who have been locked away for decades to access justice as fairness due to the new reforms and institutions have fostered corruption instead of corruption control.

The purpose of the study is to provide a new framework of law, to apply the rule to the facts based on the morality Government political commitment for legislative and insitutional reforms to fight corruption without violates human rights. This paper focused to ensure access to justice to Indonesian people, in this context that corruption and its elimination becomes critical for ensuring access to justice. In other words access to justices cannot be achieved in Indonesia without eliminating abuse of power, abuse of process and ending discrimination due to the obstruction of justice in criminal process by the politic influence and its law enforcement in corruption case. As Francesco Francioni is Professor at the European University Institute, Florence wrote ‘As in any domestic legal system, respect and protection of human rights can be guaranteed only by the availability of effective judicial remedies. When a right is violated, access to justice is of fundamental importance for the injured individual and it is an essential component of the system of protection and enforcement of human rights’.⁴ By introducing a rights into the analysis of corruption case, for that purpose it is interesting to note that the law has either been misapplied or misunderstood in a decison which it has previously given, and that on the strength of that decision, an accused person has been sentenced and imprisoned, it is bounded duty of the law enforcement to reconsider the earlier decision with a view to seeing whether that person has been properly convicted. As Oliver Wendell Holmes (1841-1935) was one of the founders of the school of thought known as American Realism says, we can begin to understand “the central tenet of which is that what actually happens in the courts is what really matters. Placing the emphasis on ‘law in action’ rather than ‘law in books’, ‘the prophecies of what courts will do in fact, and nothing moreprentiojs, are what I mean by the law’”.⁵

Method of this paper based on normative juridical research, as Mc Leod wrote, “One of the major concerns of legal method is to identify ‘the scope of the courts’ power to develop the law. It follows from this that, although the study of constitutional law is a substantial exercise in it s own right, the study of legal method must include at least an oeverview of the legal basis of the constitution as the foundatin of any real understanding”.⁶ This paper, therefore consider the legal frame work of International and National law and consider various aspects of Indonesian community context and deals with the growing importance of an awareness of the place of human rights within legal method. The present paper analysis that the challenge of establishing a rule of law to fight corruption remains unachieved. The exsting govenmental machinery across the State and Central

² Butt, Simon (2017), *Corruption and law in Indonesia*, NY:Routledge

³ Hurst, William, *Ruling Before The Law The Politics of Legal Regimes in China and Indonesia*, UK:Cambridge University Press, p 83-84

⁴ Francioni, Francesco (2007), *Access to Jutice*, NYC:Oxford University Press, p1

⁵ Holmes, Oliver Wendell (1897) *The Path of the Law*, 10 Harv LR 457 cited in McLeod, Ian (1999), *Legal Method*, UK:Macmillan Press LTD, p 4

⁶ Ibid.

Governments has not been able to inspire confidence among the people of Indonesia as far as eliminating corruption is concerned.

According to the Human Rights Watch observed in 2017 President Joko “Jokowi” Widodo’s rhetorical support for human rights has yet to translate into meaningful policy initiatives to address the country’s serious rights problems. The Jokowi government is proving to be all talk and no positive action in terms of meaningfully addressing Indonesia’s serious human rights problems.⁷ Indonesia has come a long way since the Suharto dictatorship and the government has made a lot of progress with regards to human rights. Government have signed up to numerous international human rights treaties, they have undertaken legal reforms, but over the last four to five years we’ve seen this reforms stagnate as well as an increase in some human rights violations happening in the country.⁸

Despite that we are seeing a lack of implementation of their commitments on human rights. However on the corruption prevention Corruption prevention and eradication (CPE) have become two of the main focuses of the government of Indonesia following the reform era. The determination to carry out CPE began with the establishment of new implementing agencies and the consolidation of government policies and through community awareness. The administration of President Joko Widodo (Jokowi), elected in 2014, has reinforced Indonesia’s commitment to CPE by issuing Presidential Instruction no. 10 of 2016 on the Prevention and Eradication of Corruption 2016–2017.⁹ The people of Indonesia had strong hopes that President Joko Widodo would tackle Indonesia’s corruption problem. Nevertheless over a year into his presidency, a Transparency International report suggests that little progress has been made in the crucial defence sector – casting doubts on the success of the anti-corruption push as a whole.¹⁰

In the face of corruption challenge, this paper research poses the questions, why are so many high level public official, senator or politicians are being convicted of corruption in Indonesia? What is the State action?and whether it even makes sense to speak of human rights violations in corruption case?. To answers all of those questions, we have to examine in generally corruption and its consequences for good governance as a key item on the Indonesian agenda since post reform Soeharto’s era in 1998. Moreover, we broadly examine how corruption debases human rights and its relationship with Human rights values, norms, and standards. Finally this paper makes a compelling case that battling corruption in Indonesia is much more than a criminal justice issue, it is fundamental to the empowerment of the Indonesian people and the establishment of the rule of law in the one of Asean’s most repressive, centralized and democratic nation.

⁷ Human Rights Watch (2017), *Indonesia: Silence, and Complicity on Human Rights Abuses*. Available from:<http://www.hrw.org/news/2016/08/16/indonesians-president-jokowi-silent-human-rights> (Accessed 19 August 2018)

⁸ DW News Current Affairs from Germany (2014), *Indonesian vote: 'An opportunity to improve human rights'* Available from:<https://p.dw.com/p/1Cxxar>

⁹ Glen Maaail, World Wide Web Foundation-Transparency International (2017), *Open Data and The Fights Against Corruption in Indonesia*. Available from:http://webfoundation.org/docs/2017/04/2017_OpenDataIndonesia_EN-2.pdf (Accessed 21 August 2018)

¹⁰ Scott, Edward (2016), *Indonesia's struggle to end corruption is hitting snag after snag*, Journal of Law University of Birmingham. Available from:<https://www.birmingham.ac.uk/research/perspective/indonesia-corruption.aspx> (Accessed 20 August 2018)

Corruption And Good Governance

How people understand corruption? Pippidi A.Mungiu wrote, ‘the majority of citizens do not believe the enjoy corruption control, hence the growing frustration we see on the streets’.¹¹ More specific typologies of corrupt behavior, posed by Kaushik Basu, differentiates between ‘harassment’ bribes, those ‘that people often have to give to get what they are legally entitled to’, and ‘non-harassment’ bribes, which are those ‘that are believed to occur when government gives out big development contracts.’¹² A mutual arrangement between a donor and a recipient, actively pursued by, and to the mutual advantage of both parties, whereas the latter entails some form of compulsion, usually to avoid some form or harm being inflicted on the donor or those close to him/her.¹³ Corruption in Indonesia is systemic and has a long history, even longer than the history of the Unitary State of the Republic of Indonesia itself. In the post-independence period, the new order era to the post-reform era, corruption remained rampant.¹⁴ Corruption is a phenomenon that is widely prevalent in the administrative system of Indonesia and is one of Indonesia’s most nagging problems, impeding growth and development. Indonesia has a long way to go in the fight against corruption.

Based on the Corruption Perceptions Index (CPI) measures in 2014 the perceived levels of public sector corruption in Indonesia among other Asia Pacific Countries, it paints an alarming picture.¹⁵ Indonesia score indicates the perceived level of public sector corruption on a scale of 34 (highly corrupt) to 100 (very clean) index includes 175 countries. According to José Ugaz, Chairman of Transparency International Organization “Corruption is a problem for all countries. A poor score is likely a sign of widespread bribery, lack of punishment for corruption and public institutions that don’t respond to citizens needs”.¹⁶ The question then becomes, what do we do about it? Due to the real impact of corruption crises, What can we do to transform Indonesia government to ‘good governance’?.

The term of good governance a popular topic for discussion is Asia particularly in Indonesia. The term ‘good governance’ has been popularized in Indonesia mainly due to the strong push by the World Bank and other international organization, particularly those active in the areas of development assistance and finance.¹⁷ According to Wolfensohn a President of World Bank (1995-2015) in his speech at the parliamentary network of the

¹¹ Pippidi, Alina Mungiu (2015). *The Quest for Good Governance, How Society Develop Control of Corruption*, UK:University of Cambridge, p 5

¹² Basu, Kaushik (2011). *Why, for a Class of Bribes, the Act of Giving a Bribe should Treated as Legal*, Minisry of Finance, Government of India Working Paper No.1/2011-DEA p 3-8, as cited in Bussel, Jennifer in Ackerman, Susan Rose. Lagunes, Paul (2015). *Greed, Corruption, and the Modern State*, UK:Edward Elgar Publishing Limited, p 22

¹³ Heywood, Paul (1997). *Political Corruption:Problems and Perspectives*, *Political Studies* XLV:417-35 as cited in Ibid.

¹⁴ The Head of Indonesian Eradication Commission (2014), *8th Agenda Anti-Corruption for the President 2014-2019*, Jakarta: KPK, p 9

¹⁵ Transparency International (2014), *Corruption is Threatening Economic Growth for all*. Available from:<https://www.transparency.org/cpi2014/results> (Accessed on 18 August 2018)

¹⁶ Ibid.

¹⁷ Tambunan, . (2000). *Indonesia’s New Challenges and Opportunities:Blueprint for Reform after the Economic Crises*, *East Asia: An International Quarterly*, 18(2), pp.50 as cited in Rahman, Arief (2011). *Good Governance, Democracy and Economic Development The Case of Indonesia*, Germany:LAP Lambert Academic Publishing, p1

World Bank conference, Athens, March 9, 2003, said ‘we cannot do the most effective work in countries on corruption by indicating how it should be health with or by setting forth reform mechanism. Of course, we do this, but corruption can only be addressed from the inside, in our experience. It is only when the citizens themselves decide they want to rid the country of corruption that it really happens’.¹⁸

Discussion of the term ‘good governance’ is part of a new discourse in Indonesia. The Post Soeharto’s Era in 1998 marked the beginning of governance reform process. Since then Indonesia has undertaken several efforts to improve the commitment to governance. The reform era has seen Indonesia's criminal justice institutions re-establish their independence, upgrade their capabilities and improve their responsiveness to human rights. In 2003 the Supreme Court adopted a comprehensive Blueprint for Reform. As a result, the Indonesian judiciary has transformed into an independent branch of Government. Other Government of Indonesia entities, such as the Attorney General's Office and Indonesian National Police as well as Commission Eradication Corruption (KPK) adopted their own reform plans. Despite further strengthening of their operational and managerial competency to effectively perform their mandates is required, but in practice salaries for many justice sector officials barely cover basic needs, negatively impacting enforcement. Coordination and cooperation amongst key institutional actors is also weak, hindering reform efforts.¹⁹ These are huge challenges in relation to reform the criminal process in cases relating to corruption. The criminal justice system is marred by such a degree of uncertainty and inefficiency coupled with corruption that the judicial process of corruption cases ending in a conviction seems to be a distant dream.²⁰

Ackerman wrote ‘despite the reforms and the many institutions and laws to improve governance, however the result seem ineffective at best. Indonesia has severe weaknesses in politics, finance, public procurement, court and security hidden behind its image of a modern democratic state. The country is still dependent on development and lending. Therefore, those who seek corrupt revenue need to hide their illegal transactions behind some kind of façade, typically a cosmetic reform that is too good to be true.’²¹ Given the harm it is said to cause, the administration of President Joko Widodo (Jokowi), has reinforced Indonesia’s commitment in eliminating corruption by issuing Presidential Instruction no. 10 of 2016 on the Prevention and Eradication of Corruption 2016–2017. The regulation includes 31 action plans within seven high-priority areas according to the president’s programs, namely: (1) public procurement; (2) extractive industry; (3) infrastructure; (4) the private sector; (5) state revenue; (6) commerce; and (7) state-owned companies.²² How Jokowi mobilize and reform to control corruption have made Indonesia’s score in the 2015 global Corruption Perceptions Index (CPI) improved from 34 to 36 points moving to 88th place in the ranking, from 107th the previous year. Moreover in 2016 and 2017 slightly improved score to 37 points, however in the ranking place moving to 96th from 90th the previous year. This is an encouraging development, although the nation is still quite low in the ranking. Judging by the latest string of

¹⁸ World Bank (2005). *Voice For the World’s Poor*, DC:The World Bank, p179

¹⁹ United Nations Office for Drugs and Crimes (2016), *Indonesia Criminal Justice System*. Available from:<https://www.unodc.org/indonesia/en/issues/criminal-justice.html> (Accessed on 20 August 2018)

²⁰ Op.Cit., Kumar C. Raj (2011)

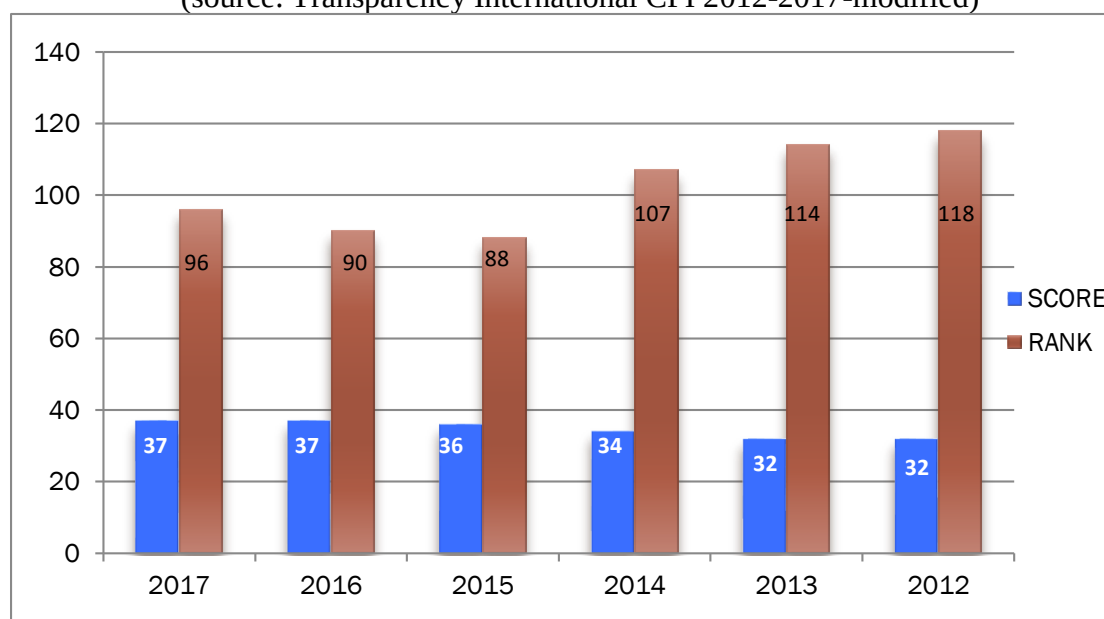
²¹ Op.Cit., Ackerman (2015) p.63

²² Op.Cit. Glen Maail, World Wide Web Foundation-Transparency International (2017).

corruption cases in Indonesia, it will be hard for the country to improve its lowly 2016 ranking of No 90 out of 176 countries on Transparency International's Corruption Index²³

Figure 1 : RANK and SCORE INDONESIA 2012-2017 CORRUPTION PERCEPTIONS INDEX

(source: Transparency International CPI 2012-2017-modified)



The losses suffered by the state in Indonesia's due to many biggest corruption cases from the level of Nation crime to the level of a diseases that permeates society. And it is felt by the poorest levels of society. For example the first one of Indonesia's biggest scandals the collapse of PT Bank Century TBK in 2008 and its subsequent US\$710 million bailout – are playing out in a Singapore courtroom, where a Mauritius-based hedge fund is trying to find out what became of more than US\$115 million that the fund claims as its own. The Indonesian Commission Eradication Corruption (KPK) has just named the former Deputy Governor of Bank Indonesia (BI) Budi Mulya as a convict in the Century case. Budi has been named a suspect since 2013. The panel of judges at the Corruption Court sentenced Budi to 10 years in prison. At the cassation level, the Supreme Court escalated Budi's sentence to 15 years. At that time, the judge of Supreme Court declared that Budi was guilty of misusing his authority in the provision of short-term funding facilities (FPJP) and the determination of Bank Century as a failed bank created the systemic impact. The Century case is said to cause a state loss of up to trillions of rupiah involves Boediono the former Governor of Bank Indonesia and the Vice President of Republic Indonesia (2009-2014) and his colleagues were mentioned in Budi Mulya's prosecution document. Despite Budi has been subjected to a final legal verdict, however

²³ Transparency International (2017). *Transparency International's Corruption Perceptions Index*. Available from: <https://www.transparency.org/cpi2017/results> (Accessed on 18 August 2018)

Boediono do not automatically become suspects since investigation into the Bank Century affair has been riddled with controversy and subjected to political pressure.²⁴

The Second biggest case involves electronic identity cards with the main suspect of the case is the House of Representative (DPR) speaker and Golkar chairman Setya Novanto. While other suspects are now on trial, finally Novanto's sentenced 15 years imprison. A fall from grace for Novanto as the Speaker of Indonesian Parliament became paramount in relation to coalitions of politico bureaucratic and business interest, state power and policy. Both cases are painful reminders that corruption is still a crippling problem in Indonesia, despite President Joko Widodo's ability in maintaining a clean personal image. To be sure, Mr Widodo faces a daunting task in tackling corruption.

Corruption Debases Human Rights

The concept of corruption has changed over the centuries and varies somewhat across cultures.²⁵ Growing evidence of climate change along with continuing threat of global corruption and memories of the meltdown of financial markets in 2008, has brought home to people around the world the complex problems we face today.²⁶ Corruption impacts upon individuals, groups and organizations (including the state) in numerous ways, while many of its negative effects are obvious, other are less so.²⁷ The many aspect of the relationship between corruption and human rights are, if anything more apparent in the relationship between human rights and criminal procedural.²⁸ Kumar Raj C. wrote, the human rights framework has challenged the traditional understanding of sovereignty in the context of globalization. The goal of every sovereign state is to ensure national security for its people so that peace and stability prevail in society. Corruption has the potential to threaten this achievement of national security. A sovereign state ought to ensure that laws are enforced in a nondiscriminatory manner. Corruption does not allow this to happen. Hence, the criminalization of politics and politicization of crimes has become a common practice in South Asian Countries.²⁹

Corruption debases human rights, in practice corruption hurts the poor most of all, while the rich bribe for speed, the poor have to bribe for access, even to basic services. The poor pay a higher proportion of their income in bribes than any other income group, they find it harder to get jobs or start business, their property rights are more insecure and they suffer from poor services or no services at all.³⁰ Such as lack of access to get National Electronic Identification Card due to the numerous high-profile bureaucrats being tied to the corruption scandal. According to Indonesia's Commission Eradication Corruption (KPK), of the IDR 6 trillion (US\$450m) that was budgeted by Government

²⁴ Indonesian Supreme Court (2015). *Cassation Ruling* case number 861 K/Pid.Sus/2015 dated 8 April

²⁵ Holmes, Leslie (2015). *Corruption A Very Short Introduction*, Oxford:Oxford University Press, p 1

²⁶ Karns, P. Margaret, Mingst A. Karen, Stiles, W. Kendall (2015). *International Organizations The Politics & Processes Of Global Governance*, UK:Lynne Rienner Publishers, Inc. p 1

²⁷ Holmes (2015). *Op.Cit.*, p 18

²⁸ Ivory, Radha (2014). *Corruption, Asset Recovery, and the Protection of Property in Public International Law The Human Rights of Bad Guys*, UK:Cambridge University Press, p 6

²⁹ Kumar C. Raj (2011). *Op.Cit.* p 61-62

³⁰ Bhargava, Vinay., Bolongaita, Emil (2004). *Challenging Corruption in Asia, Case Studies and a Framework for Action*, DC:The World Bank, xi

for the roll-out of the project, some IDR 2.3 trillion (US\$172m) had been misappropriated. Corruption involving the procurement of electronic identification cards (e-KTP) is alleged to have affected the good public perception of a single identification system that the Indonesian government is trying to establish.³¹ The Paper aims to demystify certain misconceptions surrounding a complex phenomenon aspects of corruption that are less well known and hence tend to be ignored. Sometimes behind closed doors, sometimes openly on the floors of parliaments, laws are passed, which allow corruption to be legal. Meanwhile, misleadingly termed ‘petty corruption’ can be just as, if not more, crushing as ‘grand corruption’, violates the rights of the poor people.

Conclusions

Indonesian Government need designing a coherent anticorruption strategy focus on prevention. Given a fair governance environment to pursue reforms in all of areas at the same time (law enforcement, judiciary, politic and economy). One of the establishment the rule of law for fighting corruption is the Anti-Corruption Commission (KPK) and the Anti-Corruption Court (ACC), established in 2003. The team were designed to take particular types of corruption cases. In the Indonesian criminal justice system The KPK is one of the components to the systems beside the Police, the Attorney General and the Court. However KPK’s authority to initiate and to take over corruption cases. Other power aimed at making KPK investigations and prosecutions easier and convictions more likely in the ACC. KPK appoints and dismisses its own criminal investigators and prosecutors. All of the enforcers are working under one roof called KPK. Despite all extra ordinary powers KPK has, in the criminal process the KPK is as a general principle subject to the Indonesian Code of Criminal Procedure Law No.8/1981 (KUHAP). A rights based on analysis of criminal justice procedure in corruption cases is a complex task. This is because in Indonesia, rights reasoning and the application of human rights principles are largely not structured around and established and identifiable human rights enactment or framework. The relationships of Corruption and potential human rights debases are obvious. Every crime is a form of human rights violation, since every crime is bound to disturb people’s lives. Establishing the new performance of political rule. An assessment of the political culture is needed to reveal the level of trust that people have, trust is an effective determinant of social capital and the capacity of community to coordinate their efforts.

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³¹ Kompas (2017). *Corruption Destroys E-KTP Program*, (Online) 14-03-2017, Available from: <https://kompas.id/baca/english/2017/03/14/corruption-destroys-e-ktp-program/> (Accessed 24 August 2018)

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A REVIEW ON PASSIVE DESIGN CONFIGURATIONS EFFECTS ON NATURAL VENTILATION PERFORMANCE IN MULTI-STOREY RESIDENTIAL BUILDINGS OF TROPICAL CLIMATES

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Abstract: *Energy consumption and quality of indoor environment are the main challenges for multi-story residential buildings in tropical climates. MSRB users rely heavily on mechanical ventilation systems due to local climate conditions. Various studies revealed that natural ventilation can enhance thermal comfort indoor air quality and energy efficiency in multi-storey residential buildings. However, the application effects of passive design configurations in multi-storey residential buildings to improve natural ventilation performance for adequate thermal comfort and indoor air quality is still questionable. This paper focuses on reviewing studies that evaluated the application effects of passive design configuration on natural ventilation performance in multi-story residential buildings of tropical climates. By comparative analysis, on the efficiency and the limitation of the passive design configurations applied to achieve effective natural ventilation, suitable thermal comfort, and indoor air quality. Among the identified design configurations thermal comfort level, indoor air quality and natural ventilation performance are mostly enhanced through adequate building orientation, vertical voids, window configurations, and ventilation shafts. It was also found that studies mainly rely on CFD simulation and field measurement methods for the evaluation. Furthermore, the study highlights the importance of other passive design configurations for further evaluation in multi-story residential buildings.*

Keywords: *Energy conservation, Multi storey residential buildings, Natural ventilation, passive design configuration, Tropical climates.*

Introduction

Multi-story, highrise or tall buildings are common solutions in the city due to high land cost, population density and demand. Multi-storey residential buildings can be classified based on the height parameter into medium rise residential building with height varies between six (6) levels as a minimum to twelve (12) level and high rise residential building with more than twelve (12) levels (Kuan, 2013). The high rise buildings fundamental issues are thermal comfort, indoor air quality, and energy consumption especially the ones located in the tropical climates (Niu, 2004). Occupants of residential buildings achieve thermal comfort and indoor air quality through mechanical ventilation systems which increase energy consumption. As

results, more than two-thirds (2/3) of total energy is consumed by the residential sector for heating and cooling purposes (Orme, 2001). Mechanical ventilation systems consume over half of the energy in the residential building (Bastide, Lauret, & Boyer, 2006).

S. Wong et al., (2009) indicated that occupants of high rise residential buildings Apartments showed Sick Building Syndrome such as nasal issues as one the effects of using air-conditioned. In most developed countries, the residential building sector account of two-thirds of the total carbon dioxide emission (Nejat, Jomehzadeh, Taheri, Gohari, & Mueh, 2015). On the other hand, naturally ventilated residential buildings produce less of carbon dioxide compared to residential buildings that rely on air conditioning systems (Aflaki et al., 2015). Energy efficiency is required in the residential building sector due to the massive consumption of energy and the environmental effects of carbon dioxide (Nejat et al., 2015). Scholars indicated that there are significant potentials of reducing energy consumption, CO₂ emissions and achieve better internal environmental quality in the vital sector of residential building through passive cooling strategies. Passive cooling strategies are the methods of design that allows the building to adapt with the climatic conditions where the building located, in order to achieve energy efficiency, and suitable indoor environment quality without any cooling and heating systems (Chenvidyakarn, 2007).

Passive cooling systems used in tropical climates buildings are classified into natural ventilation cooling, cooling through radiation, evaporation and thermal mass cooling (Chenvidyakarn, 2007). The application of natural ventilation as an alternative passive strategy allows to reduce energy consumption, enhance thermal comfort and indoor air quality (IAQ) in multi-storey residential buildings (Fung & Lee, 2015). However, there are different factors that influence the efficiency of natural ventilation such as the local climatic conditions, where in tropical climates there is a lack in the temperature differences between indoor and outdoor environment (Ghiaus & Allard, 2012). The location of multi-story residential in the high-density urban area reduces airflow circulation through the building. Multi-storey residential buildings particularly high rise residential buildings characterized by a limited design where living units are connected to the outdoor environment only by exterior façade (Gaber, Farea, & Minna, 2012). Moreover, limited form configurations reduce the living units surface where the application of passive design configuration of low rise buildings in multi-storey residential buildings is complicated (Aflaki, Hirbodi, Mahyuddin, Yaghoubi, & Esfandiari, 2019)

This paper aim on reviewing the literature on the application effects of passive design configurations on natural ventilation performance, thermal comfort and indoor air quality in multi-story residential buildings of tropical climates.

Thermal comfort and indoor air quality in residential buildings

Thermal comfort is affected by the environmental conditions including air velocity, temperature, relative humidity and mean radiant temperature (Ainurzaman and Jamaludin 2014; Ashrae 2010; Callejon-ferre et al. 2011). The American Society of Heating, Refrigerating and Air-conditioning Engineering (ASHRAE 2013) defines thermal comfort as “that condition of mind that expresses satisfaction with the thermal environment.”. According to Lechner (2014), air velocity is the main parameter that influence thermal comfort level, in which air velocity of 2m/s reduce indoor air temperature by 3.9 °C. 0.2m/s to 1.5m/s is the required indoor air velocity to provide optimum thermal comfort in tropical climates (ASHRAE 2004).

Ventilation rate is the primary parameter to achieve adequate indoor air quality (F Allard & Ventilation, 2006; Francis. Allard, Santamouris, Alvarez, European Commission.

Directorate-General for Energy., & ALTENER Programme., 1998; Carrilho da Graça & Linden, 2016). The movement of fresh air in indoor spaces can achieve the required indoor

air quality without the use of air-conditioning systems (Wood & Salib, 2012). The required ventilation rate varies from country to countries based on the local climate condition. In tropical climates of Malaysia, the minimum ventilation rate required to achieve indoor environment quality is 0.14 -m³ per minute per construction area m² (UBBL 2013). the airflow rate requirement for the residential buildings in United Kingdoms is 0.4-1 Air change per hour per m² (CIBSE GUIDE A, 2006).

Natural ventilation principles in multi-story buildings

The pressure differences occurred on the aperture of building envelope generates natural ventilation due to the effects of external wind forces, temperature differences or both of them, where ventilation forces divided into wind-driven ventilation that resulted from wind forces and buoyancy driven ventilation that resulted from temperature differences (Wood and Salib 2012). Khan, Su, and Riffat (2008) clarified that pressure differences generated on the building envelope and around the apertures allow fresh air to enter the indoor space through the aperture located in the wall with positive pressure zone and move out from the aperture in the wall with negative pressure zone. Natural ventilation describes as the air flow movement to internal space between inlet and outlet where its divide into cross ventilation, single-sided ventilation, and stack ventilation (Wood & Salib, 2012).

In single-sided ventilation, airflow is derived from internal spaces and extracted from side opening. Stack ventilation generated due to the temperature and pressure difference between interior and exterior in a particular area in the building. Pressure difference moved the air flow to the interior from the aperture located at a lower level and extracted from an aperture located in the upper level (Wood & Salib, 2012). Cross ventilation is the air flow moving through the apertures through both sides of the envelope dues to pressure difference effects around the apertures located in windward and leeward sides (Kleiven, 2003).

Different studies highlighted the effectiveness of ventilation strategies for adequate thermal comfort and indoor air quality in the multi-storey residential buildings. Fung & Lee, (2015) revealed that ventilation performance in high rise residential building is mostly affected by ventilation mode. A comparative study by Sara Omrani, Garcia-Hansen, Capra, & Drogemuller (2017) on the cross and single sided ventilation performance and thermal comfort level in high rise residential buildings. Results revealed that cross ventilation achieved thermal comfort for 70% of the time while single sided ventilation it was 1 % of the time and enhanced indoor air velocity by double in cross ventilation compared to single-sided ventilation. Ai, Mak, & Cui (2013) examined airflow rate in units of high rise residential building with single-sided ventilation. The results showed that external wind speed of 3.0m/s achieved better air change per hour (ACH). Aflaki et al. (2016) investigated the single-sided ventilation effects on relative humidity, indoor temperature and air velocity in high rise residential building, Results of field measurement showed that single sided ventilation achieved thermal comfort in 90 % of the time in the units located at a higher level perpendicular to the prevailing wind. The assessment of airflow rate in an isolated high rise building with single-sided ventilation, using wind tunnel revealed that the wind direction effects the dominant driving forces of both temperature and wind speed (Larsen & Heiselberg, 2008).

Stack ventilation showed efficiency in the multi-storey residential building designed with atria where it can remove the trapped heat in the internal spaces and enhance natural ventilation performance. Wei-Hwa Chiang (2012) indicated that stack ventilation in medium rise residential building designed with atria reduce indoor air temperature in the adjacent units and increase indoor air velocity level.

Application effects of building design configuration on natural ventilation in multi-story residential buildings

The following review focus on studies that evaluated the application effects of passive design configurations on natural ventilation performance in multi-story residential buildings of tropical climate. The reviewed studies are classified into five (5) main categories based on the best effective design configurations on natural ventilation performance, thermal comfort and indoor air quality in both medium and high rise residential buildings as showed in tables 1,2,3,4 and 5. All tables contain the design configuration variables, ventilation strategies, methods of evaluation and design effects. The identified design configurations include:

- i. The application effects of void configurations on natural ventilation performance in multi-story residential buildings.
- ii. The application effects of building height and orientation configurations on natural ventilation performance in multi-story residential buildings.
- iii. The application effects of balcony configurations on natural ventilation performance in multi-story residential buildings.
- iv. The application effects of window configurations on natural ventilation performance in multi-story residential buildings.
- v. The application effects of ventilation shafts configurations on natural ventilation performance in multi-story residential buildings.

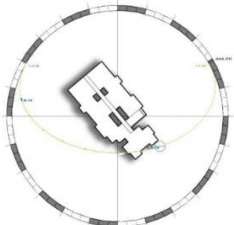
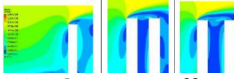
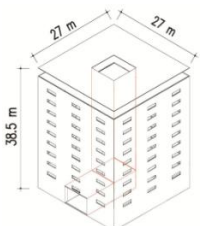
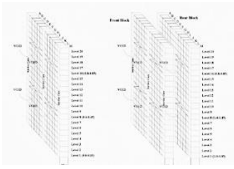
i. The application effects of void configurations on natural ventilation performance in multi-story residential buildings

The existing of the vertical void, atria or courtyard as a passive design configuration in multi-story residential building enhanced natural ventilation and lighting in the units of multi-storey residential buildings (Gaber, Remaz, Alkaff, & Kotani, 2015; Ismail, 1996; Kotani, Narasaki, Sato, & Yamanaka, 2003). Different void configurations such as size and position were examined in various studies to assess its effects on natural ventilation performance, thermal comfort, and indoor air quality. Muhsin, Yusoff, Mohamed, and Sopian (2017) examined vertical void sizes with different wind directions to find which types of vertical void provide the best natural ventilation performance in seven (7) story residential building located in Malaysia. Results of CFD simulation and site measurement revealed the increased the size of the central vertical void by 50% of the unit's surface improved the air velocity significantly in the adjacent units Furthermore, the study found that perpendicular wind to the building is the optimal wind direction to enhance air velocity. A study by Muhsin, Yusoff, Mohamed, Rasani, & Sopian (2017), clarified that vertical void enhanced ventilation rate in medium-rise residential buildings of Malaysia. However, application of large vertical void reduce the ventilation rate.

In analysing the effects of horizontal voids, Wei-hwa & Anh (2012) used the CFD simulation to assess natural ventilation performance of horizontal voids connected to central vertical void in a medium-rise residential building. The ground floor horizontal void in Wind ward façade and top horizontal void in leeward façade connected to central vertical void and enhanced air velocity and improved stack ventilation performance, an exterior wind of 1m/s is sufficient to extract the heated air from the central void to the outdoor environment. Sopian (2004) evaluated the horizontal voids integrated into the high rise residential building of Kuala Lumpur Malaysia. With a view of improving indoor air velocity for suitable thermal comfort. The outcomes of the simulation demonstrated that horizontal voids located in ground floor, middle and higher level enhanced slightly the indoor air velocity, also with a vertical void

created between two buildings blocks designed with horizontal voids at different heights reduced; the indoor air velocity in the building situated on the back of the front building.

Table 1: Summary of the application effects of void configuration in multi-story residential buildings

Building type	Design variables	Ventilation strategy Method	Design effects	Illustration images
Medium rise residential building (MRRB)	Vertical void size	Cross ventilation	Wind angle of 0°, increase void size by 50 % enhance air velocity by 50.88% to 0.44 m/s	 (Muhsin, Fatimah, Yusoff, Mohamed, & Sopian, 2017)
		Site measurement	Wind angle of 45°, increase void size by 50 % enhance air velocity by 48.56% to 0.07m/s	
		CFD simulation		
Medium rise residential building (MRRB)	Vertical void size	Cross ventilation	Wind angle of 0°, void in building increased ventilation rate by	 (Muhsin, Yusoff, Mohamed, Rasani, & Sopian, 2017)
		CFD simulation	Wind angle of 0°, Increased void size by 50 % reduce ventilation rate by 1.03%	
Medium rise residential building (MRRB)	Horizontal void position	Wind-driven ventilation	Improve stack ventilation performance and enhance air velocity by 38 % to 1.6 m/s.	 (Wei-Hwa Chiang, 2012)
		Buoyancy-driven ventilation CFD simulation		
High rise residential building (HRRB)	Horizontal voids position	Cross ventilation	Wind angle of 0°, Building without voids achieved air velocity of 0.95m/s	 (Sopian, 2004)
		CFD simulation	Wind angle of 0° horizontal void in levels 16 achieved air velocity of 0.96m/s	
			Wind angle of 0°, voids in 1 and 16 level achieved air velocity of 0.22m/s in the back building	

Source:(Muhsin, Fatimah, et al., 2017; Muhsin, Yusoff, et al., 2017; Sopian, 2004; Wei-Hwa Chiang, 2012)

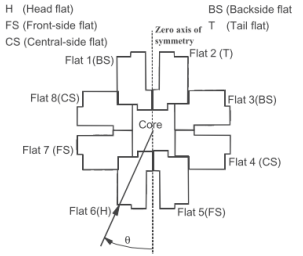
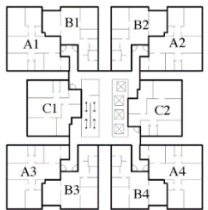
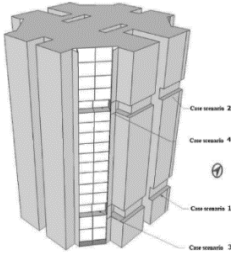
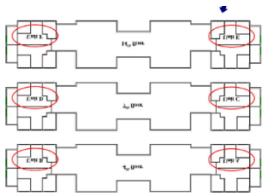
Table1 summarized studies that examined natural ventilation performance in multi-storey residential buildings designed with voids. The literature review showed limited multi-storey residential buildings with central vertical void (Muhsin, Yusoff, Mohamed, & Sopian, 2017; Muhsin, Yusoff, Mohamed, Rasani, et al., 2017; Wei-Hwa Chiang, 2012). Furthermore, only one distinctive study assessed the horizontal void connected to vertical void in medium rise residential building in a hot and humid climate (Wei-Hwa Chiang, 2012). Also, a study by Sopian (2004) highlighted horizontal voids integration in different levels in high rise residential buildings in Malaysia. The parameter of air velocity used to evaluate thermal comfort. The study conducted by Wei-Hwa Chiang (2012) achieved the highest indoor air velocity among the previous studies. The ventilation rate was $1.36 \text{ m}^3\text{s}^{-1}$ in (Muhsin, Yusoff, Mohamed, Rasani, et al., 2017).

The outcomes of the previous studies revealed that voids as passive design configuration especially a combination of both horizontal and vertical void are the most effective design configuration to improve natural ventilation performance regarding thermal comfort and indoor air quality.

ii. The application effects of building orientation and height on natural ventilation performance in multi-storey residential buildings.

Burnett, Bojić, & Yik (2005) assessed the effects of high rise residential building orientation on cross ventilation performance in Hong Kong. The results of analysis on façade pressure revealed that suitable building orientation to dominant wind is 30° , furthermore, units located in front achieved higher performance of cross ventilation in all orientation, although the study recommended orientation of 0° 45° and 90° for the front living units and 15° 30° 60° and 75° for center living units. A study conducted by Zhou, Wang, Chen, Jiang, & Pei (2014) highlighted the importance of building design modification due to the insufficient wind speed, in high rise residential building of Chongqing, China, the simulation results revealed that orientation effects significantly natural ventilation performance and enhances the ventilation rate in the units. Aflaki, Mahyuddin, & Baharum (2016) assessed the orientation and height on the efficiency of natural ventilation in high rise residential building of Malaysia. The site measurement results showed that units located in the higher level of windward and leeward sides and units in the lower level of windward side achieved better indoor thermal comfort. In Singapore, the measurement of the external wall temperature of units located on different height levels in high rise residential building showed that units located in the lower and middle levels achieved higher wall temperature than the units located in the top (Wong & Li, 2007).

Table 2: Summary of the application effects of building height and orientation in multi-storey residential buildings

Building type	Design variables	Ventilation Strategy /Method	Design effects	Illustration images
High rise residential building (HRRB)	Building orientation	Cross ventilation CFD simulation	Optimal cross ventilation performance achieved with Building orientation of 30° Optimal cross ventilation performance in windward units achieved in 0°, 45° and 90° Optimal cross ventilation performance in center units achieved in 30° 60° and 75°	 (Burnett et al., 2005)
High rise residential building (HRRB)	Building orientation	Cross ventilation CFD simulation Site measurement	Achieved Mean air change rate 11.5 h ⁻¹ in east orientation	 (Zhou, Wang, Chen, Jiang, & Pei, 2014)
High rise residential building (HRRB)	units level and orientation	Single side ventilation Site measurement	Achieved adequate thermal comfort almost 90 % in the interior spaces Achieved adequate thermal comfort with an air velocity of 0.52ms ⁻¹	 (Aflaki, Mahyuddin, & Baharum, 2016)
High rise residential building (HRRB)	units level and orientation	Cross ventilation Site measurement Energy simulation	North/south reduce the cooling load by -11.54% Achieved lower temperature in units located at a higher level than units located in lower and middle levels	 (Wong & Li, 2007)

Source: (Aflaki et al., 2016b; Burnett et al., 2005; Wong & Li, 2007; Zhou et al., 2014a)

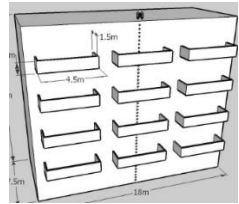
Most of the previous studies highlighted the advantages of orientation and height for effective natural ventilation in high rise residential buildings as showed in table 2. The highest air velocity achieved is 0.52ms^{-1} Also, thermal comfort of 90 % through orientation of north-east in higher units was found in (Aflaki et al., 2016a). Building orientation to north/south reduce the cooling loads by -11.54% (Wong and Li,2007). Furthermore, mean air change rate of (11.5 h^{-1}) was found in (Zhou et al., 2014).

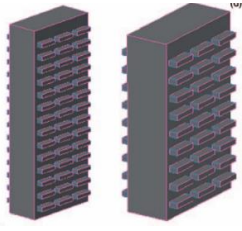
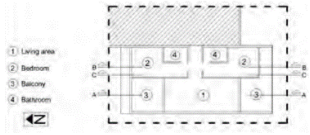
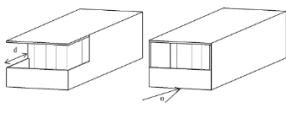
Based on the previous research findings it can be concluded that appropriate building orientation is significantly indispensable for effective natural ventilation, where adequate building orientation changes based on local climatic conditions where the building located (Aflaki et al., 2016).

iii. The application effects of balconies configurations on natural ventilation performance in multi-storey residential buildings

The ventilation performance of balcony in medium rise residential building with single-sided ventilation showed that the introduction of a balcony in the building façade reduced the wind driven ventilation effectiveness and air flow movement inside the units (Mohamed, Prasad, King, & Hirota,2009). Ai et al., (2011) studied the introduction effects of different balcony sizes in medium rise residential building with different height and orientations, simulation results revealed that the increase in the balcony size does not enhance cross and single sided ventilation performance, furthermore the performance decreased at higher levels of the building. Garcia-hansen (2015) studied the impacts of balcony types on air velocity and airflow at high rise residential building in a sub-tropical climate. The results showed that semi-enclosed balcony enhanced indoor air velocity and air flow movement, on the other hand, open balcony with 0° wind angle decreased indoor air velocity, air flow and Air Change per hour (ACH). A recent study conducted by Omrani, Garcia-hansen, et al. (2017) evaluated balcony configuration effects and orientation and wind-driven ventilation mode. CFD and site measurement results showed that building orientation to the prevailing wind and balcony type achieves adequate single sided ventilation performance. With full open balcony single sided ventilation performance improved up by 80 % compared to the semi-enclosed balcony, while cross ventilation performance decreased with the introduction of semi and full opened balcony.

Table 3: Summary of the application effects of balcony configuration in multi-storey residential buildings

Building type/ Location	Design variables	Ventilation strategy/ Method	Design effects	Illustration images
Medium rise residential building (MRRB)	Balcony dimension	Single-sided ventilation CFD simulation	Air velocity reduced below 0.02m/s and increase slightly mean age of air to 1500s with balcony width of 1.25m	 (Mohamed et al.2009)

Medium rise residential building (MRRB)	Balcony dimension	Single sided ventilation Cross ventilation CFD simulation	Decreased pressure distribution in front façade designed with balcony in lower and top levels	 (Ai et al., 2011)
High rise residential building (HRRB)	open/semi-enclosed balcony	Single side ventilation CFD simulation	Enhanced air velocity to 1.6m/s and airflow in the semi-enclosed balcony Decreased Air change per Hour(ACH) to 3%in semi-enclosed balcony	 (Garcia-hansen, 2015)
High rise residential building (HRRB)	Balcony dimension /length open/semi enclosed balcony	Single sided ventilation Cross ventilation CFD simulation Site measurement	Reduced air velocity to 1.3m/s, airflow and (ACH) to 24 % with an open balcony Enhanced single sided ventilation by 80 % with a full open balcony Decreased cross ventilation performance in both balcony types Wind angle influence the ventilation performance	 (Sara Omrani, Garcia-Hansen, et al., 2017)

Source : (Ai et al., 2011; Garcia-hansen, 2015; Mohamed et al., 2009; Omrani et al., 2017)

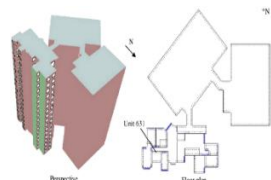
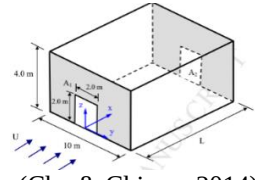
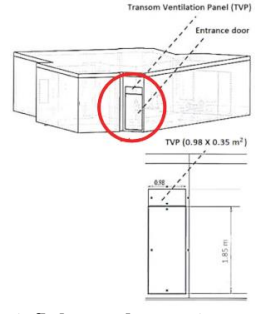
Table 3 summarized indoor thermal comfort and indoor air quality investigations in naturally ventilated medium-rise residential buildings designed with balconies. The finding of previous studies showed in table 3 revealed that the introduction of balcony does not enhance natural ventilation performance (Mohamed et al.2009; Ai et al., 2011; Garcia-hansen, 2015). However, Sara Omrani, Garcia-Hansen, et al., (2017) emphasized that building orientation to prevailing Wind improve significantly single sided ventilation performance with open balcony by 80% and indoor air speed by six times.

iv.The application effects of window configurations on natural ventilation performance in multi-storey residential buildings

The window as a building envelope component includes different design configurations such as the ratio of the window to the wall (WWR), window to floor ratio (WFR) and window position in the wall (Elshafei et al., 2017). Chu & Chiang (2014) recommended that the adequate position of the windows is in the center of the leeward and windward walls in which it enhances cross ventilation performance, the results of CFD simulation revealed that corner

windows achieved 15.5% less regarding ventilation rate compared to the central windows. On the effects of window position on top of the main opening door known as “Transom Ventilation Panel (TVP)” on wind driven-ventilation performance in units of high rise residential building located in Kuala Lumpur Malaysia. Results of simulation and site measurement conducted by Aflaki, Hirbodi, Mahyuddin, Yaghoubi, & Esfandiari (2019), showed that cross ventilation performance enhanced significantly compared to single-sided ventilation. In addition to the window positions Studies evaluated window size impacts on natural ventilation performance. In units of high rise residential building of Singapore, window to wall ratio of 24 % enhanced indoor air velocity for better thermal comfort, also the north/south is the optimum window orientation (Liping & Hien, 2007)

Table 4: Summary of the application effects of window configurations in multi-storey residential buildings

Building type	Design variables	Ventilation Strategy/ Method	Design effects	Illustration images
High rise residential building (HRRB)	Window size window to wall ratio(wwr)	Cross ventilation CFD simulation	Improved thermal comfort by 13.09% in (WWR) of 24 % with shading device.	 (liping and hien 2007)
High rise residential building (HRRB)	Window position	Cross ventilation CFD simulation	Reduced ventilation rate by 15.5% in the window located in the corner compared to the central window in leeward and windward façades	 (Chu & Chiang, 2014)
High rise residential building (HRRB)	Window position and size	Cross ventilation Single-sided ventilation CFD simulation Site measurement	Enhanced air velocity by four (4) times in cross ventilation compared to single-sided ventilation Enhance Mean Air change per Hour(ACH) by 27 % with a low air velocity of 0.02m/s in cross ventilation compared to single-sided ventilation	 (aflaki et al. 2019)

Source: (Aflaki et al., 2019; Chu & Chiang, 2014; Wang, Wong Nyuk, & Li, 2007)

Table 4 summarized the works conducted on different window configurations effects on thermal comfort and indoor air quality. The window position on the top of main entrance improved air change per Hour (ACH) by 27 % and indoor air velocity by four (4) times in cross ventilation as shown in (aflaki et al. 2019). Furthermore central window in leeward and windward façade considered as the optimum position and improved ventilation rate as

demonstrated in (Chu & Chiang, 2014). On the other hand, proper window size enhanced thermal comfort by 13.09% in (Iping and hien 2007).

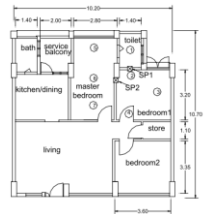
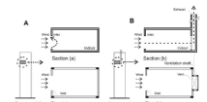
The results of previous studies showed that adequate window configurations including position, size, and orientation are fundamental passive design configuration to enhance the wind driven ventilation performance, thermal comfort and indoor air quality in multi rise residential buildings.

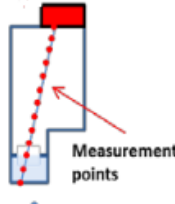
v. The application effects of the ventilation shaft configurations on natural ventilation performance in multi-story residential buildings

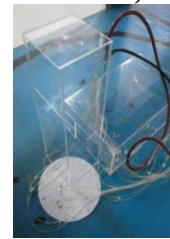
Different studies examined ventilation shafts in order to improve the ventilation performance in the multi-story residential building of the hot and humid climate (Priyadarsini et al., 2004; Prajongsan & Sharples, 2012; Fahmi et al., 2018). A study by Priyadarsini et al. (2004) assessed the influence of active and passive stacks in the unit of high rise residential building in Singapore. Results of CFD and wind tunnel experiment demonstrated that active stack with a top fan near the inlet with a dimension of 0.4m×0.4m enhanced indoor air velocity and achieved better indoor thermal comfort compared to passive stack. The CFD simulation results of ventilation shafts performance in high rise residential building located in Bangkok, Thailand with different wind speed and direction showed that ventilation shafts improved stack ventilation performance, enhance air velocity and indoor thermal comfort level (Prajongsan & Sharples, 2012). Fahmi et al., (2018) assessed the impacts of different ventilation shaft opening on cross ventilation in the units of high rise residential building in Indonesia. Results revealed that the increase in the size of the internal opening of the ventilation shaft improved indoor air speed in a room located in lower level while it decreased in a room located in higher level and improved air movement while the decreased the ventilation rate.

On the other hand, wind catchers used mainly in low rise residential buildings in the hot climatic region (Jomehzadeh, F., Nejat, P., Calautit, 2017). Gharakhani, Sediadi, Roshan, & Sabzevar (2017) evaluated the effects of wind catcher on natural ventilation performance in a high rise residential building of tropical climate using a wind tunnel experiment. Results showed that wind watcher could enhance natural ventilation performance regardless of the low external speed and provide fresh air in the indoor spaces.

Table 5: Summary of the application effects of ventilation shaft configuration in multi-story residential buildings

Building type	Design variables	Ventilation Strategy/ Method	Design effects	Illustration images
High rise residential building (HRRB)	Active stack/fan on the top	Stack ventilation	active stack with top fan Enhanced air velocity by 550% to 0.67 m/s.	 (Priyadarsini et al., 2004)
	Passive stack/without the top fan	Wind tunnel experiment		
	Room with and without	CFD simulation		
	Room with and without	Stack ventilation	Increased Air velocity by 60% to 67% and the percentage of thermal	

High rise residential building (HRRB)	ventilation shaft	CFD simulation	comfort hour is by 37.5% to 56.3%.	(Prajongsan & Sharples, 2012)
High rise residential building	Ventilation shafts internal opening size	Cross ventilation CFD simulation	Enhanced air velocity in the room at a lower level by 80 % and decreased by 52% in a room located in high level	 (Fahmi et al., 2018)
High rise residential building (HRRB)	Windcatcher height	Stack ventilation Wind tunnel experiment	Enhanced the pressure coefficient in the measured model designed with wind catcher	



(Gharakhani et al., 2017)

Source: (Fahmi et al., 2018; Gharakhani et al., 2017; Prajongsan & Sharples, 2012; Priyadarsini et al., 2004)

Table 5 summarized different studies that assessed the performance of ventilation shafts in the multi-story residential buildings. Ventilation shafts in high rise residential building enhanced indoor air velocity by 60% to 67% which increased the percentage of thermal comfort hours by 37.5% in (Prajongsan & Sharples, 2012). Furthermore, the effects of ventilation shafts at different levels showed that ventilation shafts improved air velocity in lower rooms by 80 % and decrease by 52% in the room located in a high level (Fahmi et al., 2018).

The results revealed that ventilation shafts are an effective passive design configuration which improves natural ventilation performance especially stack ventilation performance in high rise residential buildings.

Conclusion

The review paper aim is to provide a summary of previous studies that evaluated the passive design configurations effects on natural ventilation performance, thermal comfort and indoor air quality in natural ventilated multi-storey residential buildings of tropical climates. Previous literature reviews addressed the passive architectural design strategies impacts on natural ventilation performance in low rise residential buildings.

For that, current review provide comparative analysis on the efficiency and the limitations of different passive design configurations performance applied to achieve effective natural ventilation suitable thermal comfort and indoor air quality in multi-storey residential buildings in tropical climates. It was found that despite the design limitations of multi-story residential buildings, the surrounding environment and the climatic conditions of tropical climates and the introduction of passive design configurations improved the efficiency of natural ventilation as a passive cooling strategy to achieve adequate thermal comfort and indoor air quality. The comparative analysis of reviewed studies findings on natural ventilation performance for suitable thermal comfort and indoor air quality showed that configurations such as window size and position, vertical void size, the horizontal void connected to the

vertical void and building orientation are the most effective design configurations that enhanced wind-driven ventilation performance. Balcony configurations do not show any significant effects on wind driven ventilation performance. The ventilation shafts configurations are mostly effective in buoyancy driven ventilation.

The reviewed studies carried out research through CFD simulation which provides a precise prediction of indoor and outdoor air flow. However, the experimental methods need to be validated by field measurement methods or wind tunnel experiment. Tables 1,2,3,4 and 5 summarise the design configuration applied and the impacts in the wind-driven ventilation and buoyancy driven ventilation performance in the multi-story residential buildings.

Further studies are recommended to be conducted in order to improve the efficiency of natural ventilation, thermal comfort and indoor air quality in multi-storey residential buildings of tropical climates .The design of vertical void segmentation with horizontal void to enhance ventilation in units in different level and orientation, the effects of internal layout design on cross and single sided ventilation performance, the size, and position of windcatchers influence on pressure differences for both single-sided and cross ventilation, and effects of window position designed with horizontal and vertical shading devices, moreover the assessment of passive design configuration performance in the CFD simulation with the real surrounded environment.

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EXPECTATIONS OF SERVICE RECIPIENTS TOWARD THE SERVICE OF UDON THANI HOSPITAL

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Abstract: *The results showed that most respondents were female. They are between the ages of 41-50 years old and have a bachelor's degree or higher. Have average income between 10,001-20,000 baht engaged in agricultural work and live in the district of Udon Thani. Analyzes of expectations before services and service satisfaction of service recipients toward the service of Udon Thani hospital. (Service Quality) It was found that the service recipients had significantly different expectations and service satisfaction number 3sides. Service Receiver have expectations in most assurance, followed by empathy and tangibles respectively. However, when the service is completed, the service recipients are satisfied with the service side in most assurance followed by empathy and tangibles respectively. To sum up, comparing the actual expectations and satisfaction of the service, it was found that service recipients are more satisfied than expected 1 item: assurance. Finally, the empathy and the tangible things, service recipients have greater expectations than service satisfaction.*

Keywords: *Expectations, Service satisfaction, Services*

Introduction

Ministry of Public Health Establish a national health insurance policy to provide people with access to a health care system. Quality and standards are equal. Udon Thani Hospital has seen the need for sanitation and medical care of the people of Udon Thani. However, Udon Thani Hospital is still experiencing the problem of higher number of patients. This has resulted in delays, congestion and limited service personnel. The fatigue of the service providers affects the quality of service, resulting in the public not understanding and dissatisfaction with the medical service. From the above reasons. Researchers were aware of the importance of clients who came to Udon Thani Hospital. Therefore, they are interested in the quality of service and the expectation of service recipients on the service of Udon Thani Hospital. The results of the research were developed and formulated as a guideline to reinforce the strengths and weaknesses of Udon Thani Hospital.

Quality of service is different from sales. Due to the quality of the intangible, variability, inseparability and perish ability. Therefore, service recipients are influenced by expectations for service come from 4 major sources. Personal Needs, Word of Mouth Communication, Past Experience, External Communications to Customer and the measure of hope and perception of consumers related to the quality of services. There are 5 main

components used to create a quality measurement of service include tangibles, reliability, responsiveness, assurance and empathy.

Research Objectives

1. To study the expectation and service quality of the service recipients towards the service of Udon Thani Hospital.
2. To compare the expectations and quality of services of the service recipients with the services of Udon Thani Hospital by demographic factors.

Research scope

Exploratory Research this is quantitative research. The research instrument was a questionnaire. The study population was the outpatient department)OPD(of the Udon thani hospital. The study population was the relatives of the patients who were admitted to Udon thani hospital.

Literature review

Literature review on service quality. Zeithaml, Parasuraman, and Berry (1990) The study found that the results of customer evaluation of the quality of customer service is called perceived service quality. This is because the customer makes a comparison expected service. It is an experience that occurs after the customer has been served already. Evaluation of service quality) SERVQUAL(the customer considers the following five important criteria as follows: reliability, assurance, tangibles, empathy and responsiveness.

Research method

1. Samples were relatives who took patients to Udon Thani Hospital used 384 people. For the convenience of evaluation. And data analysis. The researcher used 400 samples. It is considered that the criteria. Is not less than 384 people. By calculating the Taro Yamane formula at a 95% confidence level and determining the tolerable error of .05, the researchers used a selection of non-probability samples. By choosing a convenient sample. The sample will be studied for ease of study. It is convenient to provide information.

2. The research instrument was closed-ended questionnaire, divided into 2 parts.

Part 1 Checklist. The questionnaire on demographic data of respondents included gender, age, educational level, average income, occupation, and domicile.

Part 2 was a questionnaire about the expectation of service recipients on the service of Udon Thani Hospital include: tangibles, reliability, responsiveness, assurance and empathy.

Steps to create a research tool

Researchers have set guidelines for creating research tools. To obtain the following objectives:

1. Research papers, texts, articles, websites and related documents.
2. Create a query to consult with the advisors to check and receive suggestions for improvement in accordance with research.
3. Take the revised questionnaire to the advisor for review before completing the test.
4. The questionnaire was used to determine the reliability of data. The sample was used to try out the sample of 30 samples. The reliability of the questionnaire (Conbach's Alpha Coefficient) in this study was the reliability of the questionnaire of .892.
5. Take the tested and edited questionnaire. The sample size was 400 samples.

Statistics used in data analysis.

Once the data has been collected completely. The researcher will use the data to code. Use SPSS for Windows to calculate statistics. To use the data analysis.

Descriptive Analysis Used for distribution of frequency, word, percentage, average and standard deviation. To use in describing the questionnaire. Is the demographic information.

Inferential Statistics are statistics used to test hypotheses in research to summarize references to population studied. The data in the questionnaire about the level of expectation and the level of service received. The statistics used to test the relationship between factors. Use the Independent Sample T-Test to compare the difference between the mean of two groups and one-way analysis of variance or F-test samples with more than 2 groups. If found significant differences were found at .05 level. The double difference was tested by LSD)Least Significant Difference(and use a statistical test Pair-sample t-test to compare the expectation and actual service of the service recipients to Udon Thani Hospital.

Research result

Facts about demographic factors

Answerer The sample size was 400. Most of them were female between 41-50 years old with bachelor degree or higher. Have an average income 10,001-20,000 baht engaged in agricultural work and in the district of Udon Thani.

The hypothesis testing

Different demographic factors affect expectations of service recipients toward the service of Udon Thani hospital different. There are only 4 aspects of demographic factors that accept the hypothesis.

1. Service recipients of different ages have expectations to the services of Udon Thani Hospital differed significantly at the .05 level and when classified as a couple on average, service recipients over 41-50 years of age were more likely to expect services from Udon thani hospital than those aged 31-40.
2. Service recipients have different levels of education have expectations and perceptions were statistically significantly different at the .05 level. When classified in pairs found that on average, service recipients with bachelor degree or higher have expectation of service of Udon thani hospital was higher than the level of education diploma. However, in terms of average perceived service recipients with bachelor degree, the satisfaction of the service of Udon Thani Hospital was lower service recipients with high school education.
3. Service recipients have different occupations have expectations to the services of Udon Thani Hospital differed significantly at the .05 level and when classified as a couple on average, service recipients are already employed have expectations for service of Udon Thani hospital were higher than those of students.
4. Service recipients with different domiciles have perception was significantly different at .05 level and found that service recipients who live outside Udon Thani area are more satisfied with service than those who live in Udon Thani.

Conclusions of the comparison of expectations and services received.

Variable	Expectations		services received		t	Sig.
	$\bar{X}$	<i>SD</i>	$\bar{X}$	<i>SD</i>		
1. Tangibles	3.80	0.53	3.46	0.53	10.86	.00*
2. Reliability	4.17	0.53	4.19	0.56	-0.58	.56
3. Responsiveness	3.74	0.57	3.68	0.55	1.90	.06
4. Assurance	4.16	0.49	4.24	0.52	-2.58	.01*
5. Empathy	3.92	0.56	3.63	0.64	7.55	.00*
Total	3.96	0.40	3.94	0.42	4.87	.00*

* Statistically significant at .05

A Comparison of Expectations and Perceptions to service in Udon Thani hospital have different statistically significant at the .05 level. When viewing the results of the analysis found that Expectations and perceptions on the services of Udon Thani Hospital are different in three aspects: tangibles, Assurance and Empathy. Except, expectation and perception of services of Udon Thani hospital side Reliability and Responsiveness not different.

Discussion of results

From the study Expectations of Service Recipients toward the Service of Udon Thani Hospital. It was found that the clients had high expectations. Johnson & Lyth,)1991) The expectation of service recipients for services should be based on predictable criteria. Hope comes from experiences from past experience and other experiences. Researchers have concluded that. Expectations are important for service providers or hospitals to take into account that they have full service. The thing to do is to measure good service, good value for money and if it is appreciated, it makes good. Overcoming even more expectations.

A study of perception of service recipients on the service of Udon Thani hospital. It was found that the overall perception was high. Schiffman & Kanuk (2010) Perception is the process by which the individual chooses, processes and interprets the stimulus. And interpreted in a particular way. This means that each person will have different perceptions. From what has been the same thing. Because the interpretation of what has been may have used the knowledge or experience in the past to interpret. Each one is not equal. Therefore, the hospital will have to reassure its customers. If a client comes to the hospital for medical treatment, it must be treated properly. Be safe the opportunity to recover from illness and complete medical equipment for medical treatment. To meet the needs of customers, which will lead to customer satisfaction in the future.

Based on the hypothesis testing, it was found that the level of expectation and level of perception of service recipients on the service of Udon Thani hospital the overall difference. Which the level of expectation is higher than the level of perception and consistent with the research of Hattaya Kaewkim (2012) The study of public health expectation and perception of quality of hospital services in Nakhon Si Thammarat. Found that overall, people had high expectations and perceived quality of service. Average score of expectation over perceived quality of service. The difference was statistically significant at the .05 level. This is because each hospital relies on a number of factors to allocate budgets to its own hospital management.

However, each hospital in Thailand has different sizes. Each hospital or medical device is different. Medical personnel have are not equal. Therefore, the quality of each hospital service is not equal. Some hospitals have good quality services. Some hospitals have poor service quality. So customers will come to each hospital. There is high expectation for good service. But the service may not be as good as expected.

Suggestions

Expectations suggestions

Customers have expectations about what is tangible and empathy. There are more expectations than the two. Udon Thani hospital should improve on what it can handle: hospitals should have state-of-the-art medical equipment and facilities to keep up with the current era and more facilities to meet the needs. In terms of empathy. Udon Thani Hospital should provide training on mental health services and practices. The medical staff are more eager to provide services. It also makes medical staff happy to work. It also helps to reduce stress in the future.

Perception Suggestions

Clients have more perceived satisfaction than expectations 1side: Assurance. Therefore, Udon Thani hospital should focus on the issue. Safety in medical treatment, availability of medical equipment and medical care. The clients pay attention to medical care, the chance of recovering from high illnesses, and the correct and complete medical treatment. However, the hospital should ensure that patients receive services through public relations regarding the treatment of diseases. To be successful, or to have new medical devices or procedures. To ensure that the service will be available to the people who will come to the service.

Future research

This research is only an overview of the expectations of service recipients toward the service of Udon Thani hospital. In the future, should study the behavioral factors toward the service of Udon Thani hospital. It is important to note that clients who come to Udon Thani hospital have a lot of behaviors in medical treatment. To be able to refer to the research and develop Udon Thani hospital into a provincial hospital with specialized treatment. However, Udon Thani hospital will not have to send patients or patients to another hospital and will develop Udon Thani hospital to have full capacity in the future.

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BEHAVIOR AND MARKETING MIX FACTORS INFLUENCE TO USE SHELL PETROL STATION SERVICES IN UDON THANI PROVINCE THAILAND

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Abstract: *The purposes of this study were behavior and marketing mix factors influence to use shell petrol station services in Udon Thani province Thailand. A sample was selected from 400 people was used for data analysis data was analyzed using descriptive statistics such as the frequency, percentage, mean, and standard deviation and also inference statistics in an independent sample T-Test for comparing the different of two groups of sample and then One-way Anova or F-test for testing the difference more than two groups. The findings indicated that the majority of respondents were male, aged between 21-30 years, which the average income was 10,001-20,000 Thai Baht per month. The reasons of choosing was traveled, convenience and quality. They were using between 6- 10 am and 5 pm. Overall, respondents were satisfied with the marketing mix service at a high level. When considering the list as they found that the respondents were satisfied with most of the products, price, place, promotion, process, personnel, performance and quality of service including physical*

Keywords: *Behavior, Marketing Mix, Shell petrol station services*

Introduction.

Oil or petroleum that got from fossils and plants was wastefully flue which pumped out the underground and passed the processed by used high-temperature and became the products such as gasoline. Diesel, jet fuel, gas, liquefied petroleum gas, kerosene, fuel oil,) Petroleum Authority of Thailand, 2560),the products would able more benefits direct and indirect and the quality will have been developing every time for improving technology in the automobile industrials that they achievements and always develops oil quality to highest volume . On behalf of the leader global fuel technology Shell Thailand had to research and development oil continually by co-operated with global partnerships. On the other hand PTT, PT, Bangchak, Esso and Caltex, they had a role in the petroleum and chemical industries in Thailand.

Oil was a really important resource because related to our daily life, such as traveled, transportations, productions, consumer goods, industrial, and services because the customers expect best services, so petrol station are important to provide what consumers needed. Shell Thailand the one of expert about oil and petrol station services in Thailand. In the situation that the oil market has many competitors which affected to petrol station ,so the entrepreneurs should focus on the expedite of creating strategies, especially high quality products including

with the place enough to the consumers, create promotions, personnel and the quality of service. In order to be adapting quickly and gained the advantages over other competitors. One of the most important factors that helped accomplishment in business was selecting the appropriated model of proceeds meant to extend business strategy and another thing was creating point of sale such as area creating promotion.

As everyone know, the petrol station services have more competitors, but we also keep the customers and adding new customers' data because it's been important to the business, so the researchers studied the behavior and marketing mix factors that influence they used of the Shell petrol station services. Shell Company of Thailand Co., Ltd. in Udon Thani) would be a guideline to developing quality and service to consumers. The most importantly, we could bring our strategies to handle with oil market and respond to the consumers needed.

Objectives.

1. Studies the personal factors used Shell petrol station services in Udon Thani
2. Studies the consumer behavior that they used Shell petrol station services in Udon Thani
3. Studies the marketing mix factors influence to use Shell petrol station services in Udon Thani

Scope of the Research.

A quantitative research tool was used to collect data from the Shell Oil Station in Udon Thani by surveying the sample. The questionnaire was used to examine the users of the Shell Oil Station at that time.

Literature Review.

Literature review the consumer's behavior survey means investigate the consumer) Searching (, Purchasing, Using, Evaluating and Expense in the term of products and what service that made the consumer get satisfied. (Schiffman & wisenblit, 2015)

Macdonald & Wilson (2016) Marketing mixed using the marketing tools in accordance with information processing for motivating consumers would attend.

Kapoor, Raul and Halder (2011) services is process that consumer used services. We always offer the best service to all consumers around the world by our professional provider and also offered benefits services not only keeping but we also improve the quality for made them felt convenience and really impress.

Schiffman & wisenblit (2015) the process would be have been element for consumer decided by himself and they consider physical such as learning, perception, personality and attitudes will affect to decision making for selecting and evaluation before decision.

Research Methodology.

- 1.The sample were people who came in to use the Shell petrol station services at that time the total is 384 people. For easier to evaluating and analyzing data the researcher applied sample totally 400 people which followed the regulation and conditions not less than 384 refers to Taro Yamane formula with reliability level 95 % and determined incorrect but could accepted .05.

2. The tools for researching were closed-ended questionnaire divided by 3 sections;

Section 1: Checklist items answered about personal information of each other included with age, salary, education and career.

Sections 2: The questions asked about the behavior of each person in a specific area they were using shell petrol satiation service in Udon Thani.

Sections 3: The data related with strategies and had influenced to choose services to consumers.

Research tool.

The researchers had been created the method how to cover the data for the following below.

1. Learning and finding the documents, research, text, content, website and supporting reference.
2. Created full specification information data sheet and consulted with professor for recheck and got some advised for amendment to suit with our objectives.
3. Submitted to professor for correcting greatly again before started to do.
4. Started to examine for finding the average of reliability of data by tryout with 30 samples and followed the method of Cronbach's Alpha Coefficient. We got the reliability result total .835
5. Bring all passed the questionnaire to reviewed and then applied to sample with 400 sampling.

Statistics used to analyze data.

After we collected all of completed information the researcher would put coding on SPSS programs and calculating the statistics of analysis for the following data.

- 5.1 Descriptive statistics we were applying for separating the frequency, percentage, means and standard deviation are used to describe the questionnaire and behaviors.
- 5.2 Inferential statistics use in test hypotheses in research to concluding citations for study populations and information in the questionnaire related with satisfaction level.
- 5.3 Normally the statistical test will be relation between factors and define statistically significant correlations or not. Independent Sample T-Test for comparing the diverge between two group average and also One-way analysis of variance (One – Way Anova) or F-test to test the difference between the mean of the sample groups with more than 2 groups. If there were significant differences at .05 significance level. LSD (Least Significant Difference)

Research result.

Test results hypothesis.

Assumption 1 Gender factors not different in the marketing mix in term of selection Shell stations were as follows;

- 1.1 Users different genders had influenced with the marketing mix in the part of selected Shell stations but not differently.

Assumption 2 Age factors different that affected to marketing mix and also selection of different Shell stations summarized below.

2.1 Users different ages that they had influenced to the marketing mix and choose Shell stations was really differ from promotions were statistically significant at .05 levels.

Assumption 3 Salary factors have different that influenced to the marketing mix for selection Shell stations summarized below.

3.1 User that they were different salary and had influenced to the marketing mix for selection Shell stations, in the part of sales promotions, personnel, and physical were statistically significant at .05 levels.

Assumption 4 Educational factors had different and also affected to the marketing mix for selection Shell stations summarized below.

4.1 Users that they had different educations levels and affected to the marketing mix for selection Shell was different in the part of products, place, sales promotion and physical were statistically significant at .05 levels.

Assumption 5 Occupation factors had different and also affected to the marketing mix for selection Shell stations resulted below.

5.1 Users that they were many different occupation and affected to the marketing mix for selection Shell stations was different in the part of products, sales promotion were statistically significant at .05 levels.

Assumption 6 Status factors was vary and affected to the marketing mix for selection Shell stations resulted below.

6.1 Users that they had different educations levels and affected to the marketing mix for selection Shell was different in the part of products, sales promotion and efficient were statistically significant at .05 levels

Discussion of results.

As observation in behavioral section that inductive to Shell petrol station services in Udon Thani. The users really satisfied with convenience. Later, it was found that the customers frequently refuel at the gas station. Likewise, those who influence the decision to option for the gas station it's was themselves. The customers also have the optional to pay for gas station services the cost between 501 - 1,000 Baht, users would be use the services station at 17.01 hours or more and the user had to use the services station from 1-5 times per month. Based on this data, Kotler (2012) had commented that it's was a study of consumers behavior, individuals and organizations. Use the products or service, or choose from the experience.

From our studied the marketing mix factors, the service had influenced with Shell petrol station services in Udon Thani. We found that genders not different to the marketing mix but ages were differential in the parts of sales promotion and the salary also different in the part of sales promotion, personnel, and physical. We also had the status were different amount sales promotion and efficient. Refer to previously according to Macdonald & Wilson (2016), marketing mix we could use the strategies in the right objectives and also agreeable to data proceed for motivation or encouragement the consumers to interested and more over A.StoneMarilyn& John Desmond (2007) said that the marketing mix it helped us decision that involved with the way of marketing mix element for setting up the cost of products, promotions, place and distribution channel such as when we needed to ensure about our champagnes to supporting promotion and also would apply technique for checking our efficient after we examined the market.

Based on the hypothesis testing, the researcher found about used petrol stations service. Chiratttha Moayadee)2013) told us about the most affected to the consumer would select used petrol stations and the issue of PTT, in Lampung province she found that the consumers often selected convenience first means 3-4 time of each month and overall the consumers were impress with service level on the other hand we able created strengths points and also adopted weakness points reference to Eric Riedel (2017) Marketing Strategies to enhance profitability among international oil gas services said that the best services able to adding more benefits to organization according to Panupong Wongsra)2011) said that the marketing strategy and strategies management able to increase the retail market business performance of fuel service stations in case of Bangchak Petroleum Public Company Limited. Growth strategies by using the products she found, strategies business-level and duties of strategies was creating defensive point for added value of the products.

Suggestion

Suggested Research.

1. From our studied behavior had influenced to use Shell petrol station services in Udon Thani. Found that conscience, comfortable, overpass, owner, cash, 501- 1,000 bath, at 17.01, 1-5 or each month which of each role were impressed, the researcher had comment that we should have crating promotion in section of voucher like when consumer came to fuel the gas we would give café voucher to them and also free car wash. The period consumers not quite mush such as 10.01- 12.00 and 12.00-15.00 we might launch champagne or announced new released information example free car maintenance, food vouchers for motivate consumers wanted to use our service.

2. Marketing strategies factors into selection Shell petrol station services in UdonThaniThani. Products was highest level of satisfaction as the products had reliability, well-timed, products reputation, variety products the researcher commented that should keep standard also more developing.

Price was a high level of satisfaction in the second order. The service fee is clear, charge by credit card, faire price, the researcher commented that price also higher than the competitor which may be used by the customer to use the competitor's petrol station, so he or she may be able to give discounted fuel surcharge to buy a coffee or discount check car maintain for increasing the satisfaction of the consumers.

Physical was a high level of satisfaction in the third order because they had big label, fantastic interior and appropriate uniforms, unique, clean spacious and modern but the researcher commented told us that In the field of decoration, spacious and clean was minimum satisfaction because Shell petrol station services in Udon Thani should be keep clean of car wash and car maintenance room.

Process was a high level of satisfaction in the fourth order which had queue, appropriate service order, quickly to provide consumers but the researcher commented Shell petrol station services in Udon Thani would have training staff for make sure they ready to serve our consumers.

Place was a high level of satisfaction in the fourth order which had may channel to pay, cleaning areas, enough car parking, located easy to find and comfortable. The researcher commented might lift up more clean for consumes happy to see all clean.

Personnel was a high level of satisfaction in the sixth order as staff knowing about products, always took care consumers, staff always smiled but staff not enough because consumers they couldn't wait to long time.

The efficient and quality of services was a high level of satisfaction in the seventh order which Shell petrol station services in Udon Thani used high standard equipment, handle issue very well, but sometimes might set training about how to use equipment for recheck staff didn't forgot the way to use is.

Promotions was a high level of satisfaction in the eight order which the part of advertisements,

Announcements via variety channel, activities that make relationship with consumers, give discount, but which Shell petrol station services in Udon Thani would expand public relations for getting connection to new comer consumers to know about activities or promotions.

Suggestions for the next study

1. Suggestions for the next study1. In this study, there was scope for studying of customers who came to Shell petrol station services in Udon Thani. The data is not wide enough. Therefore, in the next study, those who had similar subjects should study more samples. The questionnaire was collected in other provinces for further analysis
2. The behavior and marketing mix factors influence to used Shell petrol station services in Udon Thani should be studies and comparing with other petrol station for collecting and correct the data of marketing plan, marketing strategies and developed in overall to get the efficiency and also improved as well as the most effective to users and visitors.

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INTERACTIVE POWERPOINT FOR SELF-DIRECTED LEARNING OF MATHEMATICS: A CASE STUDY

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Abstract: PowerPoint has been a popular presentation tool for conveying learning materials in educational institutions. While slides and points simply move on clicks, students may find presentation too quickly to absorb, digest and reflect on its contents. This study is an exploratory attempt to turn PowerPoint slides into interactive, self-directed presentation designed for learning to solve equations and inequalities involving absolute values. The purpose of the study was aimed at a quick initial assessment of the design effectiveness and at identifying areas for improvement before it is applied to a larger sample of participants. The purposive sample involved an A-Level student who voluntarily sat for a pretest and interacted with the PowerPoint slides before attempting a posttest. The participant's interaction with the PowerPoint presentation was both observed and videotaped, and the solutions to the pretest and posttest qualitatively compared. In particular, the fine-grained analysis of the participant's interaction with the PowerPoint presentation which offers the opportunity to attempt tasks and access worked solutions with accompanying mathematical concepts and reasoning may explain the participant's enhanced performance particularly in solving inequalities. Nonetheless, the observations on the participant-slide interactivity led to some pedagogical insights as to how slide presentation could meet a better design for more effective learning. It is concluded that interactive PowerPoint slides which contain pedagogical and resourceful contents and allow for autonomous navigation may support mathematics learning.

Keywords: PowerPoint, Mathematics Learning, Solving Equations and Inequalities of Absolute Values

Introduction

Throughout decades, PowerPoint has proliferated in the commercial and educational arenas. Past educational studies have revealed that PowerPoint use in lectures is looked upon with favor by instructors and students alike, claiming such benefits as enhanced professionalism, motivation, attention sustainability, learnability, and interest in a subject matter (Apperson, Laws, & Scepansky, 2006; Clark, 2008; Frey & Birnbaum, 2002; Susskind, 2005). However, many studies based their findings on surveys of respondents' beliefs and perceptions (e.g., Frey & Birnbaum, 2002; James, Burke, & Hutchins, 2006), while others evaluating academic performance found no significant differences (Apperson et al., 2006; Susskind, 2005; Szabo & Hastings, 2000).

The Standards of Excellence in Teaching Mathematics in Australian Schools promotes excellent teaching of mathematics aimed at maximizing student learning by encouraging self-directed exploration, mathematical thinking and reasoning, in addition to providing purposeful and timely feedback (Galligan, Loch, McDonald, & Taylor, 2010). However, how such critical

instructional ideals should blend with technology to catalyze learning requires thoughtful efforts and passion.

One key concern has been *how* PowerPoint is used and not merely if it is made available (Bartsch & Cobern, 2003; Isseks, 2011; Jordan & Papp, 2014; Stryker, 2010). For instance, while slide presentation is mostly instructor-controlled, students usually serve as passive listeners. They may not favor the pace of presentation and the lack of engaging interaction with PowerPoint (Rudow & Finck, 2015).

This study attempted to resolve this limitation by designing an interactive, self-directed PowerPoint presentation for learning to solve equations and inequalities involving absolute values, based on the Cambridge A-Level syllabus. These mathematical topics were selected in view of students' difficulties in coping with the great structural varieties in absolute value equations and inequalities and the conceptually-demanding reasoning for deriving meaningful solutions (Brumfiel, 1980; Sierpinska, Bobos, & Pruncut, 2011).

Literature Review

The use of PowerPoint for teaching and learning has prevailed rapidly since its debut in the 1880s. Its tremendous rate of expansion has indicated not only its popularity among instructors and students, but also the growing concern about its actual contribution to learning (Apperson et al., 2006; Bartsch & Cobern, 2003; Craig & Amernic, 2006; Frey & Birnbaum, 2002; Gambari, Yusuf, & Balogun, 2015; Hill, Arford, Lubitow, & Smollin, 2012; Johnson & Sharp, 2005; Levasseur & Kanan Sawyer, 2006). Due to the popularity and ubiquity of PowerPoint, a few questions have become highly relevant and significant: Why is PowerPoint favoured? How could it be used effectively? Does it significantly contribute to student learning and academic performance?

Past studies on the use of PowerPoint varied in the extents and ways PowerPoint was employed to enhance learning. At the least, some studies investigated if there was a difference with and without PowerPoint use in student learning. For instance, Chen and Lin (2008) investigated if students downloading PowerPoint slides before the lecture led to better performance. Their study involved 126 students who took an intermediate microeconomics course at a public university in Taiwan. In the study, each student's access to the slides on the server was electronically tracked. The researchers were hence able to know which students downloaded the PowerPoint slides and the number of times downloading of slides occurred over a learning period of 12 three-hour face-to-face lectures. A panel data analysis was conducted to take into consideration possible individual heterogeneity with fixed effects and random effects models, in addition to the ordinary least squares model. All three models indicated statistically significant positive correlation between students downloading of PowerPoint and their examination performance. The study, however, did not include the design aspects besides accessibility of PowerPoint.

In an innovative attempt, Wanner (2015) employed a just-in-time learning method, whereby students were required to answer a few conceptual questions via short PowerPoint presentation prior to lectures. The students presented their work during lectures and thus were engaged in learning both before and during lectures. Such pedagogic use of PowerPoint was claimed to help students in structuring their thoughts and shaping learning contents with enhanced interactivity. In a similar strategy, Davies, Korte and Cornelsen (2016) made PowerPoint slides available to students outside of classroom. This way was claimed to be particularly useful for accelerated classes. In all the above studies, PowerPoint served as a 'carrier' of learning contents made available to students outside of class time.

Other studies looked into the use of PowerPoint during class time. Nam and Trinh (2012) tested the effects of PowerPoint on vocabulary retention of 68 grade 10 students using a pretest-posttest design and assessed the students' attitude towards the use of PowerPoint. The study found that the group with PowerPoint outperformed the control group in vocabulary retention and carried more positive attitude towards the use of PowerPoint in teaching and learning. Susskind (2005) compared traditional format with PowerPoint use in lectures on students' performance, self-efficacy, motivation, and attitudes. The students were found to have more positive attitudes towards their lectures with PowerPoint with greater self-efficacy. However, no significant differences in academic performance were noticed between the two lecture styles. Similarly, the study by Apperson et al. (2006), comparing chalk-and-talk lecture style with PowerPoint use, found no differences in students' academic achievement despite their enhanced perceived effectiveness of PowerPoint in terms of organization and clarity, interest sustainability, and professional 'feel' about professors using PowerPoint.

Most studies, however, point to such generic aspects and features of PowerPoint as concise points on slides, dynamic and animated contents, slide handouts made available before, during or after lectures, attractive slide design and presentation, etc. While such features are certainly relevant and supportive to learning across domains, the creative use of PowerPoint features and special design of slides specifically for learning a particular subject is rare. Such rare attempts may include the effort by Carmichael and Pawlina (2000), who developed animated images with PowerPoint to enhance the learning of Anatomy. The process of creating the animated presentation of a human heart was painstakingly tedious. They started with pen-and-ink paper drawings which were then scanned into digital images to be intricately refined in further editing and manipulative processes. Upon laying the images into a PowerPoint slide, animation and colours were created to label the heart and differentiate the various parts of the diagram dynamically. This dynamic nature of the course was greatly favoured by the students. While past studies have revealed mixed results relating to the effectiveness of PowerPoint use, it clearly points to the need for greater attention to *how* PowerPoint should be designed and used, rather than simply its use and availability in teaching and learning. Johnson and Sharp (2005) argued that the use of PowerPoint as a sole presentation tool for instructors may not promote learning. Without thoughtful pedagogical considerations, PowerPoint may simply be static documents, which do not embrace change, promote open thought, and require student's active role and participation. Jones (2003) viewed PowerPoint as a very powerful and flexible teaching and learning support tool but lamented its limited use for information transmission which was described as very restricted pedagogical use. In addition, Szabo and Hastings (2000) cautioned that the efficacy of lectures with PowerPoint may be case specific rather than universal, implying the need for particular attention to not only the generic features of PowerPoint, but also domain-specific pedagogical strategies.

Purpose of The Study

This study was an exploratory attempt at a quick, initial assessment of the effectiveness of an interactive, self-paced and self-directed PowerPoint presentation (iPP) designed for learning to solve equations and inequalities involving absolute values, based on the Cambridge A-Level syllabus. In addition, it was also aimed at identifying possible areas for improvement, particularly on the pedagogical design of the slideware, before it is administered to a larger sample of participants.

The study was specifically aimed at addressing the following questions: How will the participant interact with the PowerPoint slides? How will the participant's performance in solving absolute value equations and inequalities change upon interacting with the slides? In

particular, the findings were expected to unravel any pedagogical improvement required to enhance the instructional and learning potential.

Method

Design

This study adopted a qualitative design, whereby the participant's performance in solving absolute value equations and inequalities, before and after interacting with the iPP, was examined. The participant-iPP interactivity was observed, video-recorded, transcribed, and analyzed.

Sample

This study involved a purposive sample of an A-Level student who voluntarily took a pretest and interacted with the iPP before attempting a posttest.

Instrument

Interactive PowerPoint Presentation (iPP)

The iPP was designed to contain five main strands, i.e. Preparation, Tasks, Worked Solutions, Concepts, and Reasoning, in consideration of the importance of conceptual understanding, reasoning, and the opportunity to solve problems and receive feedback (NCTM, 2000; National Research Council, 2001). The five strands are further elaborated in Table 1. A total of five absolute value equations and eleven inequalities were incorporated in the iPP. The first two of the eleven inequalities did not involve absolute values, i.e. $x^2 \geq 9$ and $\frac{8}{x} < 4$. They served to help the learner establish the understanding of, and be familiar with, real values and magnitudes before the concepts of modulus kicked in. In addition, an absolute value was defined in multiple ways to help the learner master the concepts of absolute values from various perspectives (Brumfiel, 1980).

One key feature of the iPP is the connected ideas which readily link a task to the related concepts and reasoning, in addition to worked solutions. Nonlinear paths of learning are made possible via the availability of buttons whereby the learner could freely attempt a task, view a worked solution, and study the concepts and reasoning involved. For instance, when one of the optional answers to a task is clicked on, a feedback message would pop up to inform if the answer selected is correct. A few screenshots in Figure 1 illustrate the above ideas.

Table 1: The Five Main Strands of The Interactive PowerPoint Presentation

Strand	Content/Purpose
1. Preparation	Cover page, subject title, learning outcome, instructions and explanation on the overall slide design (e.g. how to navigate between slides)
2. Tasks	Tasks on absolute value equations and inequalities for learner's attempt
3. Worked Solutions	Solutions to particular tasks revealed part by part on learner's action
4. Concepts	Mathematical concepts in relation to particular tasks and solutions
5. Reasoning	The reasoning explaining particular concepts or solutions

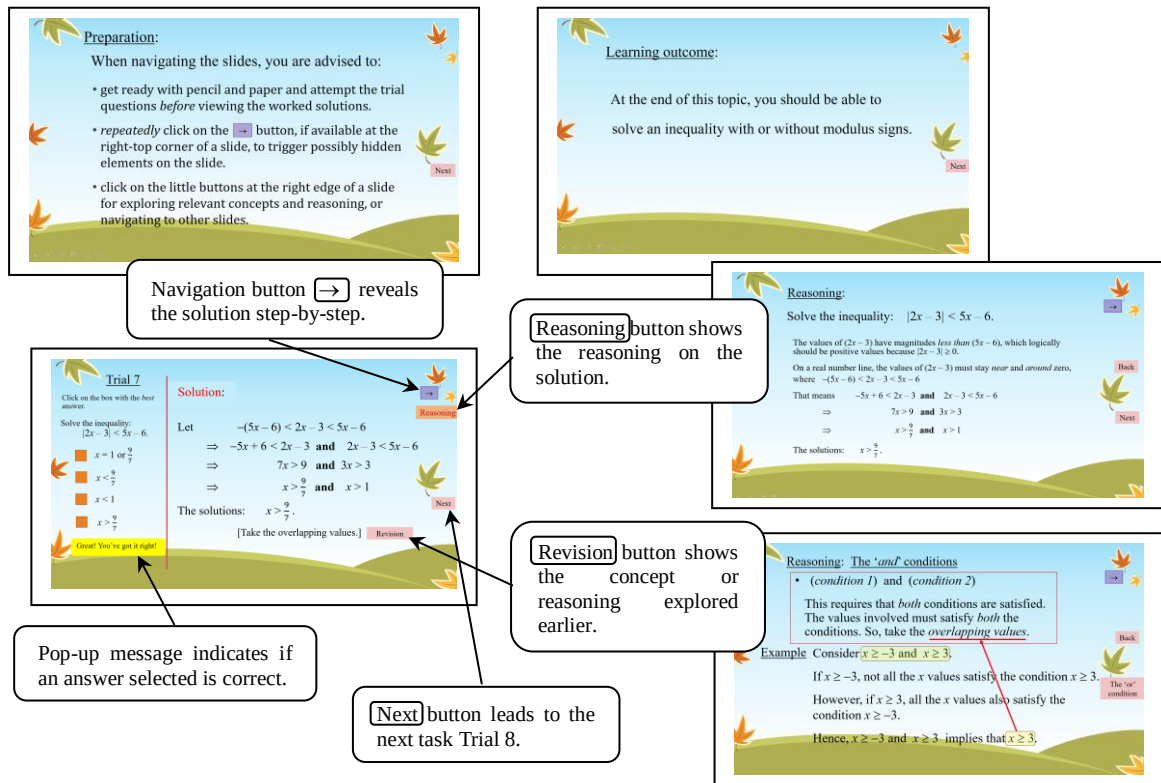


Figure 1: Examples of Connected Slides in iPP Showing Nonlinear Paths of Learning

Table 2: Equations and Inequalities of Various Structures in The Pretest and Posttest

Equations	Inequalities
1. $ 5x + 2 = 8$	1. $ 2x + 5 < 8$
2. $ 5x - 3 = 3 - x $	2. $ 2 - 7x \geq 3$
3. $ 2x + 6 = 4 - 8x$	3. $ 2x + 6 \leq 4 - 8x$
	4. $ 5x - 2 > 3 - x$
	5. $ 4x + 3 < 3 x + 1 $
	6. $\left \frac{3x+5}{1-2x} \right > 2$
	7. $x < 8$ and $x > -2$
	8. $x > 8$ and $x > -2$
	9. $x \leq -3$ or $x \leq 5$
	10. $x \geq 3$ and $x \leq 1$

Pretest and Posttest

Both the pretest and posttest included the same tasks as shown in Table 2. The tasks, which were based on the Cambridge A-Level syllabus, involved various structures and logical intricacies. The tasks are amenable to multiple solutions based upon varied algebraic reasoning despite sharing the same fundamental concepts of absolute values.

This domain of solving equations and inequalities of absolute values was selected in view of students' difficulties in dealing with the structural varieties in equations and inequalities and the epistemological complexity involved in teaching absolute value inequalities (Sierpinska, Bobos, & Pruncut, 2011).

Procedure

A pretest of absolute value equations and inequalities was initially administered to the participant, who then freely navigated the slides to attempt tasks, view worked solutions, and explore the underlying mathematical concepts and reasoning on the iPP. The participant learned to solve absolute value equations and inequalities on the iPP in two separate sessions. A posttest was administered upon the completion of each learning session. The participant's interaction with the slides was closely observed and videotaped. Relevant details were recorded during observation and the video data transcribed for qualitative analysis. In addition, the participant's responses to the pretest and posttest were qualitatively examined for comparison. The two learning sessions took approximately 38 minutes (solving equations) and 1 hour 15 minutes (solving inequalities).

Data Analysis

Interaction with The iPP

The observation and fine-grained analysis of the participant's interaction with the iPP revealed the contents the participant accessed, e.g. Preparation, Tasks, Worked Solutions, Concepts and Reasoning, in addition to the activities that had transpired and the time spent on the various contents and activities. Elements of interactivity that suggested requisite effort for improving the pedagogical aspects of iPP, in particular, were noted.

Five hundred points of time were randomly generated. The contents the participant accessed at these points of time were subjected to a reliability test by two independent raters. The Kappa Measure of Agreement value was .915 for $p < .0005$, indicating a very good agreement.

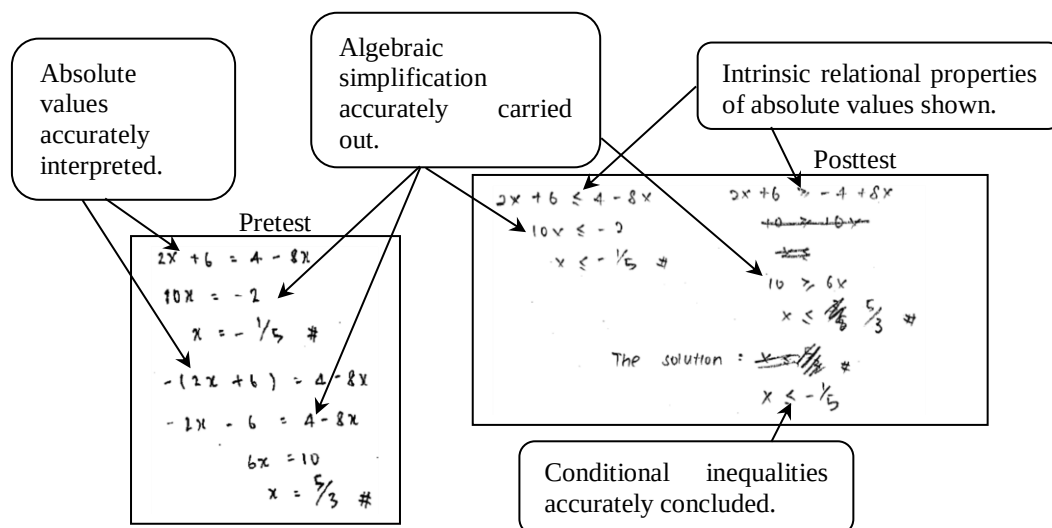


Figure 2: Qualitative Comparison of The Pretest and Posttest Solutions to Task ' $|2x + 6| \leq 4 - 8x$ '

Pretest and Posttest

The participant's solutions to the pretest and posttest were qualitatively compared. The emergent themes slightly varied from task to task. Five most-frequently emergent themes included interpretation of absolute values, intrinsic relational properties of absolute values, algebraic simplification, conclusion of conditional inequalities, and accuracy. Figure 2 exemplifies a qualitative comparison between the pretest and posttest solutions to the Task ' $|2x + 6| \leq 4 - 8x$ ' in relation to the five themes.

Findings

Interaction with The iPP

It was observed that the participant navigated the iPP freely mostly on a mouse and occasionally on the keyboard. Most of the time he was focusing on the slides, e.g. viewing a task or solution, or studying the relevant concepts and reasoning, at times evidenced by his line-by-line mouse movement on the screen. Other time he would be attempting the tasks on paper. Table 3 depicts the time spent on the first access and revised access to the various iPP contents on absolute value equations and inequalities. The participant's

Table 3: The Time Spent (in Minutes) on The First and Revised Access to The Various iPP Contents

	Equations		Inequalities	
	First access	Revised access	First access	Revised access
Preparation		0.87		0.62
Tasks	3.53	0.12	10.20	16.90
Worked solutions	2.48	1.17	6.62	7.42
Concepts	2.62	0.75	2.18	3.80
Reasoning	7.62	1.95	3.38	2.93
Random Flipping		0.60		1.42

Non-linear access to the iPP contents was prominent. Occasional quick flipping between slides was also observed.

In general, the participant had spent relatively more time on learning to solve absolute value inequalities than equations. The total time spent on equations and inequalities are 21.71 minutes and 55.47 minutes, respectively. More time was spent on nonlinearly revising the various contents on the iPP for inequalities (56.0%) than for equations (18.4%). The participant spent most of the time on reasoning for the absolute value equations (44.1%) but most time was spent on attempting inequality tasks (48.9%).

Pretest and Posttest

The comparative analysis of the participants' solutions to the pretest and posttest revealed significant improvement in the participant's performance particularly in solving inequalities involving absolute values. The posttest solutions to inequality tasks revealed not only a change in reasoning but also enhanced accuracy particularly in communicating the intricate concept of simplifying combined inequalities (e.g. ' $x > 2$ or $x > 5$ ' $\Rightarrow x > 2$, but ' $x > 2$ and $x > 5$ ' $\Rightarrow x > 5$). However, the participant performed equally well in solving absolute value equations in both pretest and posttest, implying the existence of prior knowledge. Figure 3 shows a sample of solutions which illustrates the participant's enhanced accuracy and understanding of intrinsic relational properties of absolute values in the posttest solutions. The solutions to all other tasks showed a similar trend, as in Figures 2 and 3.

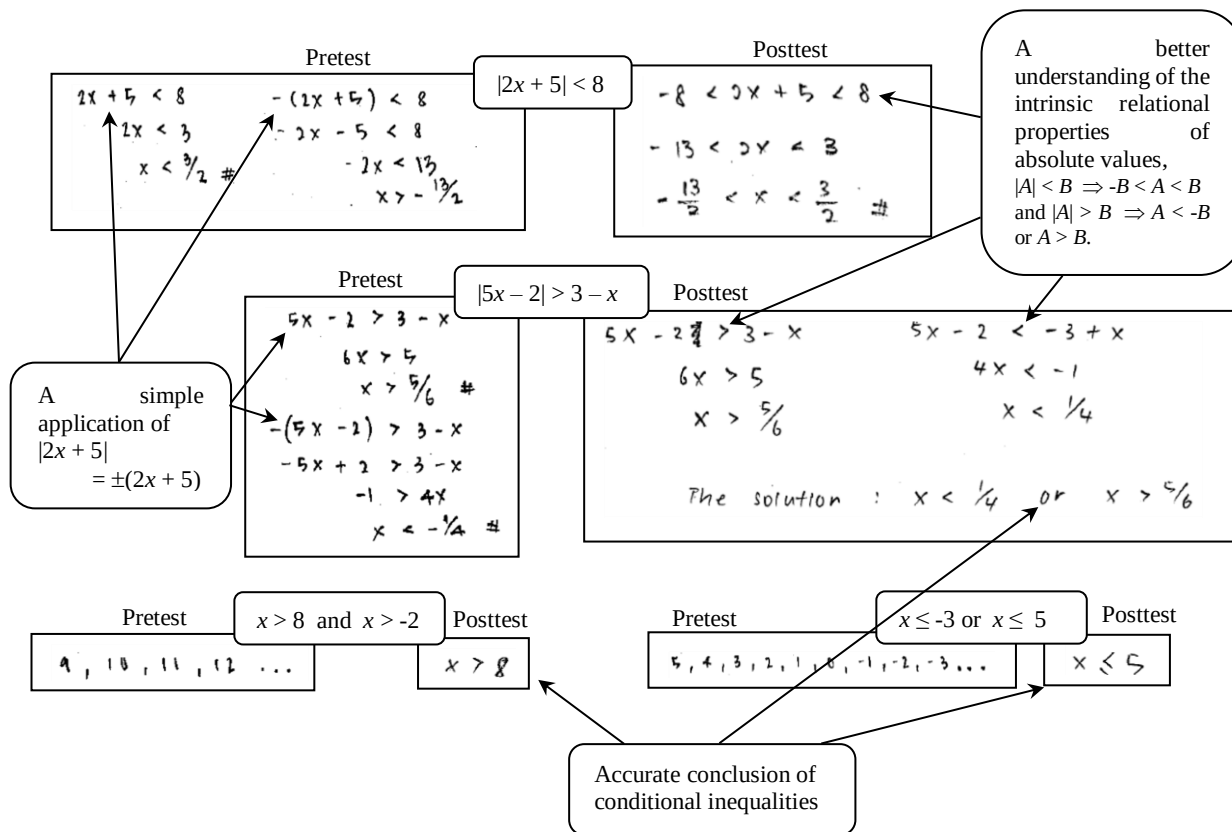


Figure 3: Improved Conceptual Understanding and Reasoning Shown in The Solutions to Posttest

Discussion

PowerPoint has commonly been employed according to its original intent, i.e. for a presenter to engage an audience with succinct, dynamic information. This study, however, showed that it may also work well without the presence of a presenter in an educational context. This study echoed the findings of other studies that the use of PowerPoint enhances learning (Davies, Korte, & Cornelsen, 2016; Nam and Trinh, 2012; Wanner, 2015). Given the freedom to navigate the presentation on a self-directed path of learning, a learner may learn a content with the underlying concepts and reasoning and assess understanding by attempting tasks iteratively and repeatedly. The participant's nonlinear access to the iPP contents confirmed the flexibility of iPP in supporting nonlinear, iterative autonomous learning. We surmise that such freedom and autonomy could be motivating and engaging (Reeve, 1999).

Besides the peripheral design supports, e.g. pace of presentation, font types and sizes, animation, etc., the contents and substance on the slides are no less important. In particular, mathematics is philosophically a 'language'. Every mathematical statement conveys some information, which could only be sensible with sufficient conceptual understanding, reasoning and the power to explain. Such belief was a key consideration for the iPP slide design. The opportunity for accessing concepts, reasoning and worked solutions while attempting tasks had undoubtedly been helpful in advancing the participant's conceptual understanding. Without the essential substance to promote conceptual understanding and reasoning, even an attractive presentation is of little value. The emphasis on concepts and reasoning (Brodie, 2009), with the opportunity to attempt tasks and learn from the worked solutions, is believed to be a strategic catalyst for knowledge and conceptual advancement. We conjecture that positive

learning outcomes may not be associated with simply the availability of PowerPoint. How contents are designed and incorporated in PowerPoint slides may explain the mixed learning outcomes in the past studies. We argue that this viewpoint is generally extensible to other use of educational technology.

It is also worth mentioning that the fine-grained analysis adopted in this study has unraveled aspects that are not immediately apparent. Such method of analysis is deemed to be effective in unraveling tacit nuances and details critical for continuous improvement. For instance, it was observed that the experience of navigating the iPP could be enhanced by incorporating an ‘end-of-slide indicator’ so that a learner will not continue pressing on the ‘next’ button, only to find that the same slide repeats. In addition, the participant’s great amount of time spent on attempting the inequality tasks might have inadvertently reduced the effort to focus on such other aspects as concepts and reasoning. This finding, also in consideration of today’s learners’ short attention spans (Rothman, 2016), suggests that a topic on the iPP can be delivered in multiple short sessions, particularly when the number of tasks and their complexity increase. This way may let a learner have more balanced access to concepts and reasoning in addition to attempting tasks.

Conclusion

It is concluded that interactive PowerPoint slides which contain pedagogical and resourceful contents and allow for autonomous navigation may support mathematics learning. However, any attempt to generalize the findings is strictly inappropriate. Further studies have to be conducted to ascertain the effectiveness of iPP and to better understand learners’ differences in such technological learning context.

Originality/Value

Retooling PowerPoint into interactive, self-directed presentation for the learning of mathematics is a rare attempt. Such attempt is indubitably time-consuming. However, considering a one-time design with subsequent fine-tuning only when needs arise, the opportunity for student’s self-paced learning by repeatedly iterating between attempts at tasks, reflection on worked solutions in comparison with own attempts, and access to relevant concepts, explanations and reasoning, it could be worth the effort particularly in supporting weaker learners and saving instructional hours.

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BRAND EXPERIENCE BRAND LOVE AND BRAND ADVOCACY: A CASE OF K-PLUS USER IN UDONTHANI

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Abstract: *The study aims to investigate in the relationship between brand experience, brand love, and brand advocacy of K-Plus users in Udonthani. The data was collected by questionnaires from 400 samples K-Plus Users in Udonthani . Then data was analyzed by using Structural Equation Modeling (SEM). The SEM result revealed that (1) brand experience has the influence on brand love. (2) brand love has the influence on brand advocacy. (3) brand experience has the influence on brand advocacy. The results supported three hypotheses of the study, the relationship of brand experience with brand love is showing 60%, the relationship of brand love with brand advocacy is showing 46% and the relationship brand experience of brand love with brand advocacy is showing 33%.*

Keywords: *Brand Experience , Brand Love , Brand Advocacy*

Introduction

At present, technology is a very important role in the daily life of the people. It is a time when information can spread quickly and connect seamlessly. The factors that affect this change most. Is electronics in the form of a smartphone. Most commercial banks have introduced digital banking to serve their customers instead of dealing in more branches. This will improve the convenience of the transaction. And another alternative service.

KASIKORNBANK is another bank with a commitment to digital publishing. Have a vision. A customer-centric financial group. Initiative on new things and committed to integrating technology and human resources into sustainable development. KASIKORNBANK's K-Plus service has the highest number of users in Thailand. the importance of technology to KASIKORNBANK's online transaction service, K-Plus application has led the researcher to apply this case study in the area of brand experience, brand love and brand advocacy of K-Plus the current consumer.

K-Plus of the current consumer. One of the important factors that drives consumer behavior are Brand experience. The touch points are the necessary connections between the consumer and the manufacturer. Any brand that gives consumers confidence will come to the mind of the customer and will affect the ease of access. The result is brand loyalty.)Brand Loyalty()Barsky & Nash, 2002; Berry, et al., 2002)

In addition For marketing. Is to make consumers love the brand. This is a passionate feeling as well as the satisfaction of customers with products or services. Love is not a favorite, but love is more of a quality than love. Brand Love in the brand is very important in marketing.

This may lead to positive feedback from consumers. (Word of Mouth) It also gives consumers loyalty in the brand. (Brand Loyalty) (Carroll & Ahuvia, 2006)

As mentioned above, it affects the brand advocacy. As consumers who are brand advocacy are more loyal to the brand. This is reflected in the customer retention of the brand. It leads to support for others to use. Brand supporters are welcome to introduce their favorite brands to others. Be willing to recommend yourself without asking. Finally become a brand Evangelist. And when motivated by question or negative support. Brand advocacy will showcase themselves to guide and protect their brand.)Kotler, 2017. Referring to Naluck Charuvat, 2560.(Like K-Plus when consumers experience brand, brand love and brand advocacy. It is recommended to others.

Therefore, the researcher sees the importance of brand experience. Brand love and brand advocacy In the case of K-Plus users in Udon Thani, this study may be useful in the future. This leads to research issues.

Objectives

1. To study the relationship between brand experience has the influence on brand love.
2. To study the relationship between brand love has the influence on brand advocacy.
3. To study the relationship between brand experience has the influence on brand advocacy

ii.Theoretical

A.Theory and Concepts Brand Experience

Suangkana Na Nakorn (2003) describes consumer experience with marketing communications. The company does not offer products or services anymore. But it does offer the experience that is felt in the consumer. The result will give each person a different experience. Experience is about living, can be multi-dimensional. Creating Experiences with Consumers Can be explained. Experience Modeling (Strategies of Experiential Marketing: SEM) and experience provider

B.Theory and Concepts Brand Love

Love concept in brand

Halilovic (2013) mentions the concept of love in the brand. Brand love is a part of the relationship between the consumer and the brand, and is a more intense relationship than passion. Consumers can express their feelings about the brand through love, as consumers begin to have relationships and emotions with the brand.

C.Theory and Concepts Brand Advocacy

Brand advocacy concept

Kotler (2017) referred to in Naluck Jarawat (2560). Brand advocacy means More loyalty to the brand. This is reflected in the customer retention of the brand. Repeat buying leads to support for others. While brand advocates are happy to introduce their favorite brand to others. Be willing to recommend yourself without asking. The brand advocates tell good stories to others. And became a Brand Evangelist. However, most brand loyal supporters are not expressive. Unless triggered by a question or negative support. When facing such a stimulus. Brand sponsors will showcase themselves to guide and protect their brand.

Conceptual framework for research and hypothesis.

A. Framework

The literature review found that In terms of brand experience. There is a positive relationship with brand love. While Brand Love Has a positive relationship with the brand advocacy and Brand Experience There is a positive relationship with Brand Advocacy. From the above relationship. K-Plus branding is based on the concept of research as in Figure 1.

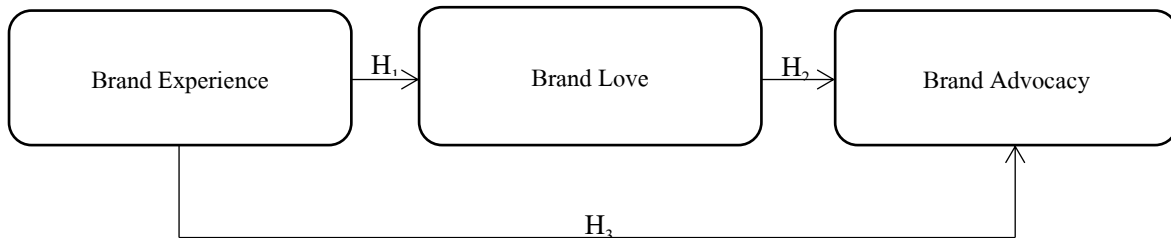


Figure 1.Framework

B. Research hypothesis

Table I. Summarize the study hypothesis and the relationship prediction.

Hypothesis	Educational assumptions	Relationship prediction
H ₁	Brand Experience is positively correlated with brand love.	(+)
H ₂	Brand love is positively correlated with brand advocacy.	(+)
H ₃	Brand advocacy is positively correlated with brand experience.	(+)

III. Research Methodology

Population used in research

The population used in this research was K-Plus users in Udon Thani.

Research samples

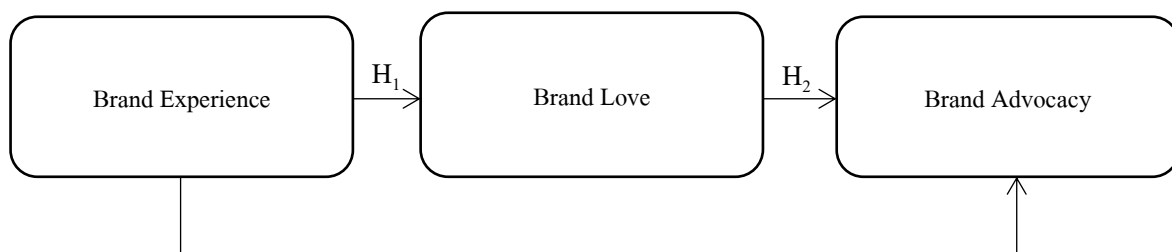
The samples used in this study were K-Plus users in Udon Thani. Are over 15 years old. There are at least 400 Kbank accounts.

Data analysis

Use data analysis Descriptive Statistics and Inference Statistics

VI. Testing hypothesis

Analysis of model structure brand experience brand love and brand advocacy. The results of the analysis of the structural equation model can be summarized in Figure 2.



Note → Accept the hypothesis — — — → Reject the hypothesis
Note $R^2_{BL} = .604$, $R^2_{BA} = .462$, $R^2_{BE} = .330$
*P < .05, **P < .01, ***P < .001

Figure 2 Model structure brand experience brand love and brand advocacy

The research question is "How does brand experience relate to brand love and brand advocacy?" The hypothesis is that the research questions and the hypotheses are tested. The results are as follows.

Assumption 1 or H₁ : Brand Experience is positively correlated with brand love.

The results of the hypothesis test showed that Relationship of brand experience)BE(Influence on Brand Love)BL(Statistically significant at .001 level With a beta (β) as .778 This is a direct and positive influence. Can be explained. True Self-Sufficiency consists of two questions: I am involved in the field of action and behavior when I use the brand. K-Plus)BE7(and brand K-Plus Made me think.)BE11) There is a positive relationship with brand love, which is based on the assumptions set.

Assumption 2 or H₂ : Brand love is positively correlated with brand advocacy.

The results of the hypothesis test showed that Relationship of brand love) BL(Influence on Brand advocacy)BA(Statistically significant at .001 level With a beta (β) as .681 This is a direct and positive influence. Can be explained. Ideal self-harmony It consists of 2 questions: I feel brand K-Plus It is a wonderful brand.)BL1(And i love brand K-Plus)BL5(Positive relationship with brand advocacy. This is based on assumptions set.

Assumption 3 or H₃ : Brand advocacy is positively correlated with brand experience.

The results of the hypothesis test showed that Relationship of brand experience)BE(Influence on Brand advocacy)BA(Statistically significant at .001 level With a beta (β) as .576 This is a direct and positive influence. Can be explained. Emotional Brand Engagement consists of 2 questions: I will spend my time and physical strength to get involved in brand K-Plus)BA3(And I will actively resist the negative information about the K-Plus brand.)BA4(Positive relationship with brand advocacy. This is based on assumptions set.

Table II. Summary of the hypothesis testing results.

Hypothesis	Research hypothesis	test result
H ₁	Brand Experience is positively correlated with brand love	Accept
H ₂	Brand love is positively correlated with brand advocacy	Accept
H ₃	Brand advocacy is positively correlated with brand experience	Accept

IV. Research result

The population used in this study is K-Plus users in Udon Thani. The sample size was 400 persons. This is from K-Plus users in Udon Thani. They are over 15 years old and have at least one Kasikornbank account. The instrument used in this research was a questionnaire. The respondents could answer by Self-Administered The questionnaire consists of 4 questions: Part 1 General information of the respondents., Part 2 Experience in using the service K-Plus , Part 3 Love in the brand K-Plus And part 4, brand advocacy K-Plus By collecting data. The researcher went to the area to collect the questionnaire. The respondents fill out their own answers in the questionnaire.

A.General data analysis

The sample of the sample was 400 respondents. Be the person who uses the service K-Plus How many times have you used K-Plus the most? Six times or more, 154 people Percentage 38.50 The next is more than 5-6 times, 119 people Percentage 29.75 More than 3-4 times, 110 people Percentage 27.50 Less than 2 times, 17 people or Percentage 4.25

B. Confirmation Analysis

Analysis Convergence Validity and Reliability found Factor loading. The observed variables are as mentioned above. All variables were observed to have higher factor loadings .50 This indicates that the data is highly accurate. (Hair et al., 2010) In terms of reliability, Cronbach's alpha coefficient was found to be equal to .887 And the lowest value was .759, where all the values were greater than .70, indicating that the data were analyzed with high reliability.

C. Analysis of structural equation models

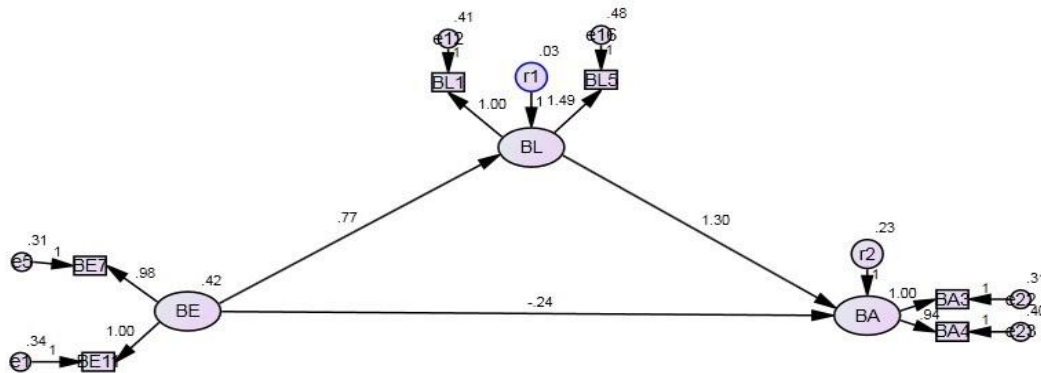
The structural equation is consistent with the empirical data. model structural equation, brand experience. brand love and brand advocacy. considering the five consistent values of compliance $\chi^2/df = 2.285$, GFI = .986, CFI = .986, RMSEA = .068 and SRMR = .0503 It shows that the structural equation model is consistent with the empirical data. The relationship between theoretical variables was found, brand experience)BE(Influence on brand love.)BL() $\beta = .778$, $P < .001$) brand love)BL(Influence on Brand advocacy)BA() $\beta = .681$, $P < .001$) brand experience)BE(Influence on Brand advocacy)BA() $\beta = .576$, $P < .001$) Brand experience ,brand love and brand advocacy found to have a predictive coefficient.) R^2) as .604 .462 and .330 respectively Can describe the relationship of brand experience.)BE(with brand love)BL(Percentage 60 Explain the relation of brand love.)BL(with brand advocacy)BA(Percentage 46 And the relationship of brand experience)BE(with brand advocacy)BA(Percentage 33 As shown in Figure 2, the results of the analysis of the model's consistency index

Show

in

Table

III.



SEM Chi-square=17.113, df=6, ChiSquare/df=2.852, GFI=.986, CFI=.986, RMSEA=.068, SRMR=.0503

Figure 2 Analysis of model equation structure,
brand experience, brand love and brand advocacy

Table III. The results of the analysis of the harmonization index of the model.

Index of harmony	criterion	Measurable index	result
χ^2/df	< 5.00	2.285	Pass
GFI	> 0.90	.986	Pass
CFI	> 0.90	.986	Pass
RMSEA	< 0.09	.068	Pass
SRMR	< 0.08	.0503	Pass

From Table III, the model consistency of the model was found to be consistent with the empirical data. The five indices of harmony indexes that met the acceptance criteria were: $\chi^2/df = 2.285$, GFI = .986, CFI = .986, RMSEA = .068 and SRMR = .0503. Therefore, it can explain the beta analysis. β (The relationship between variables was found to be between .576 – .778). As shown in the table IV.

Table IV. Beta values (β) of the relationship between variables

Relationship style	β	t-value
BE----->BL	.778	11.724***
BL-----> BA	.681	18.551***
BE-----> BA	.576	14.060***

Note $R^2_{BL} = .604$, $R^2_{BA} = .462$, $R^2_{BE} = .330$
* $P < .05$, ** $P < .01$, *** $P < .001$

From Table IV, the maximum beta to beta (β) was found to be the maximum beta (β) of .778. The relationship of brand experience (BE) Influence of brand love (BL) was statistically significant at .001 level. The value of beta (β) was 681. The association of brand love (BL) had a significant influence on brand advocacy (BA) at .001 level. The beta (β) with the lowest value was .576. The relationship between the brand experience (BE) had a significant effect on the brand advocacy (BA) at .001 level.

V. Discuss the results

Brand Experience is positively correlated with brand love

In case of K-Plus users in Udon Thani Brand Experience is a part of the relationship between consumers and the brand K-Plus And it's a more serious relationship than a favorite. Consumers are more likely to have a relationship with their K-Plus brand and consumers can develop better relationships with the brand.)Carroll & Ahuvia, 2006(There are five levels of consumer love that can be expressed in the brand. 1(Brand passion 2(Brand engagement 3(Branding is positive. 4(Respond to the brand with positive feelings. 5(Announcement of love for the brand.)Batra, Ahuvia & Bagozzi, 2012(

Brand love is positively correlated with brand advocacy

In case of K-Plus users in Udon Thani Brand love is a part of the relationship between consumers and the brand K-Plus And it's a more serious relationship than a favorite. Consumers are more likely to have a relationship with their K-Plus brand and consumers can develop better relationships with the brand.)Carroll & Ahuvia, 2006(There are five levels of consumer love that can be expressed in the brand. 1(Brand passion 2(Brand engagement 3(Branding is positive. 4(Respond to the brand with positive feelings. 5(Announcement of love for the brand.)Batra, Ahuvia & Bagozzi, 2012(

Brand advocacy is positively correlated with brand experience

In case of K-Plus users in Udon Thani Brand experience has a structure of consumer relationships and brand advocacy. K-Plus services, as Kotler (2017) cites in Naluck Jarawat (2017). Brand advocacy refers to the fact that a customer is more loyal to the brand. This is reflected in the customer retention of the brand. Repeat buying leads to support for others. While brand advocates are happy to introduce their favorite brand to others. Be willing to recommend yourself without asking. The brand advocates tell good stories to others. And became a Brand Evangelist. However, most brand loyal supporters are not expressive. Unless triggered by a question or negative support. When facing such a stimulus. Brand sponsors will showcase themselves to guide and protect their brand.

Suggestion

Findings and implementation of research results in academic.

- 1) New findings in the study found that the relationship of brand experience (BE) and brand love (BL) Percentage 60. Describe the relationship of brand love.)BL(with brand advocacy)BA(Percentage 46 and the relationship of brand experience.)BE(with brand advocacy)BA(Percentage 33 This is to increase knowledge for marketing.
- 2) New findings in the study found that the findings on the creation of brand love. and brand advocacy. Use the brand experience. In the context of the K-Plus service, which has never been studied in Thailand in this particular context. The results of the research were consistent. Mohammad Taleghani, Mahmood Samadi Largani & Seyyed Javad Mousavian (2011) Have tested the concept for building customer relationships from an experienced perspective. The

purpose is to describe the scope of intent to purchase. Consumers are influenced by brand relationships (satisfaction, trust, and brand promise). And brand experience And the loyalty (Loyalty) makes customers return to buy goods or services of the organization. Discuss or share the experience of these valuable values.

Suggestions for the use of research results in the business sector.

1) Business related services Should focus on branding. Within the organization of the service business The concept of user perception can be applied. As part of the brand used in business. This is consistent with the concept McConnell & Huba)2003(Refer to in Yaverbaum et al.) 2006(That said Brand Advocacy It means that influential consumers create a strong connection with the brand or brand company with strong emotions and feelings. These consumers will re-buy their branded products or brands. And declare themselves as passionate about the brand. They also tell other consumers about those brands. The brand is worth buying. It is worth owning. In summary, Brand experience Can motivate target customers to brand love and brand advocacy. The results of this study showed that. The concept of branding support. Can be used in cross-cultural context as well. (MacLavery et al., 2007) These will contribute to consumer satisfaction. Want to use the service without changing your mind to use other brand services? And lead to tell other consumers.

2) K-Plus services are part of service business. Businesses should pay close attention and be aware of the branding efforts that occur with consumers. The data from this study can be used for business planning and development of marketing strategies.

Businesses can leverage information from this study to develop marketing strategies to build brand advocates: business organizations may leverage social media. And applications. In order to motivate their brand's customers to become brand-conscious, they become brand advocates.

Suggestions on the next issue

1) Next research he models and variables used in this study should be used. In other service businesses to run a business successfully. Or government agencies that require government officials to drive within the organization. To determine if it can be applied in another context.

2) Next research Qualitative research methods should be used as well. In-depth interview Participatory Observation To gain insights into the behavior of the client.

3) Next research Other variables that may be correlated with behavioral variables of the service are also perceived as part of the brand.

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CORPUS LINGUISTICS AND LANGUAGE TEACHING

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Abstract: *Recently a great deal of research continues to investigate how computer can be helpful and can function as a facilitator in language teaching. One particular area research on computer which even now is open for further investigation is corpus linguistics. It is important to find out what exactly corpus linguistic is, what corpus linguistic studies can offer language learning and teaching, how it can be adopted and used by English language teachers, how achievable such an adoption would be. The present article will address these questions.*

Keywords: *Corpus Linguistics, Language Teaching, Language Learning, Technology*

Corpus Linguistics

The advancement and progress of computer technology within the last decades has eventually introduced a new approach to linguistics (Moradi, 2014). The advent of corpus linguistic as a branch of linguistics added a new facet to the discipline of traditional linguistics; this was done with the help of new technology and implementation of computer technology that assisted linguistics to boost and engage with various tools, software programs and techniques to collect data from the actual language use from to analyze the databases based on a newer methods. As Moradi (2014) depicts:

“The new approach to linguistics and language studies has provided adequate scopes for the immediate and direct use of linguistic information and evidences in typical activities and works associated with language technology and linguistics.

Moradi (2014)

To be able to conduct a research on language which is on the basis of corpus, it is essential to access to a corpus and as well concordancing programs. A corpus composed of a databank of written texts, collected from transcription of recorded natural speech and writing. A concordance is a computer program which can analyze the corpora and list the findings. The key purposes of corpus linguistic are to explore patterns of natural language use, analyzing the authentic language usage, revealing facts about actual language behavior.

Register Variation

One regularly ignored facet of language use which is formidable to account for devoid of corpus research is register. Register composed of varieties of language that are employed in various circumstances. Language consists of many various registers which can be range from the most general to the highly specific ones. A general register consists of newspapers, academic prose, casual conversations or fictions, while specific register are sub-registers within academic prose, like scientific texts, linguistic studies and literally criticism, each with its own field's specific features. Corpus analysis explores and reveals that language usually behaves in a different manner on the basis of the register, each with some particular patterns.

Advantages of Conduction Corpus-based Analysis

Corpus linguistic offers more objective perspective of language. John Sinclair (1998) asserts that this is due to the fact that the speakers do not have access to the imperceptible patterns that used up in a language. A corpus-based analysis can examine nearly any language patterns, structural, lexical, grammatical, morphological, phonological, and discourse, usually with particular agendas like finding male versus female usage of tag questions, acquisition of irregular verbs by children. With the use of suitable analytical programs, it can not only discover the language use patterns, but also the extent of their usages and contextual factors which affect variability. For instance, it can be researched the frequency of using past perfect in speaking versus writing or fiction versus newspapers or as an example it can also be investigated about the frequency and preference of the use of synonyms like commence/ begin/ start or large/big/great to in different contexts.

Applying Corpus Linguistic to Teaching

As Brlow (2002) mentions, corpus linguistic can be applied to teaching mainly in three main areas namely: 1) classroom activities 2) material development 3) Syllabus design.

Classroom Activities

Classroom activities can include active learner-conducted language analyses in which the learners make use of concordancing programs and corpus to make their own findings about language use. The instructor can guide an established survey which will results in predictable outcome or can let the learners to it in their own which leads to a less predictable outcome. This clarifies data driven learning that can motivate language learners' autonomy by training them to make their own conclusion about language use.

Material development

The material development usually relies on the instinctive knowledge of developers of the students' needs. With the aid of a corpus, material developers can create exercises on the basis of real effective examples that help students to discover language use characteristics. The material developers are able to analyze or simply make use of published corpus research study as a reference guide.

Syllabus Design

The syllabus arranges the decisions of teachers in regards to the focus of class and class activities based on the needs of the learners. Register knowledge and frequency are very essential and helpful in providing and planning the course. By making use and analysis of corpus which is related to the objective of specific class, the teachers can make decisions about what items and concepts of language can be linked and associated to the target register.

Teacher/Student Roles and Benefits

Teachers can at as a facilitator to teaching and research rather than merely as one who impart knowledge and skills. The advantage of such Lerner-centered learning is learners have access to the authentic language use that extracted from real contexts rather than from constructed pedagogical materials. In fact, studying concordances can make learners more mindful of language use. According to Richard Schmidt (1990), asserts that "what language learners become mindful and conscious of, what they pay attention to, what they notice... impact and determines the result of language learning". Willis (1998) depicts that learners are able to determine:

- The potential and feasible different meanings and uses of common lexical items or words
- Useful phrases and particular collocations that they might make use of them
- The nature and structure of both spoken and written discourse
- That particular language characteristics are more typical of some specific types of texts than others

Barlow (1992) depicts that a corpus and concordancer can be utilized to:

- Analyze readers, books, and course books
- Make comparison between language use, such as written and spoken form of language
- Analyze usage of language, such as lexical usage, for instance when it is appropriate to use get rather than obtain or vice versa.
- Generate student tasks or activities and useful exercises
- Investigate word order
- Make comparison between synonym words, such as request vs. ask

Problematic Issues

There are some challenges and difficulties for the implementation of the use of corpus in teaching languages. The first important issue is corpus selection. However, depends on the nature of the teaching, some teaching purposes require large corpus and while some small corpus. Some of the corpora can be accessible online for free. However, teachers should be careful to analyze the usefulness of the corpus according to the specific teaching context and check if the corpus is representative for the target register. Another issue is the corpus construction, particularly when the target register is very specific. This can be completed by making use of textbooks, course reader or various articles which the learners need to read are representative what they need to read. It should be mention that effectiveness of a corpus does not depend on its size and largeness; in other words a corpus does not require being necessarily large to be effective. The most substantial consideration is that it should be useful and relevance to the learners, it needs only to be selected based on the learning objectives of the class.

One important issue is that the data can mislead individuals, if they use very general corpus, it may cause frustration and despondency, and it may even make the register variations that provide significant contextual information about actual language use.

Exploring Corpus for Classroom Activity

Even though corpora appear to be reasonable theoretically, implementing it into the classroom and learning activities is somehow challenging and formidable because the information which it provides sometimes appears to be chaotic. That's why teachers need to be more responsible in controlling a corpus by filtering the data based on the needs of the students. According to Conrad (2000) demonstrates that the materials writers and developers should pay much more attention to register specific corpus studies.

Conclusion

In order to conduct a research on language and language use which is on the basis of corpus, it is essential to access to a corpus and as well concordancing programs. Corpus linguistic can be significantly useful in teaching specifically in three areas include: 1) syllabus design 2) development of material 3) classroom activities. With the help of corpus linguistics, the researchers are able to analyze various language patterns, discourse, structural, lexical,

grammatical, morphological, phonological aspects of language. With the help of corpus linguistics and new computer technology teachers can enhance and promote learners' language skills in various effective ways (Moradi, 2014).

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FACTORS THAT AFFECT THE SEASONAL EQUITY OFFERING WITH AND WITHOUT WARRANTS AND THEIR SHARE PRICE REACTIONS

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Abstract: *Much research has addressed the issues of whether bonus and warrants in Seasoned Equity Offerings (SEO) will cause any positive or negative reaction to shareholders. Some studies have examined the creditors' reactions instead towards firms' equity offerings (IPO and SEO). This study therefore has tried to fill in the literature gaps by comparing the share price reactions towards and additional factor in the traditional SEO in Malaysia by using warrant. In addition, this study also looks into the firm offerings and their specific factors that will influence firms' decisions to issue warrant during SEO and identify if these factors are significant in determining the direction and magnitude of share price reactions. The analysis employs logit and probit regression model in analysing the determinants of firms' choice to issue warrant during SEO. The findings conclude that in Malaysia, firms with high long term debt, overvalued stocks, and lower size of proceeds tend to issue warrants during SEO. The second objective is to compare the shareholders share price reaction in SEO with warrants and pure SEO without warrants. It was discovered that in Malaysia market, firms that issue SEO with warrants was better received than pure SEO in term of share price reaction.*

Keywords: *shareholders' reaction, warrants, emerging market, developed market, Seasoned Equity Offerings*

Introduction

The importance of corporate financing decision to wealth creation and firm value has been initiated by Modigliani and Miller propositions as early as year 1958. According to Modigliani & Miller (1958) in their Capital Structure Irrelevance Propositions, for a given production and investment decision, a firm's value is not dependent on its financing decision. However, this idea is only valid under the assumption of perfect and frictionless market. In a real world setting, it is understandable that firms' financial decisions will result in changes in financial claim structure which imply different costs of capital.

The fact that forms of financing is important in facilitating different stage of firms' growth and innovations was highlighted in the United Nation Economic Commission for Europe (UNECE) in their Policy Options and Instruments for Financing Innovation based on the result of Financing of Innovative Survey, in year 2000. It was found that at the expansion stage, financing channel such as debts, bridge loans, as well as public stock markets play the most important role in providing cash flows to businesses as shown in Figure 1. As the importance of these financing sources varies across different stage of development, researcher expects that the market reactions towards corporate financing decision to be more critical in emerging countries, e.g. Malaysia, as compared to the developed countries.

Prior to Asian bond market emergence, the equity market has always been the priority source of financing to business firms after bank loans. Equity funding was perceived as important source of funding, especially during post crisis period as presented by the debt-to-equity ratio in Figure 2. However, after the emergence Asian bond market Debts, financing is slowly increasing acceptance because it was regarded as one of the popular and cheaper sources of financing for investors due to several factors which include: (1) it allows for immediate buy and selling bonds at any time with a very low transaction cost, (2) it gives the freedom to investors to manage their portfolio easily, (3) ease of investment monitoring with the built up automated trading system, (4) allows the investors to maximize returns by diversifying risks into different equity, (5) a predictable form of investment, (6) putting the investor in control and free from fund management fees, and last but not least (7) considerable tax advantage. This increasing importance of debt financing is not implying that one should undermine the significance of equity financing in creating firm value. However, firms continuously need to balance their debt to equity ratio in order to avoid excessive financial risk problem. Figure 2 shows that the debt to equity ratios is always less than one.

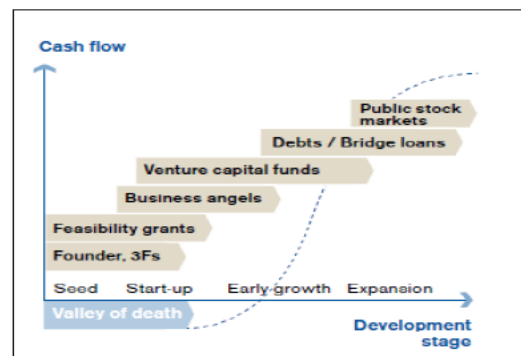


Figure 1 : Financing Sources and Development Stages

(Source: Policy Options and Instruments for Financing Innovation, United Nation Economic Commission for Europe (2000))

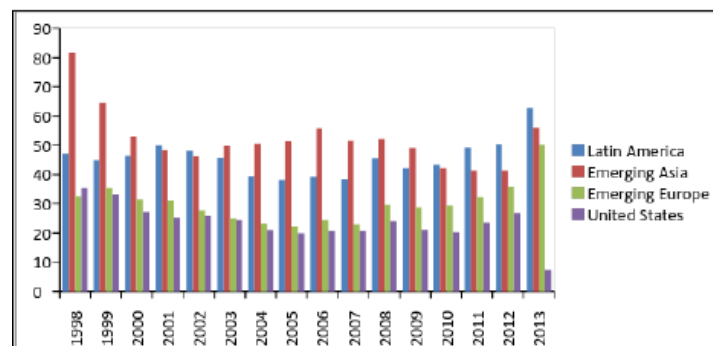


Figure 2 World Debt to Equity ratios

(Source: IMF, Corporate Vulnerability Utility, April 2014; available from: <http://www.imf.org/external/pubs/ft/reo/2014/apd/eng/areo0414.htm>)

Therefore equity financing is still the large component in corporate financing by equity offering. The issuers of equity are now popular to add element attached to the original security for example bonus or warrants to increase subscription. According to Ross (2013), bonus/warrants may be attached to the offerings in order to attract investors' attention to subscribe to the firms' equity offerings. However, with the inclusion of these element into the

existing issuance, the interest of shareholders are now emphasise as all these financial instruments enable the investors to either exercise the rights they possess with the bonus/warrants and options features, or participates in the issuers' stock price appreciation through the conversion of option. The increase interests by these shareholders make the role of financial managers to become more complex and challenging. Not only these decisions will results in greater complexities in making financial decisions, but it also lead to changes in firms' cost of capital

It is very important for firms to understand and be aware of what sort of factors that may increase their cost of capital. These factors include financial factors such as firm size, growth opportunities, profitability, financial leverage outstanding, tangibility of assets, firm's liquidity, and asset turnover (Serghiescu & Văidean, 2014) and non-financial factors such as customer satisfaction, brand value, and corporate reputation (Himme & Fischer, 2014).. During the issuance of equity, these factors will leads to change in cost of capital (Tran, 2014). This is because, in a real world where information asymmetry exist, investors are making decision based on the information they received and estimate the level of return they required which in turn will denotes firms' cost of raising capital (He, Lepone, & Leung, 2013).

The inclusion of warrants into firms securities are very popular practices for Malaysia firms. These method of offerings is taken as a signal of firm quality, free cash flow level, as a well as potential profit. If the inclusion of the warrants signals favourable financial outlook of the issuing companies, shareholders reaction to share prices may be different in SEO with warrants relative to pure SEO without warrants. However, if the inclusion of warrant is perceived as a complication to the issuance, shareholders may respond negatively to the SEO announcement, while the opposite can happen.

By taking into account the importance of corporate disclosures to the company's cost of capital, this research will analyze the implications of SEO with warrants relative to pure SEO without warrants announcements on shareholders reaction to share prices adjustments using samples of firms from Malaysia.

According to product cycle theory, Hasan, Hossain, & Habib (2015) found that the cost of equity for firms at introduction and declining stages will be higher than firms at growth and maturity stages. But, with an inclusion of warrant to SEO, it is expected that some firms will be able to have lower cost of capital (Byoun & Moore, 2003) which may be advantageous for firms in emerging market.

The objectives of this paper is to:-

1. analyze the determinants of firms issuing SEO with warrants relative to pure SEO without warrants
2. estimate the shareholders reaction to share prices towards issuing SEO with warrants relative to pure SEO without warrants

There have been numerous researches being conducted on shareholders' reactions towards pure SEO covering developed and developing countries like US (Autore, Bray, & Peterson, 2009), as well as Asia developed and developing countries like Singapore (Tan,2002), Malaysia (Salamudin, 1999), China (Wang et al., 2006), However, there is lack of research covering on the impact of issuing SEO with warrants on shareholders' reactions other except for US market (Byoun & Moore, 2003), China (Dang & Yang, 2013),. Therefore, the findings generated from this research is expected to add more evidence on emerging Asian capital pertaining issuing which will add value to the existing literatures which seems to be lacking.

Literature Review

Capital structure theory explains how the firm's financing mix affects the cost of capital which leads to the changes in shareholders' wealth. The right mix of debt and equity must be determined in order to maximize the value of the firm. Capital structure theory was first initiated with Capital Structure Irrelevance Hypothesis by Modigliani and Miller (1958) who suggested that firm value is unaffected by the changes in firm's capital structure. They posited that firm value is only determined by the level of firm future cash flows.

Therefore, when firm issues equity or debts it will alter the capital structure. It is popular to issue equity with an attachment with warrants. Warrant is a financial instrument issued by firms to get cash proceeds by promising to sell m number of shares to an investor for a fixed strike price at any time before or on maturity date of the contract. Unlike call options, warrants will increase the number of shares outstanding in the market which in turn will cause a dilution of equity to shareholders. Warrants may be issued in conjunction with ordinary equity (in Initial Public Offering or Seasoned Equity Offerings) or issued with accompanied by any other financial securities. To highlight the implication of warrants to firm value, the following explanation based on option valuation model may be used.

Firms have been combining warrants with the issuance of debt and equity securities. Warrants are often considered as the addition or equity promoter because they are often issued in combination with financial securities (Ross, 2013). It is often view by practitioners that warrants can be used as a mechanism that can encourage investors' interest with firms' issuance (Mazouz, Saadouni, & Yin, 2008). It has been used in initial public offerings (Mazouz, Saadouni, & Yin, 2008; Jain, 1994; Schultz, 1993), in seasoned equity offerings (Gajewski, Ginglinger, & Lasfer, 2007; Adaoglu, 2006; Byoun & Moore, 2003; Marsden, 2000; Slovin, Sushka, & Lai, 2000; Masulis & Korwar, 1986; Smith, 1977), and even in bonds issuance (Xiao, Zhang, Yao, & Wang, 2013; Bagella & Becchetti, 1998; De Roon & Veld, 1998).

The way warrant works in equity offerings are simple enough to understand. When a company is offering seasoned equity via warrants, the existing shareholders will have to pay for the right issues in the first place before entitled to the warrants attached.

Various firm and offer characteristics have been put forward by previous researchers in explaining firms decisions to issue unit (common shares with warrant) or plain SEO (common shares). These firm and offer characteristics were outlined by referring to several financing theories such as in signaling model by Chemmanur and Fulghieri (1997), agency cost of free cash flow model by Schultz (1993), and sequential financing model by Mayers (1998).

Previous studies conducted on testing signaling theory have been conducted on warrants attached on both equity offering. These literatures covers various types of equity issuance including the initial public offerings (IPO), unit IPO (i.e. IPO with warrants or bonus issues), seasoned equity offerings (SEO) alone, unit SEO (i.e. SEO with warrants or bonus issues),

Corporate insiders have superior information about the firm's growth, the role of information signalling is very important. Among the ways which firms can use to convey information to their investors is via corporate actions and their debt to equity ratio (Morellec & Schürhoff, 2011). In addition, the portion of equity hold by insider group is also one of the determinants of firms's riskiness. Firms with high risk were said have lower insider ownership. As a result, these firms will use equity with warrants offerings (Chemmanur & Fulghieri, 1997). Hypothetically, firms with lower insider ownership will tend to issue equity with warrants offerings.

Firms tend to underpriced equity offerings in order to increase subcriptions rate. Chemmanur & Fulghieri (1996) have shown that firms with different risk level will use

different methods to issue underpriced equity. Firms with high risk will issue underpriced equity with warrants offerings, while low risk firm will issue underpriced plain equity. The underpricing is more significant when the risk level is higher. There are two main reasons why equity offers are underpriced. The first reason could be because of liquidity of issuers' stocks (Butler, Grullon, & Weston, 2005), while the second one is because of the uncertainty of the trading price (Corwin, 2003) after the shares have been issued. In the context of SEO with and without warrant attached, the signals may be varied. When firms issue equity with warrants, it shows that firm have higher profitability and better asset utilization rate (Mazouz et al., 2008). In the context of SEO, firms that issue rights offerings with warrants will have better future operating performance, investment opportunities, and dividend policy than pure SEO issuers (Adaoglu, 2006). As a result, the stock market reactions were significant and positive for rights offerings with warrants, while negative and significant abnormal returns were shown in the case of pure rights offerings (Adaoglu, 2006). Will the same reactions found for two issuances in Malaysia equity markets? This is one of the questions to be answered in this study

A series of research conducted by Schultz (1993), and Jain (1994) have shown that firms that issue IPO with warrants are smaller, have less income and assets, less survivability, lower initial return, and marketed by less prestigious underwriter due to higher business risk of the issuers. In contrast to these findings, Mazouz, Saadouni, and Yin (2008) who also studied on the wealth effect of in IPO with warrants for Hong Kong market has discovered that firms that issue IPO with warrants will have higher profitability and better asset utilization rate as compared to IPO without warrants. However, all three researchers come to an agreement that is, firms that issue IPO with warrants have higher risk than those firms that issue pure IPO.

In the context of SEO, most of the literatures have posited that firms that issue SEO with warrants are associated with better future outlook. Research conducted by Byoun and Moore (2003) has shown that firms that issue SEO with warrants will experience higher abnormal stock returns than if they have issued shares alone. This finding was further supported by Adaoglu (2006) who demonstrates that SEO with warrants conveys favorable information about the firm's future operating performance, investment opportunities, liquidity and dividend policy. These positive outcomes from the inclusion of warrants to SEO may be resulted from the increasing offer price flexibility and minimized risk of failure of the issue (Gajewski et. al., 2007). In short, it can be said that firms may reduce the cost of capital by including warrants to their SEO. Based on these literature reviews, it can be hypothesized that, the inclusion of warrants in SEO signals positive financial outlook of the issuing firms which may results in better shareholders and creditors reactions.

The evidence in both IPO and SEO basically suggest that most firms attach warrants in their new or additional equity offerings when they have confidence over their future prospect. This condition will enable the investors (i.e. holders of the warrants) to exercise the warrants in the money. In this study, two factors will are put forward to test for the Sequential Financing Hypothesis which are firm' riskiness and percentage of managerial ownership. A positive and significant relationship between firm risk with the shareholders reacting positively to issuance from share price increase will provide a conclusion that supports Sequential Financing Hypothesis.

The fourth hypothesis that seen to affects the SEO with warrants is Agency Cost of Free Cash Flows by Schultz (1993). In the case of SEO with warrants, this type of agency problem is expected to be mitigated as the warrants attached will provides firms with two stages equity financing in which the second stage financing proceeds will highly dependent on the stock price appreciation which can be achieved by undertaking only positive NPV projects. For firms that is still young and at growing stage, SEO with warrants may be preferable as there is higher

tendency for the firms' warrants to be exercised due to active involvement of issuing firms in going for positive NPV projects in order to continue growing.

Since the cost of warrant can also be allocated under the computation of firm's cost of capital, therefore, it can be said the cost of warrant can be one of the determinants of the firm value. In other words, firms' decision to include warrants into their stocks issuance will directly affect their main objective achievement which is to maximize the wealth of their shareholders. This is one of the reasons why this research is going to focus on the role of warrants in signalling firms' ability to maximize the wealth of the shareholders and at the same time taking care of the interest of its other resources contributor e.g. the creditors.

The implications of warrants towards increasing number of share outstanding has been further discussed by (Adaoglu, 2006a; Byoun & Moore, 2003a; Gajewski et al., 2007; Jain, 1994; Schultz, 1993b) in past literatures. According to these researchers, with warrants as part of the issuance, firms not only can increase the possibility of having high subscription to equity issuance but also may increase the number of shares outstanding in the market once the warrants have been issued (Adaoglu, 2006a; Jain, 1994). In addition, the inclusion of warrants may also reduce the risk of undervalued stock as suggested by Mazouz et al. (2008). All these evidence indicate that, if number of shares outstanding is increasing as a result of warrant exercise, only then we can claim that warrants do effectively play its role as the attachment of the offerings. Investors' decision to exercise the right is highly dependent on their perceptions about firms' future prospects. If they have positive expectations about firms' future performance, there will be high tendency that the warrants to be exercised (Mazouz et al., 2008; Suchard, 2005).

The second part of this study is then followed by the relevant financial theories that explains the factors that influence firms' choice in issuing SEO with and without warrants. Among variables identified and included in this study can be categorized into; (i) firm specific characteristics (firm risk, firm long term debt level, insider ownership ratio, firm age, firm size, firm growth, and firm's prior performance) and (ii) offer specific characteristics (size of proceeds, use of proceeds, and the portion of offers unsubscribed by existing investors

Research Methodology

Data and Sample

Samples will be collected from public listed firms in Malaysia Kuala Lumpur Stock Exchange. The samples consists of firms' rights offerings with and without warrants attached. The announcement of issuance covers from year 2004-2014 which were collected from Datastream database with cross checking from various sources such as Bloomberg Database, the stock exchange announcements as well as companies' websites. Researcher excludes all issues that involve financial firms and issues that involve various financial securities other than rights offerings.

Hypothesis

In answering the research questions, two research hypotheses were developed. These hypotheses are:

1) To analyze the determinants of firm's choice to issue SEO with and without warrants

H₀: There is no relationship between firms and offers characteristics to firm's decisions to issue sweetened and unsweetened SEO.

2) To investigate if shareholders react differently to issue SEO with and without warrants
H₀:There is no relationship between shareholders reaction with firms and offers to issue SEO with and without warrants

Objective 1 is tested with a two sample t-test and is estimated by a probability model to describe firms' probability of issuing sweetened and unsweetened SEO is shown in equation below:

$$\text{Unit} = \beta_0 + \beta_1 \text{Volatility} + \beta_2 \text{LTDA} + \beta_3 \text{Owner} + \beta_4 \text{Age} + \beta_5 \text{LMVE} + \beta_6 \text{Growth} + \beta_7 \text{Prior performance} + \beta_8 \text{Proceeds} + \beta_9 \text{Freecashflow} + \beta_{10} \text{External} + \varepsilon$$

Where unit =1 if rights-warrant offerings, and 0 if rights alone.

Table 1:Lists of variables and expected sign

Variables	Descriptions	Expected Sign
Volatility	The estimated standard deviation of daily stocks return 90 days before the announcement	Positive
LTDA	Long term debt to asset ratio (in book value) at the end of the year prior to the announcement	Positive
Owner	Proportion of equity owned by management for the year before the announcement is made	Negative
Age	Number of years since incorporation. This variable is computed by calculating the difference between announcement year until the year of incorporation	Negative
LMVE	Natural logarithm of market value of equity as of the day before the announcement	Negative
Growth	Firm's growth prospect which is market to book ratio preceding the offering	Positive
Priorperformance	Mean abnormal returns over 200 days before the announcement date	Positive
Proceeds	Log of gross proceeds in dollars	Positive
Freecashflow	Dummy variable to indicates the use of proceeds which is equal to one if the proceeds of issuance is used for debt repayment	Positive
External	Proportion of issue which is not taken up by existing shareholders	Positive

Objective 2 is tested using the cumulative abnormal returns (CAR) of the share reaction to the SEO with warrants and without warrants using event study method.. A detail two sample t-test are employed using 5 sizes of windows of CARs.

Where CAR_i is the cumulative abnormal return for different day event window period (-d, +d) for company i.

Results and discussion

Table 2 presents the sample firm characteristics based on the rights offerings decision (with warrants versus with warrants). The table documents basic parametric t-test for the differences in mean values between the two samples of SEO in Malaysia. Panel A and B of Table 2 reports the differences in firm characteristics. Different from previous studies by Byoun and Moore

(2003), the differences in means for firms' characteristics in Malaysia are only significant only for long term debt levels, firm size, prior firm performance, and proceeds of issuance of at least at 10% significance level.

Table 2 show the two sample t-test for the SEO with and without warrants. The sample includes 252 SEO on the Bursa Malaysia Stock Exchange from year 2000 to 2014. The table reports the mean, and the p-value for differences in means between SEO with and without warrants. In Panel A, Volatility is the annualized volatility of stocks for 90 days period before the announcement; Growth is the market to book value ratio at year-end; LTDA is the long term debt to total assets ratio; Owner is the percent of managerial ownerships (including directors) before the announcement date; Age is the number of years from the year of incorporation until the year of announcement; and LMVE is the natural log of market value of equity. In Panel B, Prior Performance is the cumulative abnormal returns for stocks from 200 days before until a day before announcement date; Proceeds is the gross proceeds from issuance in RM millions; Free Cash Flow a dummy variable which is equal to one if the proceeds from issuance is used for debt repayment, and External is the proportion of issuance which is not taken up by the existing shareholders.

Table 2: Descriptive Statistics of SEO with warrants and no warrants in Malaysia

		All sample	With Warrant	No Warrant	p-value from t-test
<i>Panel A- firms' characteristics</i>					
Volatility	Mean (%)	3.43	3.53	3.24	0.15
Growth	Mean (%)	1.24	1.35	1.03	0.28
LTDA	Mean (%)	10.85	11.97	8.73	0.05**
Owner	Mean (%)	12.72	12.88	12.41	0.83
Age (years)	Mean	19.27	18.12	21.48	0.20
LMVE	Mean	4.68	4.53	4.96	0.03**
Prior Performance	Mean (%)	-13.52	2.42	-43.76	0.00***
<i>Panel B-issue characteristics</i>					
Proceeds (RM Millions)	Mean	92.83	78.81	119.44	0.10*
Free Cash Flow	Mean	0.52	0.53	0.51	0.75
External	Mean (%)	30.80	30.19	31.96	0.65
Number of samples		252	165	87	

Note: *** Significance at .01 confidence level, **significance at .05 confidence level, * significance at .1 confidence level

In short, there are significant differences between SEO with and without warrants firms for long term debt levels, firm size, prior firm performance, and proceeds of issuance of at least at 10% significance level.

Table 3 summarized the results of issuance choice for SEO with and without warrants offerings in Malaysia using the probit and logit regression framework. The dependent variable is issuance choice, which takes a value of 1 for SEO with warrants and 0 for pure SEO. The results are robust when the study uses logit estimation. The probit and logit estimates reported in column 1 and column 2 of Table 3, respectively yield similar conclusions. In the probit and logit regressions, 3 out of 10 coefficients on variables are individually statistically significantly difference from zero at the .05, and the coefficient on the amount of issuance gross proceeds (i.e. Proceeds variable) is statistically significant at the .01 level.

The dependent variable is the dummy variable of 1 if the issuance is SEO with warrants and 0 if the issuance is pure SEO. The variables examined include: Volatility which is the annualized volatility of stocks for 90 days period before the announcement; Growth is the market to book value ratio at year-end; LTDA is the long term debt to total assets ratio; Owner is the percent of managerial ownerships (including directors) before the announcement date; Age is the number of years from the year of incorporation until the year of announcement; LMVE is the natural log of market value of equity; Prior Performance is the cumulative abnormal returns for stocks from 200 days before until a day before announcement date; Proceeds is the gross proceeds from issuance in RM millions; Free Cash Flow a dummy variable which is equal to one if the proceeds from issuance is used for debt repayment and External is the proportion of issuance which is not taken up by the existing shareholders. In parentheses are the p-values. The log-likelihood ratio test statistic

Table 3: Estimation results of the probit and logit model for Malaysia market

Coefficienta	Probit model	Logit Model
CONSTANT	0.501 (0.36)	0.819 (0.37)
VOLATILITY	0.051 (0.44)	0.084 (0.45)
LTDA	0.029*** (0.00)	0.049*** (0.00)
OWNER	-0.001 (0.91)	-0.001 (0.92)
AGE	-0.004 (0.31)	-0.008 (0.27)
LMVE	-0.002 (0.76)	-0.037 (0.81)
GROWTH	0.002 (0.31)	0.045 (0.36)
PRIORPERFORMANCE	0.009*** (0.00)	0.016*** (0.00)
PROCEEDS	-0.001** (0.02)	-0.002** (0.02)
FREECASHFLOW	0.096 (0.58)	0.119 (0.69)
EXTERNAL	-0.001 (0.54)	-0.002 (0.56)
R-squared	0.173	0.173

Note: *** Significance at .01 confidence level, **significance at .05 confidence level, * significance at .1 confidence level

As for the total cumulative return in Table 4, CAR, it was found that the level of CAR for SEO with warrants was found to be higher than pure SEO for (-1 to 0) period. However, when it comes to three days event window (-1 to +1), shareholders' wealth creation was found to be higher for pure SEO. Based on CAR(-1,0) and (-3,0) results, the pre-announcement period

covering day $t=-3$ until day $t=-1$ under SEO with warrants is higher than pure SEO. Although the differences between CAR with warrants and without warrants are not significant, their means are individually significant for most of the observed event window at least at .05 confidence level.

Table 4: CAR over various cut off points after the announcements of SEO with and without warrants in Malaysia

SEO with warrants				SEO no warrant			
Day	CAR	t-value		CAR	t-value		t-value for difference between means
CAR(-1,0)	-0.0012	-0.53		-0.0079	-2.23	**	0.34
CAR(-1,1)	-0.0139	-7.74	***	-0.0121	-3.43	***	0.82
CAR(-3,1)	-0.0129	-9.26	***	-0.0144	-4.08	***	0.88
CAR(-3,0)	-0.0001	-0.09		-0.0102	-2.89	***	0.23
CAR(-5,5)	-0.0306	-32.71	***	-0.0315	-8.93	***	0.95

Conclusion

This paper investigates the role of firms specific and offer specific characteristics in determining issuance choice between rights with warrants and rights alone as a form of SEO. It further investigates the market performance of rights with warrants and rights alone around the announcement dates. It also examines whether there is a significant difference in these characteristics and market performance in emerging which were proxied by Malaysia. The findings conclude that in Malaysia, firms with high long term debt, overvalued stocks, and lower size of proceeds tend to issue warrants during SEO.

Furthermore, the announcements of both types of SEO in Malaysia are associated with negative average stock price reactions, with less severe negative shareholders' returns for SEO with warrants. This finding is aligned with what has been hypothesized by Schultz (1993) in the context of unit IPO.

The results from this study will be a value added element to the policy-makers, regulators, industrial people, as well as academia. Emerging market such as Malaysia is currently at the phase of moving toward developed status by year 2020. In realizing this mission, the role of firms in private sectors is very crucial as they are one of the key economic drivers for Malaysia's growth. With proper financing decision, all these firms will be able to continue working together with the government sector in achieving this status. Therefore, the findings generated in this study will be able to help in generalizing to the to other developing markets when it comes to the security market policy. Issues such as investors' confidence, cost of capital, as well as the information conveyed by corporate announcement are among the elements that could be look into when discussing about the security market policy.

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EMPIRICAL ANALYSIS OF THE RELATIONSHIP BETWEEN FOREIGN AID, FOREIGN DIRECT INVESTMENT AND ECONOMIC GROWTH IN NIGERIA (1980-2017): VECTOR ERROR CORRECTION MODEL (VECM) APPROACH

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Abstract: *The impact of foreign aid, FDI on economic growth in developing countries has been an area of intellectual debate among development economists and policy makers. Using a Two-gap model framework, this paper investigates the relationship between foreign aid, FDI and economic growth in Nigeria spanning a period 1980-2017. The study utilized vector error correction model in identifying the long run and short run causality among the variables. The Johansen Cointegration test showed that long run relationship exists among the variables, giving an indication that the variables have the tendency to reach equilibrium in the long run. The VECM result revealed the absence of longrun causality and confirmed the presence of short run influences of foreign aid, FDI on economic growth in Nigeria. On the basis of the findings, the study concludes that foreign aid and FDI exerts positive influence on economic growth in Nigeria during a period under review.*

Keywords: *Foreign Aid, Foreign Direct Investment, Economic Growth, Nigeria, VECM.*

Introduction

The significance of foreign aid and foreign direct investment in the growth process of developing countries Nigeria inclusive cannot be overemphasized. It has been a topic of intense debate and discussion among academicians and policy makers. It is estimated that African countries have collected more than one trillion US dollars in the last 50 years as foreign aid (Moyo, 2009). While, Foreign direct investment (FDI) flows to Africa estimated to \$42 billion in 2017, a 21% decline from 2016 (UNCTAD's World Investment Report, 2018). The growth literature identified these two factors as the major source of external finance and foreign exchange earnings of developing countries.

In developing countries; internal savings propensity are inadequate to provide the needed resources to meet the desired levels of investments, growth and development. Foreign exchange generation through export earnings is also insufficient to finance all the desired imports of capital goods (Hansen, Henrik, and Tarp, 2001). Therefore, such nations are constrained in their struggle to achieve a desired economic growth. Capital inflows into the countries such as foreign aid and foreign direct investment are meant to fill these gaps and contribute immensely to achieve economic growth.

Several empirical studies were conducted to examine whether these factors (Foreign aid and foreign direct investment) affect economic growth positively or negatively. Numerous empirical studies such as Lumbila (2005) and Pradhan et al., (2008) find evidence that these

factors have a positive impact on growth, while other studies such as Chami et al., (2005) report a negative effect or no effect at all on economic growth.

Net official development aid received (% of gross capital formation) in Nigeria was 3.26 as of 2015. Its highest value over the past 34 years was 104.32 in 2005, while its lowest value was 0.19 in 1981. Likewise, foreign direct investment, net inflows (% of GDP) in Nigeria was 1.10 as of 2016. Its highest value over the past 46 years was 10.83 in 1994, while its lowest value was -1.15 in 1980 (World Bank 2017). Nigeria's problem of underdevelopment has long time identified lack of infrastructural facilities, poor and inconsistent policy frameworks, hostile environment, backward in technological advancement and over-dependence on imported products amongst other constraints.

The issue of aid efficacy was brought to limelight vigorously in 2005 when the Paris Declaration (PD) was endorsed by Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) members. Despite the persistent aid to African countries, some of them became worse off than they were in the early 1960s. Furthermore, many poor countries in Africa do not have the needed opportunities to attract FDI since they receive limited attention from multinational companies (MNCs). Based on these consideration, most poorest African countries tend to have foreign aid, in order to provide their population with basic needs such as roads, education, health, etc., and possibly to build institutional capacity to govern their countries. Foreign aid to low-income countries may also come in several forms such as projects, cash, programs, education and training, technical assistance and others (Alemu and Lee, 2015).

Several empirical researches have focused on domestic savings and oil export earnings; the effectiveness of these variables to affect economic growth of the country is far from reality. Based on this senario, the Two-Gap growth model postulated that foreign aid should be directed to those countries that have balance of payments deficits while foreign direct investment should be channeled to augment the domestic savings. Foreign aid and foreign direct investment will therefore be reviewed to palliate the short comings of export earnings and domestic savings in achieving economic growth and development respectively. Given the importance of foreign aid and foreign direct investment to Nigerian economy, it is imperative to understand their impact on economic growth.

Theoretical Framework and Empirical Literature

Dual- gap model which is also called two-gap model was populaized by Chennery and Strout (1966) as an extension of Harrod Domar model. When external inflows of capital either in forms of grants or loans augments domestic resources, then we have “the Two-Gap model” the major assumption of this model is that most developing countries either face a shortage of domestic savings to augment for investment opportunities or they are faced with foreign exchange constraints to finance the needed capital and intermediate goods. Todaro and Smith (2004) believed that most Two-Gap models assume that the savings gap and the foreign-exchange gap are unequal in magnitude and independent in nature. These two gaps are known as the Savings Gap and the Foreign Exchange Gap.

Therefore, in Harrod-Domar model foreign trade was to be introduced so as to explain the role of foreign exchange required to import capital and intermediate goods and raw materials needed for industrial growth. Accordingly, the extension of Harrod-Domar model was made by adding the term for foreign trade balance (namely, imports minus exports) as per cent of national income. The extended Harrod-Domarmodel was written as $g = \frac{s}{k} + \frac{b}{k}$ where $b =$ export-import/national income. The importance of this extended version of Harrod-Domar

model was that the growth of exports of developing countries was insufficient, imports could exceed exports only if foreign aid (both grants and concessional loans) or private foreign investment was available to enable the developing countries to get the required foreign exchange for importing capital goods and industrial raw materials so that more investment than domestic saving can occur to achieve target growth rate.

Empirical Review of Foreign Aid-Economic Growth Nexus

Foreign aid is an international payment or assistance that consists of either a loan or a grant, from one country to another, these payments can either be bilateral, multilateral or private assistance from a nongovernmental organization. Thus, foreign aid enhances industrialization, in building up economic overhead capital, and creating larger employment opportunities to recipient countries mostly less develop countries.

Several empirical studies assert that there is a positive associationship between foreign aid and economic growth because it not only improves domestic resources, but also supplements domestic savings, help in bridges the foreign exchange gap, transfer modern technological advancement and managerial skills, and also create access to foreign markets leading to economic growth (Burnside & Dollar, 2000; and Gomanee et al., 2005).

Similarly, Levy (1988) reports a significant positive relationship in a regression model including aid (as a ratio of GDP) and income per capita, for 1968-82 in Sub-Saharan African countries. Under such considerations, foreign aid has the potential to showcase a key role in accelerarating developing countries' economic growth as well as reducing poverty. Abdulnasser and Manuchehr (2005) examined the impact of foreign aid on economic growth in selected developing countries using panel Cointegration techniques. The result shows that foreign aid has a significant effect on economic growth of the sample countries.

Contrary to the above assertions, economists and researchers believed that foreign aid has no impact on economic growth of the recipient countries. Friedman (1958) and Bauer (1972) called for an end in foreign aid, believing that it is not a necessary prerequisite for the economic growth of a country. They assert that foreign aid or assistance to governments is risky because it increases the power of the elite in the recipient governments, leads to corruption and retard economic growth. Bakare (2011) investigated the macroeconomic impact of foreign aid in Sub-saharan Africa using Nigeria as a case study. His finding revealed a negative relationship between foreign aid and output growths in Nigeria, which imply that foreign aid, tend to worsen output growth in the country rather than increase it.

Similarly, Kolawole (2013) examine the impact of foreign assistance and FDI on real growth in Nigeria during a period 1980-2011 using Johansen Cointegration and ECM. The findings show a negative relationship between FDI and real growth and ODA has no impact on real growth.

The figure 2.1 below shows ODA % GNI
1980-2016

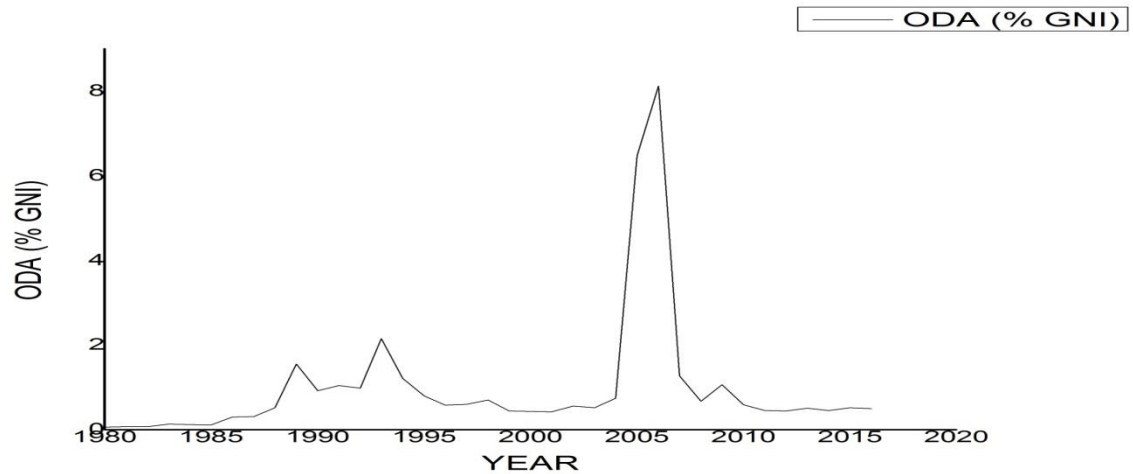


Figure 2.1 Net Official Development received (% of GNI) 1980-2016

Source: World Bank Data (2017)

Net ODA received (% of GNI) in Nigeria was 0.5 as of 2016. Its highest value over the past 37 years was 8.12 in 2006, while its lowest value was 0.06 in 1980.

Empirical Review of FDI-Economic Growth Nexus

Theoretically, FDI affects economic growth in several of ways. The standard Solow-type neoclassical growth model suggests that FDI increase economic growth through capital stock expansion, and other studies suggest that foreign-owned enterprises is more productive than domestically owned enterprises (see, Haddad & Harrison, 1993; and Aitken & Harrison, 1999) .

However, findings from studies conducted to investigate the impact of FDI on economic growth showed remarkable divergence. While some researchers vehemently stressed on its positive impacts on the output growth of the developing countries, some still remain skeptical about it. Oyatoye *et al* (2011) establish that there is a positive relationship between direct foreign investment and gross domestic product (GDP) in Nigeria. Similarly, Dritsaki *et al* (2004) utilizes a cointegration and causality techniques in which they find a positive long-run equilibrium association between FDI and economic growth and a unidirectional causality between FDI and economic growth, running from FDI to growth.

Uwubanmwun and Ogiemudia (2016) investigated the impact of foreign direct investment on economic growth in Nigeria utilizing annual time series data spanning the period 1979-2013. The data were analyzed using Error Correction Model. The empirical results show that FDI has both immediate and time lag effect on Nigeria economy in the short run but has a insignificant negative impact on the Nigeria economy in the long run.

Another empirical study by Awe (2013) investigated the impact of foreign direct investment on economic growth in Nigeria spanning the period 1976 – 2006. The finding from the study reveals a negative relationship between economic growth and Foreign Direct Investment due to the fact that FDI inflow into the Nigerian economy is insufficient. The figure 2.2 below shows the FDI inflow (% of GDP) in Nigeria from 1980-2016

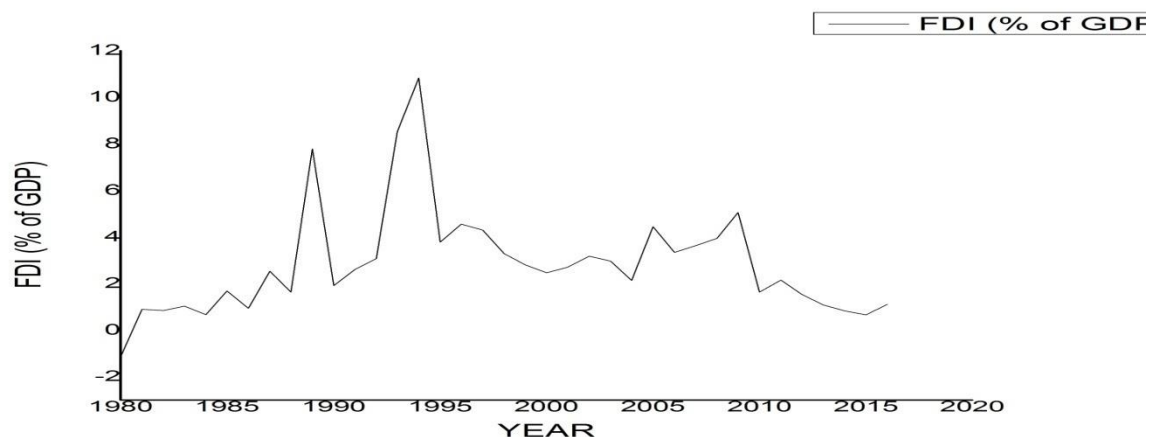


Figure 2.2 Foreign Direct Investments (% of GDP) 1980-2016

Source: World Bank Data (2017)

Foreign direct investment, net inflows (% of GDP) in Nigeria was 1.10 as of 2016. Its highest value over the past 37 years was 10.83 in 1994, while its lowest value was -1.15 in 1980.

Research Methodology

Data Requirement and Source

This study analyzed long run relationship and short run dynamics between foreign aid, FDI and economic growth in Nigeria using annual time series data from 1980-2017 (37years). The rationale behind the selection of thirty seven years is to strictly adhering to central limit theorem for normality and stability purpose. The data was collected secondly from World Bank Development Indicators 2017.

Model Specification

As such, if ODA is the aid required fills the necessary foreign exchange gap and FDI for domestic savings gap, then the study specified the following model based on 2 gap model:

$$GDP = f(ODA, FDI) \dots \dots \dots (1)$$

where GDP is gross domestic product per capita a proxy for economic growth, ODA is official development assistances and official aid received a proxy for foreign aid and FDI is foreign direct investment. Transforming equation (1) in to econometric form, we have the new model:

$$GDP_t = \beta_0 + \beta_1 ODA_t + \beta_2 FDI_t + \mu_t \dots \dots \dots (2)$$

β_0 = constant parameter, β_1 & β_2 = coefficients of ODA & FDI, μ = error term, t = time

Estimation Techniques (Econometric Analysis)

In order to identify the long run relationship and short run dynamics between foreign aid, FDI and economic growth in Nigeria, the study utilized the following econometric techniques:

Unit Root Test

Most of macroeconomic time series data are not stationary at level or they have unit root, to avoid running a spurious regression result both Augmented Dickey Fuller and Phillips Perron were ran as preliminary test. Table 2 shows the result of Augmented Dickey Fuller and Phillip Perron tests.

Table 1: Augmented Dickey Fuller and Phillips Perron Unit Root Tests

Variables	ADFt-st	5%	PPT-st	5%	Order of Integration	
	C.value	Prob.	C.value	Prob.	<i>ADF</i>	<i>PP</i>
	Value		value			
GDP	-4.4841	-3.5806	-4.4774	-3.5806	I(1)	I(1)
	(0.0069)		(0.0070)			
ODA	-5.3936	-3.5875	-10.092	-3.5806	I(1)	I(1)
	(0.0009)		(0.0000)			
FDI	-6.5212	-3.5806	-6.3667	-3.5806	I(1)	I(1)
	(0.0001)		(0.0001)			

Source: Author's Computation (2018) using E-views version 10.0

The unit root test above revealed that at level all the variables are not stationary, but became stationary at first difference using both ADF and PP test. Thus, all the variables are integrated of the same order I(1).

VAR Lag Order Selection Criterion

The table 3 shows that the optimum lag to be selected for the model is 4 lag

Table 2: Var Lag Oder Selection Criterion

<i>Lag</i>	<i>LogL</i>	<i>LR</i>	<i>FPE</i>	<i>AIC</i>	<i>SIC</i>	<i>HQ</i>
0	-					
	1405.264	NA	2.23e+43	108.3280	108.4731	108.3698
1	-					
	1352.932	88.56071	8.02e+41	104.9948	105.5754	105.1620
2	-1333.592	28.26574	3.75e+41	104.1994	105.2156	104.4920
3	-1309.763	29.32910	1.30e+41	103.0587	104.5103	103.4767
4	-1289.262	20.50023*	6.38e+40*	102.1740*	104.0612*	102.7175*

*indicate lag order selected criterion

Johansen Cointegration Test

Johansen Cointegration test is conducted when all the variables are non stationary at level but integrated of the same order I(1), the result of the unit root test depicts that our series are integrated of order I(1). The results of Johansen Cointegration show 2 Cointegration equations from trance statistics and maximum-Eigen rank test.

Table 3: Unrestricted Cointegration Rank Test (Trance)

Hypothesized	Eigenvalue	Trace	0.05	Prob.**
No. of CE(s)				
		Statistic	Critical Value	

None *	0.722414	54.46459	29.79707	0.0000
At most 1 *	0.586789	22.42398	15.49471	0.0039
At most 2	0.013077	0.329079	3.841466	0.5662

Trance test indicates 2 cointegration eqn(s) at the 0.05 level

Table 4: Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.722414	32.04061	21.13162	0.0010
At most 1 *	0.586789	22.09491	14.26460	0.0024
At most 2	0.013077	0.329079	3.841466	0.5662

Max-eigenvalue test indicates 2 cointegration eqn(s) at the 0.05 level

Vector Error Correction Model (VECM)

The table 6 below shows the VECM which is estimated based on 4 lag. C(1) is the error correction term or speed of adjustment towards equilibrium. The coefficient of C(1) is -0.126222 and probability value is 0.2740 greater than 5% (0.05) as such there is no long run causality running from ODA, FDI and GDP. To determine the short run dynamics between the variables, C(7),-C(10) coefficient can be used to explain the short run causality running from ODA to GDP while C(11)-C(14) FDI to GDP and C(15) constant parameter of the model. It can be observed from table 6 that all the coefficient values of short run analysis C(7)-C(14) are statistically insignificant, thus, at their individual lag could not explain GDP. Therefore, it becomes necessary to use Wald Test (table 7 and 8) to find the short run causality by using the lag jointly.

$$\begin{aligned}
 D(\text{GDP}) = & C(1) * (\text{GDP}(-1) - 5.26828103755\text{E-}07 * \text{FDI}(-1) + 773.901637796) \\
 & + C(2) * (\text{ODA}(-1) - 0.311615292949 * \text{FDI}(-1) - 535033508.03) + C(3) \\
 & * D(\text{GDP}(-1)) + C(4) * D(\text{GDP}(-2)) + C(5) * D(\text{GDP}(-3)) + C(6) * D(\text{GDP}(-4)) \\
 & + C(7) * D(\text{ODA}(-1)) + C(8) * D(\text{ODA}(-2)) + C(9) * D(\text{ODA}(-3)) + C(10) \\
 & * D(\text{ODA}(-4)) + C(11) * D(\text{FDI}(-1)) + C(12) * D(\text{FDI}(-2)) + C(13) * D(\text{FDI}(-3)) + \\
 & C(14) * D(\text{FDI}(-4)) + C(15)
 \end{aligned}$$

Table 5: VECM Result

	Coefficient	Std. Error	t-Statistic	Prob.
C(1)	-0.126222	0.109051	-1.157456	0.2740
C(2)	-1.02E-07	3.87E-08	-2.633195	0.0250
C(3)	-0.028389	0.312351	-0.090889	0.9294
C(4)	0.050731	0.127868	0.396747	0.6999
C(5)	0.234952	0.156230	1.503887	0.1635
C(6)	0.016604	0.159951	0.103808	0.9194
C(7)	6.29E-08	4.05E-08	1.550820	0.1520
C(8)	7.82E-08	3.23E-08	2.417249	0.0362
C(9)	-3.49E-08	2.98E-08	-1.171103	0.2687

C(10)	1.37E-08	2.79E-08	0.489413	0.6351
C(11)	2.77E-08	7.06E-08	0.392828	0.7027
C(12)	6.99E-08	6.26E-08	1.115905	0.2906
C(13)	1.17E-07	5.92E-08	1.970669	0.0771
C(14)	-1.78E-08	5.51E-08	-0.323771	0.7528
C(15)	3.510447	47.18589	0.074396	0.9422
R-squared	0.977219	Mean dependent var		67.04786
Adjusted R-squared	0.945327	S.D. dependent var		322.3686
S.E. of regression	75.37726	Akaike info criterion		11.76660
Sum squared resid	56817.32	Schwarz criterion		12.49792
Log likelihood	-132.0825	Hannan-Quinn criter.		11.96944
F-statistic	30.64079	Durbin-Watson stat		1.932115
Prob(F-statistic)	0.000003			

Table 6: Wald Test Result (ODA)

Test Statistic	Value	Df	Probability
F-statistic	26.28869	(4, 10)	0.0000
Chi-square	105.1548	4	0.0000

Null Hypothesis: $C(7)=C(8)=C(9)=C(10)=0$
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(7)	6.29E-08	4.05E-08
C(8)	7.82E-08	3.23E-08
C(9)	-3.49E-08	2.98E-08
C(10)	1.37E-08	2.79E-08

The p. value (0.0000) is less than 5%, we reject H_0 and accept H_i meaning that $C(7)=C(8)=C(9)=C(10) \neq 0$, thus short run causality runs from ODA to GDP.

Table 7: Wald Test Result (FDI)

Test Statistic	Value	Df	Probability

F-statistic	7.820526	(4, 10)	0.0040
Chi-square	31.28210	4	0.0000

Null Hypothesis: $C(11)=C(12)=C(13)=C(14)=0$
Null Hypothesis Summary:

Normalized Restriction (= 0)	Value	Std. Err.
C(11)	2.77E-08	7.06E-08
C(12)	6.99E-08	6.26E-08
C(13)	1.17E-07	5.92E-08
C(14)	-1.78E-08	5.51E-08

The p. value (0.0000) is less than 5%, we reject H_0 and accept H_1 meaning that $C(11)=C(12)=C(13)=C(14) \neq 0$, thus short run causality runs from FDI to GDP.

Post Estimation Diagnostic Tests

The following post estimation diagnostic tests were performed in order to ascertain the efficacy, normality and stability of the model.

Table8: Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.357009	Prob. F(3,7)	0.7860
Obs*R-squared	3.317503	Prob. Chi-Square(3)	0.3452

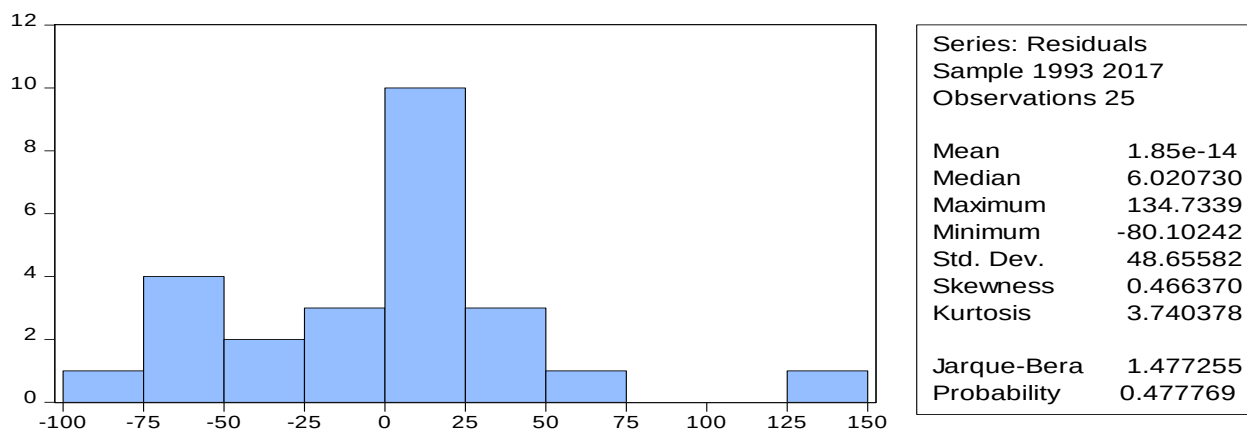
From the table the probability chi-square value of the observed R-square is 0.3452 greater than 5% (0.05); we accept the null hypothesis that the model is does not have serial correlation among the series.

Table9: Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	0.464560	Prob. F(15,9)	0.9090
Obs*R-squared	10.90968	Prob. Chi-Square(15)	0.7590
Scaled explained SS	2.391731	Prob. Chi-Square(15)	0.9999

The result of the table shows that the probability chi-square value of the observed R-square is 0.7590 greater than 5% (0.05); we accept the null hypothesis that the model is homoscedastic.

Normality Distribution Test



Jarque-Bera statistics shows whether the residual violates the normality assumption of the OLS technique or not. JB statistics is 1.477255 and corresponding P.value (0.477769), the H_0 of non normality is rejected, thus, the residuals are normally distributed.

Findings

The unit root test shows that all the series are non stationary at level values but became stationary at first difference or integrated of same order $I(1)$. The result of optimal lag selection criterion selected 4 lag to be used in Johansen Cointegration test and VECM. The Cointegration results shows 2 Cointegrating equations in both trace statistics and maximum-eigenvalue, this is an indication of long run relationship among the variables. The VECM revealed the absence of long run causality among the series because the sign of error correction is insignificant to explain GDP. The findings from short run dynamics show the evidence of short run causality running from ODA, FDI to GDP. The R^2 value (0.977219) indicating that 97% variation in GDP is explaining by ODA and FDI, the F-statistics 30.64079 and its corresponding P.value (0.00003) shows that the model is adequate. The post estimation diagnostic tests also revealed desirable results of no serial correlation, series are homoscedastic and residuals are normally distributed.

Conclusion

This study examined the long run relationship and short run dynamics between foreign aid, foreign direct investment and economic growth in Nigeria for a period of 37 years (1980-2017). On the basis of the findings, the following conclusions are made; there is no evidence of long run relationship among the series rather significant short run causation has been identified. Thus, foreign aid and foreign direct investment impact positively on economic growth in Nigeria during the period under review.

Thus, the findings of this study are consistent with findings of previous studies on the impact of foreign aid, foreign direct investment on economic growth. Thus this study revealed that the criticism of foreign aid and foreign direct investment is flawed. In fact, foreign aid and foreign direct investment has played a critical role in stimulating economic growth in Nigeria through supplementing internal sources of finance such as savings, foreign exchange and thus increasing the amount of investment and capital stock. The Chenery and Strout (1966) two-gap model showed that developing countries are domestic savings and foreign exchange earnings are insufficient to spurs growth. The model suggested that foreign aid and foreign direct investment are needed to break the poverty circle and solve the two gaps simultaneously.

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IN-SILICO MODELING OF PATTERN RECOGNITION RECEPTOR EFR AND MOLECULAR INTERACTION WITH PATHOGEN ASSOCIATED MOLECULAR PATTERN elf18

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Abstract: Plants depend entirely on pattern-triggered immunity (PTI) system to protect them from various pathogenic bacteria. It is activated by pathogen-associated molecular pattern (PAMP) of the host plant by pattern recognition receptor (PRR) with co-receptor. Elongation Factor Receptor (EFR) is one of the PRR used to protect against Brassica species disease. Although research on transgenic approach have been carried out to analyze the EFR protein, but the full ectodomain interactions of EFR with PAMP elf18 protein and co-receptor Brassinosteroid Insensitive 1-associated receptor kinase (BAK1) through in-silico has not been accomplished yet. The purpose of this study was to determine the interaction of EFR protein with elf18 protein through in-silico analysis. In this study, PRR EFR and PAMP elf18 was constructed by homology modeling using HHpred Modeler, followed by docking and molecular dynamics (MD) simulations of EFR and elf18 protein using Z-Dock and GROMACS 5.0.4 respectively. Modelling results showed that multiple template modeling (MTM) generated best models compared to single template modeling (STM) due to their best quality of the protein structure obtained by HHpred Modeler generate best-validation results of 71.123 ERRAT, 95.67% Verify3D and 92.8% in favoured region of the Ramachandran Plot. Docking results showed that the complex interaction of BAK1 and elf18 binds at leucine-rich-repeat (LRR) EFR (LRR 1-8 and LRR 12-14). After 50ns MD Simulation, the results showed that the docked complexes have significant reduction of H-bonds. For EFR-elf18-BAK1 (normal) complex, 20 hydrogen bonds were sustained compared to EFR-elf18-BAK1 (mutated) complex that only sustained 16 hydrogen bonds, proved that the mutated protein have less interaction after simulation. This study may contribute significantly towards understanding the early event of Pattern Triggered Immunity mechanism of EFR-elf18-BAK1 protein complex.

Keywords: PAMP, EFR, MD Simulation, elf18.

Introduction

Brassica plant species such as Cabbage (*Brassica oleracea* var. *capitata* L.) is one of the main vegetables consumed in Malaysia, not only as fresh market vegetable but also eaten fresh in food consumption such as coleslaw, sauerkraut and cabbage roll. The *Brassica* species mainly affected by diseases such as *Xanthomonas campestris* and *Plasmiodiospora brassicae* causes by the most prominent insect pest, *Plutella xylostella*. There is a lot of research has been already done to control the disease such as transgenic crops as well as the usage of the biological insecticide and insect-resistant genetically modified crop, which is ineffective due to the some factors such as short-lived of plant species, non-environmental friendly and cost effective.

Many of the research recently focussing on *in-silico* analysis study where all the data of biological experiments are being carried out entirely in computer. Pattern recognition receptor (PRR) plays an important role in *in-silico* study for rapid detection of potential danger caused by pests and microbes by pathogen-associated molecular pattern (PAMP). EFR is one of the most-characterized membrane protein used for *in-silico* study. Previous research on transgenic expressions of LRR-RK EFR protein with different receptor protein of Flagellin Sensitive2 (FLS2) has been carried out through experiments such as binding assay, co-immunoprecipitation, conservation mapping and others. Although most of PRR/PAMP are already been identified, however the full ectodomain analysis of EFR protein and its interaction with PAMP has not been carried out yet. Therefore, this current study make an attempt to interact PRR of full domain EFR protein without trans-species transfer with elf18 protein (PAMP specified for EFR) and co-receptor BAK1 protein, to analyse the interaction at atomic level between PRR/PAMP through *in-silico* analysis using bioinformatics approach.

Literature Review

Pattern Triggered Immunity (PTI)

PTI is the first layer defense mechanism in plant innate immune system to protect plants from wide range of pathogens like bacteria, fungi and viruses (Saijo, *et al.*, 2018). Plants do not have antibody or special cell to destroy pathogens, yet they only have various pattern recognition receptors (PRRs) which recognized specific PAMPs in specific pathogenic bacteria. EFR is the most recognised protein identified in *Arabidopsis* plant. Apart from EFR, FLS2 receptor also has been identified in the model plant *Arabidopsis thaliana* (Zipfel, 2014). Other receptor such as Peptidoglycans (PGNs) which perceive to LYM1 and LYM3 protein also identified in *Arabidopsis* plant, whereas PGN that perceive to LYP4 and LYP6 protein has been identified in rice plant. As well, the *Arabidopsis* ReMAX receptor perceived by yet-unknown PRR from *xanthomonads* in *Brassicaceae* plant. However, the recognition of the receptors have been thoroughly proved in recent wet lab research.

Role of EFR Receptor

EFR (EF-Tu Receptor) is a pattern-recognition receptor (PRR) that binds to the prokaryotic protein EF-Tu (elongation factor thermo unstable) in *Arabidopsis thaliana* plant (Pfeilmeier *et al.*, 2018). Based on UniprotKB server, EFR constitutes the pattern-recognition receptor (PPR) that determines the specific perception of elongation factor Tu (EF-Tu), a potential elicitor of the defence response to pathogen-associated molecular patterns (PAMPs). EFR receptors have a high affinity for the EF-Tu PAMP. This has been proven analytically through competitive binding assays.

Bioinformatics Approach in Protein 3D Structure Prediction

An important observation in 3D prediction is that the proteins that share similar sequences often share similar protein structures tool (Ong *et al.*, 2015). Protein structure significantly termed as arrangement of atoms in three-dimensional. Based on this concept, although bioinformatics approach techniques does not generate equivalent results, as those from X-ray crystallography, but the methods are comparatively fast and inexpensive to build a close approximation of a structure from a target sequence, without the time and costs of experimental procedures.

Homology Modelling

Homology modelling, which is also known as comparative modelling, mainly indicates the build of an atomic-resolution model of the target protein initially from its amino acid sequence and three-dimensional structure of similarly related homologous protein known as template (Beer, 2008). This method begins from selection of homologues with known structures from the PDB and if the query template sequence has high sequence percent identity which is more than 30% to the structure, thus the homology detection is more straightforward which is usually done by comparing the query sequence with all the sequences of the structures in the PDB (Xiang, 2006). There are few list of homology modelling tools of Modeller 9.10, SWISS-MODEL, HHpred Modeller, Geno-3D and more. Homology modelling can produce high-quality structural models when the target and template are closely related.

Multiple Template Modelling (MTM) Approach

3D modelling protein structures can be improves if more than one fold template was used for the modelling method. There is a significant analysis of the multiple-template model, which has the appropriate combinations of templates that enhance the model quality compared to single-template modelling (Chakravarty *et al.*, 2008). Perhaps multiple-template modelling emphasise on not to be only in mix and match segments of templates in order to achieve more coverage yet, there must be an improvement in model quality. Since multi –domain-modelling template difficult to find, thus each domain from a respective protein has been model and combined to one full protein model. There is a multi-template combination algorithm for protein. The algorithm chooses and combines full template and target alignments where the score is approximate to the top template and target alignment within a threshold given.

Methodology

Modeling of Pattern Recognition Receptor EFR

For single template modelling, NCBI Blastp tool and HHpred tool has been used to analyse EFR protein amino acid sequence, in which through NCBI Blastp the Protein Data Bank (PDB) using default parameter values was used in order to find for one suitable template for EFR protein. Basic single template modelling done for EFR protein using few homology modelling tools which are HHpred Modeller, CPHmodels-3.2, Geno3D, SWISS-MODEL and Local-meta threading server (LOMETS) modelling tools of PRC, pGenTHREADER, Prospect2, FFAS-3D, FFAS03, SP3, SPARKS-X, MUSTER (Warner *et al.*, 2013). Basic modelling for EFR protein using few tools shown in Table 1.

Table 1: Single Template Modelling Approach for EFR protein

Tools used	Modelling method	Template used
HHpred Modeller	Homology	4mn8A
CPHmodels-3.2	Homology	4mn8A
Geno3D	Homology	4mn8A
SWISS-MODEL	Homology	4mn8A
PRC	LOMETS	4mn8A
pGenTHREADER	LOMETS	4mn8A
PROSPECT2	LOMETS	5gijB
FFAS-3D	LOMETS	5gijB
FFAS03	LOMETS	5gijB
SP3	LOMETS	5gr9b
SPARKS-X	LOMETS	5gijB
MUSTER	LOMETS	5gijB

Multiple template modelling started through multiple sequence alignment, which was carried for full EFR protein by using Praline tool, in which top five template chosen based on lowest e-value resulted from NCBI Blastp to observe the relationship of the template sequence coverage with target sequence (Notredame, 2014). All the selected templates in its respective domains to model EFR. From all the selected templates, the best templates for LRR domain and K domain has been proceed to permutation and combination method to make sure the best combination of templates proceed for modelling. The modelling of the entire paired template has been done using HHpred tool.

Structure Validation

The structural validation method has been done mainly to analyse and evaluate the structural consistency and reliability of the protein model (Kleywegt, 2000). The method has been done specifically to generate the validation score after each modelling method to analyse the best tool, which produce a good structure of protein model. The model has been validate using tools such ERRAT (B. Wallner & Elofsson, 2006), Verify3D and RAMPAGE server. ERRAT is mainly to verify protein structures determined by crystallography and study the statistics of non-bonded atom-atom interactions, Verify3D functions to determine the compatibility of an 3D atomic model with its own amino acid sequence, whereas the Ramachandran plot from RAMPAGE server is used to analyse the consistently of the protein model. The final model in multiple template modelling also validate by using MolProbity, ProQ ProSA to prove the quality of the model in detail. The protein structure also has been visually analysed in maximum quality by PyMOL tool.

Molecular Interaction of EFR, elf18 and BAK1

The complexes has been proceed to docking with the protein-protein docking tool ZDOCK 3.0.2 (Chen, Li, & Weng, 2003). For multiple protein docking first EFR was docked with PAMP elf18, then the best docked complex structure was proceed to further docking with co-receptor BAK1/BAK1M (mutated). From the top 10 predicted models, the best predicted protein were analysed in PyMOL. Besides, the protein validation has been done in Molprobity Ramachandran Analysis (Kihara *et al.*, 2009) to choose the stable complex from all the predicted docked complexes and measure the polar contacts using PyMOL. Also the comparison for binding mechanism of hydrogen bond (Bertonati & Punta, 2010), hydrophobic interactions, ionic interactions, aromatic-aromatic interactions, aromatic-sulphur interactions, cation-pi interactions (Margreitter & Oostenbrink, 2017) bonding for before simulation and after simulation has been done for the docked complexes. On top of that, the polar contact measurement of protein by PyMOL tool and the comparison picture before simulation and after simulation has been described in detail for all the five complexes.

Molecular Dynamics Simulation of Docked Complexes

After protein-protein docking, the best predicted docked complexes were subjected to run molecular dynamics (MD) simulation using GROMACS 5.0.4 (Scheraga *et al.*, 2007). The Gromacs96 54a7 united force field was used to run the simulation. Before running the simulation, the system were solvated, neutralized, energy minimized and equilibrated. For solvation procedure, the proteins were taken into a cubic box with minimum distance of 1Å between protein surface and its edges. Then the protein complexes in the cubic boxes were solvated with simple point charge (SPC) water model. The systems were neutralized with genion tool of GROMACS before proceed to energy minimization. Then the systems were equilibrated for 2ns NPT ensemble followed by 1ns NVT ensemble maintaining a constant

1atm pressure and 300 K temperature respectively. Finally, 50ns MD simulation were subjected to run for each system and root mean square deviation (RMSD), root mean square fluctuation (RMSF) was done. Also after 50ns of simulation, the complexes were subjected to further analysis by PyMOL tool.

Results and Discussion

Modeling of Pattern Recognition Receptor EFR

NCBI BLASTp analysis of 1031AA sequence of EFR protein resulted several templates according to e-value, and its each identity. Among the template, 4MNA_A (Chain A, Crystal structure of the free Fls2 Ectodomains has the maximum score of (363) with lowest e-value 2e-112 and 37% identity. For HHpred, 4mn8_A (LRR receptor-like serine/threonine-protein kinase FLS2; FLS2, BAK1, flg22, Flagellin, plant; HET: SO4, NAG; 3.062A {Arabidopsis thaliana}) was found to be the best template for the modelling of the EFR protein, which gives highest percentage identity, which is 100% probability and maximum score of 782. Homology modelling tool of HHpred Modeller produce the best model with less structure deviation compared to CPHmodels-3.2, Geno3D, and SWISS-MODEL which couldn't able to produce full 1031 AA model. Multiple template modelling has been done using few main tools of different modelling methods, such as HHpred modeller (homology) (Biegert *et al.*, 2008), AIDA (homology) (Xu *et al.*, 2014), Phyre2 (Ab initio), Raptor-X (Threading). HHpred modeller generate model for each domain of EFR protein ,where it results a clear view of the model using best templates of LRR domain, TM domain and kinase domain, in which the model has been analysed in detail in Figure 1. For AIDA and Raptor-X, the model generated for both tools are moderately superposed and specially model the LRR domain and TM domain only, which kinase domain hasn't been generated and remains open as undefined structure, thus the model remain incomplete. Moreover, the model also not consistent to the secondary structure and not same to the predicted template. Phyre2 intensive modelling only generated LRR domain, in which the kinase domain has not resulted a clear view and TM domain has not been generated and left a gap in the structure model, which causes the structural deviation in the full model, proved that Phyre2 doesn't produce good quality models compared to HHpred modeller.

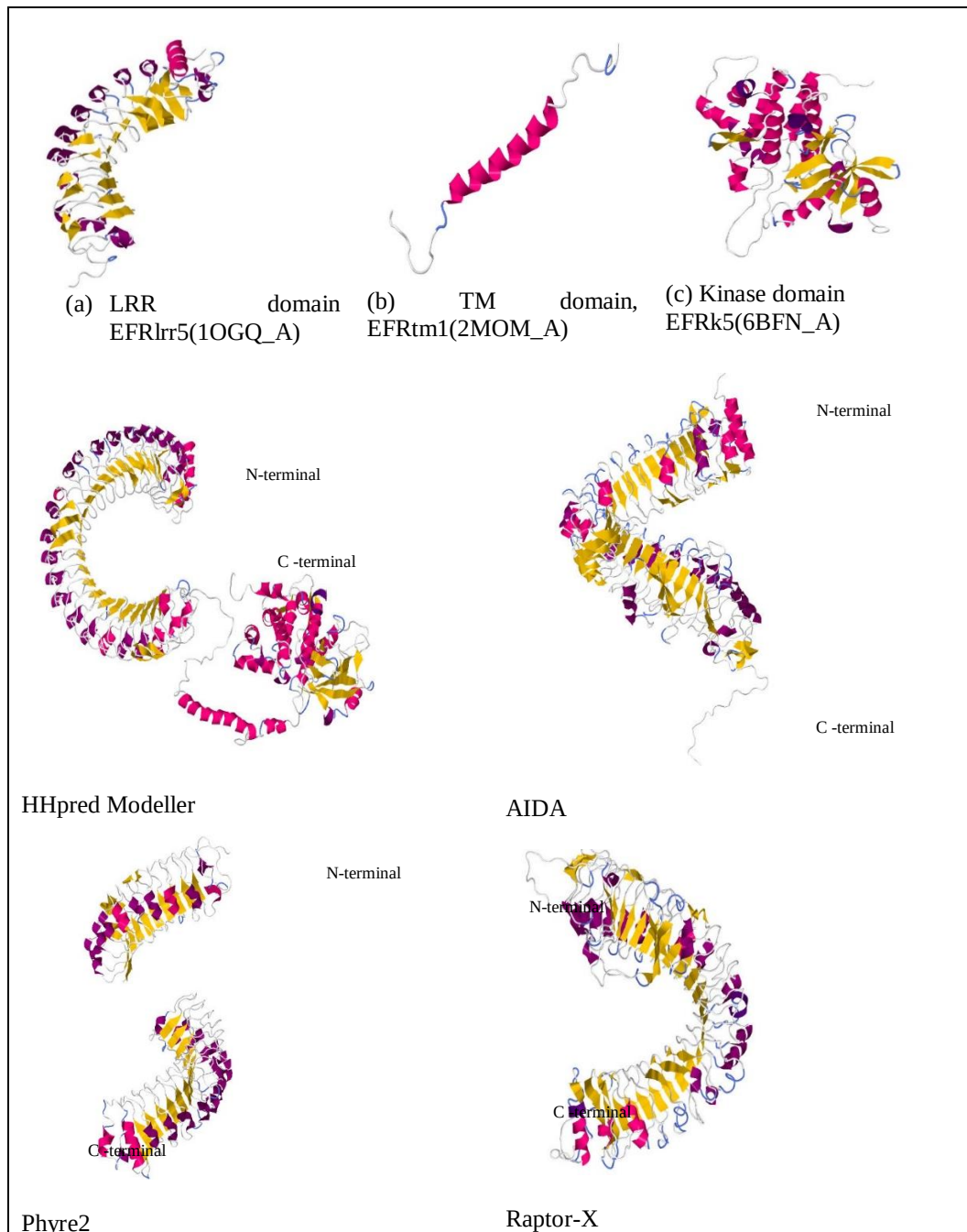


Figure 1: Multiple template modelling approach of EFR by different modelling tools

Structure Validation

The tools that gives results for the validation of single template modelling using ERRAT are HHpred Modeller, SWISS-MODEL, CPHmodels-3.2, Geno3D and cdPPAS. Whereas other modelling tool such as PRC, PROSPECT2, pGenTHREADER, FFAS03, FFAS-3D, SPARKS-X, MUSTER, SP3, cdPPAS gives error value. This is mainly because these tools are based on threading method which has high chances to produce less quality models than homology modelling tools (Akansha Saxena, 2013). Among the tools which generates results for ERRAT, the tools which gives results with acceptable value (>50) are (HHpred) Modeller (68.858),

SWISS-MODEL (74.223), and Geno3D (85.417). For model validation of combined domain in multiple template modelling, the entire protein model which was generated from all the tools, resulted ERRAT for (>50) for the accepted value. For Verify3D, only HHpred modeller (95.67%) generated results (>80), which indicated as the model resulted from HHpred has good quality structure and have high AA compatibility structure. Ramachandran plot Summary from RAMPAGE resulted that protein model that has been generated from HHPRED modeller has more residues in favoured region (92.8%) and has the lowest residues in Outlier region (0.4%), which is nearly 0%, as shown in Table 2.

Table 2: Validation results of models of EFR protein by different tools for Multiple Template Modelling

Tools used	Errat	Verify3D (%)	Ramachandran Plot Summary from RAMPAGE (%)		Summary from
			FR	AR	OR
HHpred server	71.123	95.67	92.8	6.8	0.4
AIDA	79.175	74.04	92.5	6.2	1.3
Phyre2	67.512	75.2	89.0	7.7	3.3
Raptor-X	69.589	76.67	91.3	6.6	2.2

FR, Favoured region; AR, Allowed region; OR, Outlier region.

Molecular Interaction of EFR, elf18 and BAK1

The significant bonding pattern observed in EFR with elf18 and BAK1 and mutated BAK1 are Hydrogen bonding, hydrophobic interactions within 5 Angstroms, ionic interactions within 6 Angstroms, Aromatic-Aromatic Interactions within 4.5 and 7 Angstroms, Aromatic-Sulphur Interactions within 5.3 Angstroms, Cation-Pi Interactions within 6 Angstroms.

Molecular interaction of EFR with elf18 and co-receptor BAK1

Hydrogen bonds formed between EFR ARG21 with BAK1 ARG146 and GLU98 respectively. In this case, measure 3 in Table 3 proved that H-bond between ARG21 and GLU98 is the shortest measurement with the distance of 1.8 Å through PyMOL tool. There are also few hydrogen bond sustained in the interaction between EFR and elf18 such as EFR TYR398 with elf18 LYS4, and EFR ASN422 with elf18 ARG7. In this case, polar contact measurement through PyMOL proved that TYR398 and LYS4 has the shortest distance of 1.4Å.

Table 3: Polar contact Measurements of EFR with elf18 and co-receptor BAK1 through PyMOL tool

Protein	Measurement	Donor Atom	Acceptor Atom	Distance (Å)
		LRR EFR	BAK1	
LRR EFR_elf18_BAK1	Measure 1	SER-26_O	GLN-166_O	2.2
	Measure 2	ARG-21_O	ARG-146_N	2.4
	Measure 3	ARG-21_N	GLU-98_O	3.4
		ARG-21_N	GLU-98_O	1.8
		ARG-21_N	ASP-74_O	3.1
	Measure 4	GLY-55_O	ARG-72_N	2.8
	Measure 5	LYS-57_N	TYR-100_O	2.8
	Measure 6	GLN-196_N	GLU-2_O	2.9
		SER-220_O		3.4
	Measure 7	ASP-269_O	ARG-4_N	2.9
	Measure 8	GLN-369_N	LEU-15_O	3.5
	Measure 9	SER-1_O	elf18	
			BAK1	
			PHE-11_N	2.1
			PHE-11_O	2.1
	Measure 10	GLU-374_O	LRR EFR	
			elf18	
			LYS-4_N	2.7
	Measure 11	SER-372_O	LYS-2_N	2.4
		ASP-396_O		2.7
	Measure 12	TYR-398_O	GLU-3_O	3.3
			LYS-4_O	1.4
	Measure 13	SER-399_O	GLU-6_O	2.3
	Measure 14	SER-423_O	ARG-7_N	2.1
	Measure 15	ASN-422_N	ARG-7_O	3.4

Molecular interaction of EFR with elf18 and co-receptor (mutated) BAK1

The binding interactions for EFR with elf18 and mutated BAK1 has generated and sustained different residues compared to complex with normal BAK1. There are high number of hydrogen bond generated majorly between EFR and mutated BAK1, and in total of 11-hydrogen bond sustained after simulation. In this case, measure 5 in Table 4 proved that H-bond between ALA174 and GLN527 is the shortest measurement with the distance of 1.2Å,

which indicates the strongest bonding between the respective residues using PyMOL tool. Measure 13 in Table 4 proved that H-bond between TYR398 and LYS4 is the shortest measurement with the distance of 1.4Å and Measure 17 proved the shortest measurement distance between elf18 SER1 and mutated BAK1 ASP507 which is 2.8Å.

Table 4: Polar contact Measurements of EFR with elf18 and co-receptor (mutated) BAK1 through PyMOL tool

Protein	Measurement	Donor Atom	Acceptor Atom	Distance (Å)
		LRR EFR	BAK1(M)	
LRR EFR_elf18_BAK1(M)	Measure 1	LYS-57_N	GLU_426_O	2.0
		LYS-57_N	ASN-368_O	3.4
		LYS-57_N	GLU-426_O	3.5
		ARG-21_N	GLU-426_O	2.7
	Measure 2	ASP-79_O	LYS-389_N	2.7
	Measure 3	SER-127_O	ASN-529_N	3.3
	Measure 4	SER_126_O	GLY-528_O	2.1
	Measure 5	ALA-174_O	GLN-527_N	1.2
	Measure 6	GLN-196_N	GLU-519_O	2.9
		SER-220_O		3.0
	Measure 7	ARG-267_N	LYS-516_O	3.2
	Measure 8	ASP-269_O	LYS-516_N	2.7
	Measure 9	TRP-291_N	LYS-514_O	3.0
	Measure 10	PHE-268_O	LYS-516_N	1.5
	Measure 11	ASP-396_O	LYS-2_N	2.7
		SER-372_O		2.4
	Measure 12	GLU-374_O	LYS-4_N	2.7
	Measure 13	TYR-398_O	GLU-3_O	3.3
			LYS-4_O	1.4
	Measure 14	SER-399_O	GLU-6_O	2.3
	Measure 15	ASN-422_N	ARG-7_O	3.4
	Measure 16	SER-423_O	ARG-7_N	2.1
		elf18	BAK1(M)	

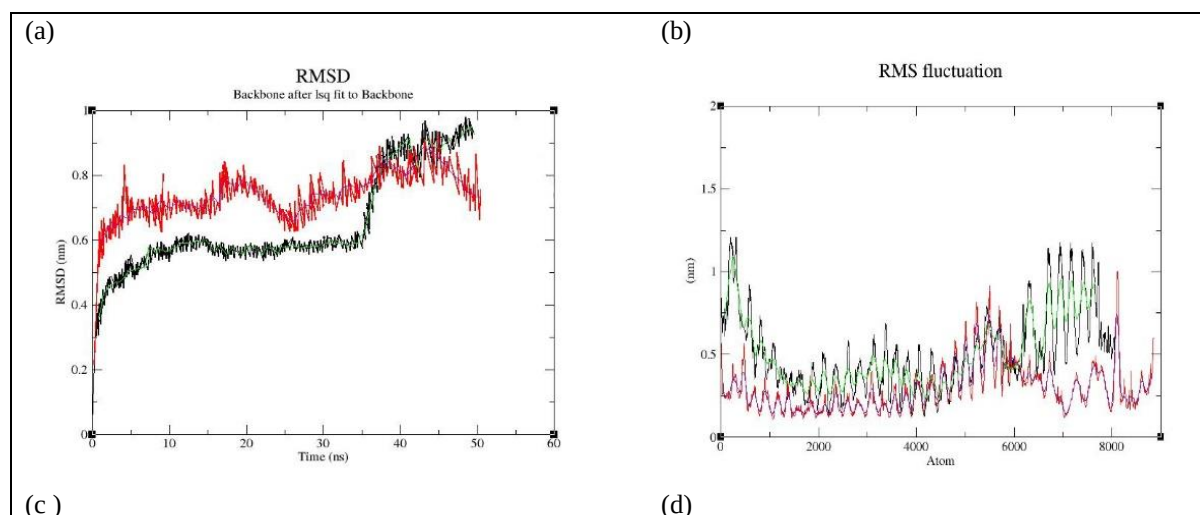
Protein	Measurement	Donor Atom	Acceptor Atom	Distance (Å)
		LRR EFR	BAK1(M)	
	Measure 17	SER-1_O	ASP-507_O	2.8
	Measure 18	SER-511_O	LEU-464_O	3.3

Molecular Dynamics Simulation of Docked Complexes

Analysis on molecular dynamics on the docked complexes is mainly on Root mean square deviation (RMSD), root mean square fluctuation (RMSF), radius of gyration (Rg) and additionally on number of hydrogen bond, which was calculated using GROMACS tools.

Molecular Dynamics Simulation of EFR with PAMP elf18 and co-receptor BAK1 complexes

RMSD value for both complexes increase up to 10ns period of time and complex with mutated BAK1 showed an average fluctuation until 50ns, whereas complex with normal BAK1 maintained a steady graph up to 35ns period and showed an upward trend consequently till 50ns. For the complex with mutated BAK1 initially showed higher RMSD value yet for the complex with normal BAK1 showed higher RMSD value towards 50ns period as shown in Figure 2. RMSF for both complex showed almost similar level of fluctuation, yet complex with normal BAK1 showed higher RMS fluctuations mainly at the terminal regions compared with complex with mutated BAK1. Rg for C-alpha atom, complex with normal BAK1 showed mild fluctuation till 35ns period of time, followed by a sharp increase and Rg value maintained at 3.4nm by 50ns period of time. Complex with mutated BAK1 showed higher Rg value at 5ns and a downward trend till 35ns and consequently showed an upward trend till 50ns. Overall Rg value observed is lower and maintain a steady value for 30ns for complex with normal BAK1 compared to the complex with mutated BAK1, which also showed minimum fluctuation and less Rg value change over time. The protein-protein hydrogen bond number graph showed an upward trend for both of the complexes. The interactions between proteins increases over simulation time.



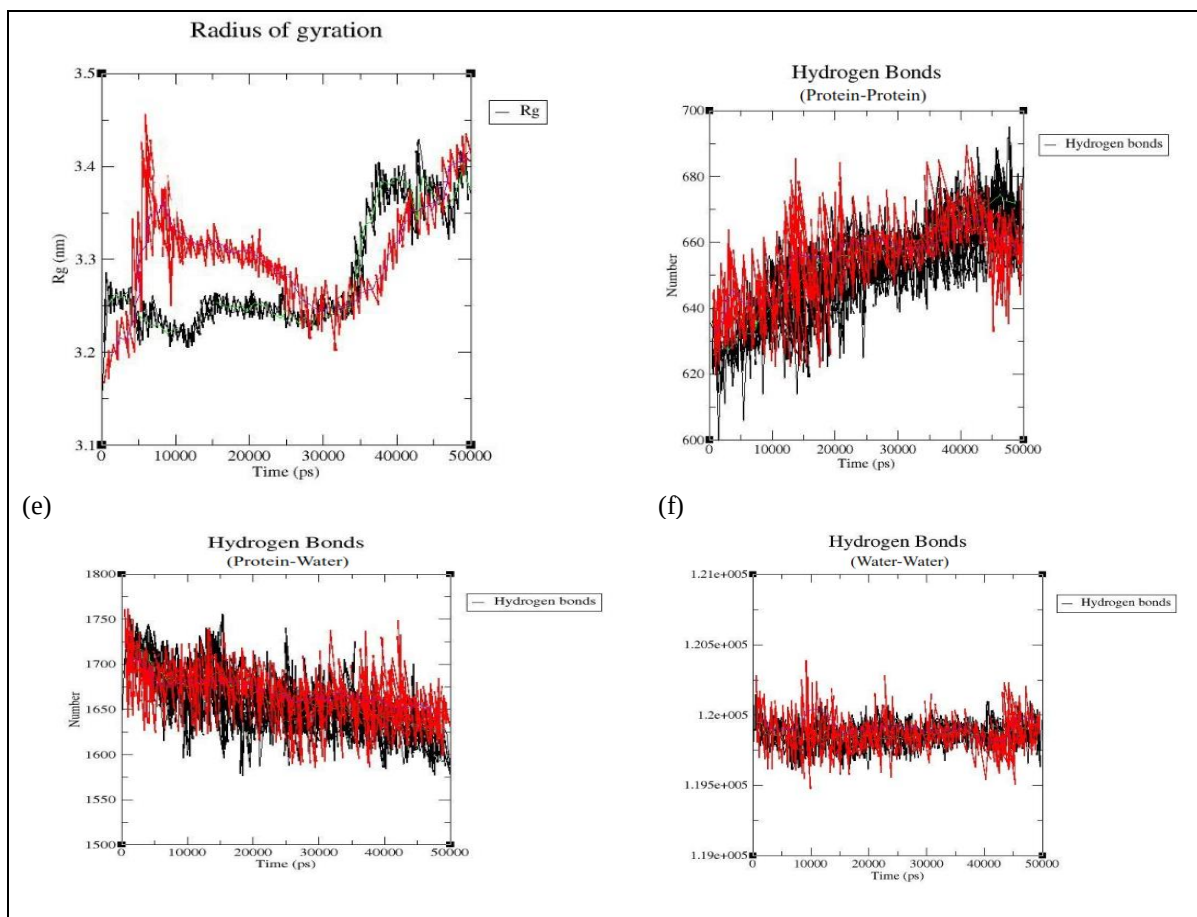


Figure 2: (a) RMSD ; (b) RMSF ; (c) Rg ; (d-f) Hydrogen bond formed over simulation between protein-protein, protein-water and water-water for EFR, elf18 and BAK1 docked complex. Black curves shows the results for EFR, elf18 and BAK1 docked complex where the red curves shows the results for EFR, elf18 and (mutated) BAK1 docked complex.

Conclusion

This study is the first approach to *in-silico* analysis to find the best complex interaction of EFR protein and PAMP elf8 with the aid of co-receptor BAK1. This result proved that HHpred Modeller generated the best modelled of EFR protein with good validation score. Following that, multiple template modelling method generates good models compared to single template modelling method with less structure deviation and gaps. The molecular dynamics simulation analysis proved the structure stability of the most reliable interaction occurred between EFR, elf18 with normal BAK1 supported by RMSD graphs. Further research needed to be done to understand the comparative analysis of FLS2-flg22-BAK1 crystal structure as template and EFR-elf18-BAK1 as protein model complex and proper mechanism of inside membrane activity of EFR using bioinformatics approach.

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THE DETERMINANTS OF OPPORTUNITY IDENTIFICATION BY ENTREPRENEURS IN SOUTH- WESTERN NIGERIA.

Abayomi Odebunmi

Abstract: This study focused on examination of the determinants of opportunity identification by entrepreneurs in South-western Nigeria. The study determined whether cognitive ability enhances opportunity identification by entrepreneurs in south-western Nigeria. It also examined the effect of academic education on opportunity identification by entrepreneurs in South-Western Nigeria. And also ascertained if profit making motive enhances opportunity identification by entrepreneurs in South-Western Nigeria. The study was carried out using a quantitative methodology through administrative of a structured questionnaire. The data gathered was analyzed using descriptive and inferential statistic such as percentages, one sample Chi-square test at 0.05 level of significance, with the aid of statistics package for social science (SPSS) version 20. The study was conducted in the six states of south-western Nigeria that is Lagos, Ogun, Oyo, Osun, Ondo, and Ekiti. At P-value 0.000 the null hypothesis was rejected which means all the variables are significant. The results show that cognitive ability, academic education and profit making motive enhances opportunity identification and the also the practice of entrepreneurship.

Keywords: opportunity identification, entrepreneurial opportunity, entrepreneurial alertness. This work was sponsored by TETFUND institutional Base Research Grant.

Introduction

Opportunities exist in “creativity” entrepreneurs need to identify such opportunities and “Claim” those that hold potential to generate economic value (Casson, 1982; Shane, 2003). This line of thinking manifests in the concept of entrepreneurial alertness (Kizner, 1977). A number of research has centered on the concept of alertness, which focus on perceptual and cognitive processing skills that facilitate opportunity identification. Shane (2003) opines that to be alert rests on cognitive capacity such as intelligence and creativity. These capacities can help entrepreneurs identify new solutions to market needs, or to generate ideas for new products and services that do not yet exist (Busenitze, 1996). Recognizing opportunities involve creative thinking that is, thinking outside the box” (De-Bono, 1978). Understanding the opportunity process remains important in the domain of entrepreneurship (Gaglo & Katz, 2007).

Shane and Venkataraman concluded that entrepreneurial opportunities are objective phenomena, which not be known to all people at all times (Shane and Venkatavaman, 2000). Thus, opportunities exist awaiting alert individual to recognize them (Kirzner, 1973).

Kizner (1979) asserts that the mental representations and interpretations of entrepreneurs do differ because they are driven by entrepreneurial alertness.

Hills, Lumpkin & Singh (1997) refer to opportunities as either the possibility to create new businesses or significantly improve the position of an existing business, in both cases resulting in new profit potential. Kirzner (1997) argues that an individual holds different assumption about the value of creation and this is based on the assumption that actors in a given

market possess asymmetric information (Hayek, 1945). Some people are able to recognize opportunities that others might not see. Although this perspective acknowledges that people holds different views about perceptual processes that facilitate opportunity identification, the opportunities themselves are seen as objective phenomena to be discovered. Indeed, it is assumed that opportunities exist, discovered and exploited (Share & Venkataraman, 2000). Is discovered that studies on opportunities identification by entrepreneurs are prevalent mostly in developed countries and dearth of studies emanating from developing countries, such as Nigeria for example (Afolabi, 2015). This study intends to fill that gap by x-raying the determinant of opportunity identification by entrepreneurs in South-Western Nigeria.

Research Problem

Researchers has not been able to support empirically opportunity identification problem which always questions its value (Busenitz, 1996).

Entrepreneurial alertness has been theorized to help people identity opportunities, scholars have a relatively limited understanding of what alertness specifically entails, how to operationalize it, and whether it is actually predictive of successful opportunity identification. (Gaglo & Katz, 2001).

Previous empirical investigation focused on identifying opportunities without a search opines that ability to use flow of information to identified opportunities without a deliberate search for a specific opportunity is maximized. Shaver & Scott (1991) pose the salient psychological questions: how are market environments represented and interpreted in the mind of the entrepreneur such that opportunity identification occurs? Do these representations and interpretations differs from those of other market actors? If so, in what ways? Kizner (1979) asserts that the mental representations and interpretations of entrepreneurs do indeed differ a critical first step in the entrepreneurial process remains relatively limited (Shane, 2012). And this study intends to fill that gap. Despite the prevalence of this phenomenon in practice, however, theoretical understanding and empirical analysis of how people identity opportunities are under developed (Gagho & Katz, 2001).

Research Objectives

The main objective of the study is to examine the determinant of opportunity identification by entrepreneurs in south-western Nigeria, while the specific objectives are:-

1. To determine whether cognitive ability enhance opportunity identification by entrepreneur in South-Western Nigeria.
2. To examine the extent to which academic education pays a positive role in opportunity identification by entrepreneurs in South-Western Nigeria.
3. To ascertain if profit making motive enhances opportunity identification by entrepreneurs in South-Western Nigeria.

Statement Of Hypothesis

- i. Ho: cognitive ability has no significant effect on opportunity identification by entrepreneur in South- Western Nigeria.
- ii. Hi: Cognitive ability has significant effect on opportunity identification by entrepreneur in South- Western Nigeria.
- iii. Ho: Academic education does not affect opportunity identification by entrepreneur in South- Western Nigeria
- iv. Hi: Academic education affect opportunity identification by entrepreneur in South-Western Nigeria.

Literature Review

Concept Of Entrepreneurial Opportunities

Scholars, practitioners and policing makers share a common interest in understanding entrepreneurship (Mattew, 2015).

Although most new ventures ultimately fail (shaue, 2008), entrepreneurship is widely viewed as an engine of economic growth, competitiveness and innovation (Schumpeter, 1442; Timinons and Sipinelli; 2008; Wessner, 2008).

There is a fundamental, but complex question: How do people identify new opportunities? This question is fundamental because opportunity identification is viewed as starting point for all entrepreneur (Baron, 2004; Shane and Venkataraman, 2000) and which informs questions.

“What constitutes an opportunity” and “Where do opportunities comes from” (Gregoire, Shepherd and Lambert, 2016).

Scholars also agree that new technologies foster the formation of firms (Shane, 2011) and create value through innovation spillovers (Jaffe, 1986). Scholars have even explored the “dark side” of entrepreneurial opportunities, arguing that technological discount unities (Tushinan and Anderson, 1986) and architectural innovations (Henderson and Clark, 1990), enable, “alert” firms (Kirzner, 1997) to capitalize on opportunities identified.

Entrepreneurial opportunities is more accurately described as an opportunity to engage in entrepreneurial action, in which entrepreneurial denotes a subclass of some broader category of human action (Yosem and Jeffery, 2007). Given that all human action is arguably motivated by profit (Homans, 1964), Opportunities then become the where and when of entrepreneurial action i.e, a situation in which one can attempt to profit by creating new goods or services (Humans, 1964).

Shane and Venkatataman (2000) have argued that entrepreneurial opportunities are “objective phenomena” existing in time and space even through they may not be known to all people at all times (Shane and Venkataraman, 2000). This, opportunities exist awaiting alert individuals to recognize them (Kizner, 1973).

Entrepreneurial Alertness

The submission that skill or ability which is known as entrepreneurial alertness. has its origin in the writings of economist (Kizner, 1973, 1979, 1985), who has defined alertness in two ways as the ability to notice opportunities that have hither to been overlooked” Kizner (1979) Schumpeter (1942) suggests that opportunities arise when an exogenous shock to the current economic market makes it more efficient to recombine existing goods in a new way. Entrepreneurs are those individuals who recognize and exploit such opportunities in pursuit of profit. Similarly, Kizner(1997) argues that individuals have different beliefs about the value of certain resources. Based on the assumption that actors in a given market possess asymmetric information (Hayek, 1945). Non-alert individuals fail to indentify or create entrepreneurial opportunity because they misjudge their market environment and the kind of behavior demanded by the moment (Kizner, 1979). Non-alert individuals believe that their behavior requirements consist of allocating their existing resources in ways that it will have the highest probability of maximized returns or have been congruent with previous institutional process (Kizner, 1979).

Methodology

This study covers entrepreneurs in the six states in South-western Nigeria and it focuses on understanding opportunity identification by entrepreneurs of the selected firms in the six states in south-western Nigeria. The six states were selected because they are the hub of business activities in the Nigeria Nation (Afolabi, 2015).

The research design provides a general framework for the collection of appropriate data on opportunities identification by entrepreneurs in South-western Nigeria. It uses quantitative approach to determine how cognitive ability, academic education and profit makeup motive enhance opportunity identification by entrepreneurs which rely on primary data.

The study relies on primary data that was gathered from about 571 entrepreneurs in the six states in South-western Nigeria.

Section A uses information on the indices such as age, gender and highest educational attainment while section B deals with opportunity identification by nascent entrepreneurs.

The study was analyzed using descriptive and inferential statistics of non-parametric test of chi square

$$X^2_{cal} = \sum \frac{(o-e)^2}{e}$$

Where $X^e = 0.05$

Result And Findings

Table I: cognitive ability enhances opportunity identification.

	Frequency	Percentage	Valid percent	Cumulative Percentage
Strongly agree	228	39.9	39.9	39.9
Agree	292	51.1	51.1	91.1
Undecided	34	6.0	6.0	97.0
Valid				
Disagree	14	2.5	2.5	99.5
Strongly	3	.5	.5	100.0
Disagree	571	100.0	100.0	
Total				

Source: Survey Study, 2017

The table indicates that 292 or 51.1% and 228 or 39.9% respondents Agree and Strongly agree that cognitive ability enhance opportunity identification.

Table II: Academic education plays a positive role in opportunity identification.

	Frequency	Percentage	Valid percent	Cumulative Percentage
Strongly agree	292	51.1	51.1	51.1
Agree	184	32.2	32.2	83.4
Undecided	53	9.3	9.3	92.6
Valid				
Disagree	39	6.8	6.8	99.5
Strongly	3	.5	.5	100.0
Disagree	571	100.0	100.0	
Total				

Source: Survey Study, 2017

The table shows that 292 or 51.1% and 184 or 32.2% respondents strongly agree and agree to the fact that academic education plays a significant role in opportunity identification.

Table III: Pursuit of profit makeup motive enhances opportunity identification.

	Frequency	Percentage	Valid percent	Cumulative Percentage
Strongly agree	189	33.1	33.1	33.1
Agree	226	39.6	39.6	72.7
Undecided	98	17.2	17.2	89.8
Valid				
Disagree	47	8.2	8.2	98.1
Strongly	11	1.9	1.9	100.0
Disagree	571	100.0	100.0	
Total				

Source: Survey Study, 2017

The table indicates that 226 or 39.6% and 189 or 33.1 agree and strongly agree that pursuit of profit makeup motive enhance opportunity identification.

Table iv: Gathering information about competitors enhance opportunity identification,

	Frequency	Percentage	Valid percent	Cumulative Percentage
Strongly Agree	237	41.5	41.6	41.6
Agree	223	39.1	39.1	80.7
Undecided	69	12.1	12.1	92.8
Valid				
Disagree	36	6.3	6.3	99.1
Strongly	5	.9	.9	100.0
Disagree	570	99.8	100.0	
Total	1	2		
Missing System	571	100.0		
Total				

Source: Survey Study, 2017

The table shows that 237 or 41.5% and 223 or 39.1 strongly agree and agree that gathering information about competitors enhances opportunity identification.

Table V: Gathering information about market size and growth enhances opportunity identification

	Frequency	Percentage	Valid percent	Cumulative Percentage
Strongly agree	292	55.1	51.1	33.1
Agree	216	37.8	37.8	72.7
Undecided	41	7.2	7.2	89.8
Valid				
Disagree	19	3.3	3.3	98.1
Strongly	3	.5	.5	100.0
Disagree	571	100.0	100.0	
Total				

Source: Survey Study, 2017

The table indicates that 292 or 51.1 and 216 or 37.8 strongly agree and agree that gathering information about market size and growth enhances opportunity identification.

Discussion

Table 1

The focus of this study is the determinants of opportunity identification by entrepreneurs in South-western Nigeria and the first objective is to determine whether cognitive ability enhance opportunity identification by entrepreneur in South-western Nigeria. From table 1 which indicates that 292 or 51.1% and 228 or 39.9% respondents Agree and Strongly agree that cognitive ability enhance opportunity identification. Notice without a search “Kaish and Gidad (1991) interpret this as having an aptitude to position oneself in the flow of information so as to be able to identify opportunities. Cognitive ability has to with the way we see and process information. The mental models direct attention and guide information processing and resourcing for any specific event real or imagined. If Kizner is correct, then alert individuals have more accurate mental models. And this correspond with our findings that cognitive ability enhances opportunity identification.

Table II

The objective is to examine whether academic education play a positive role in opportunity identification. And from the table it was submitted that academic education plays a positive role in opportunity identification. The table shows that 292 or 51.1% and 184 or 32.2% respondents strongly agree and Agree to the fact that academic education helps in opportunity identification. Academic education enhances knowledge to the opportunity domain, that is, those with academic education are alert to the opportunity around them. Heynie, Shepherd and McMullen (2009) found that entrepreneurs are attracted to opportunities that are complimentary to their existing knowledge which is academic education. Moreover, knowledge of the domain is not only important for identifying opportunities but also for evaluating those opportunities.

Table III

From the table which submits that pursuit or profit makeup motive enhance opportunity identification. The table indicates that 226 or 39.6% and 189 or 33.1 Agree and strongly agree that pursuit of profit makeup motive enhance opportunity identification. This is identification of economic opportunities that makes the market opportunities and enables these new goods and services to be commercialized for wealth creation that is profit makeup venture (Gatignon and Xuereb, 1979). The above submission is in corollary with on findings that pursuit of profit makeup identification. Thus, opportunities identification is potential for profit.

Table IV

The table shows that gathering information about competition enhances opportunity identification. The table indicates that 237 or 41.5% and 233 or 39.1 Strongly agree and Agree that gathering information about competitors enhances opportunity identification. Entrepreneurial opportunities provide a competitive advantage to the first firm that is able to discover and exploit them (Lieberman & Montgomery, 1988). The competitive advantage is transient, however, because as information on valuable opportunities becomes available, other firms will develop the resources and capabilities required to identify and exploit these opportunities (Fecce et al., 1997). There is no doubt about the fact that information gathered about competitor enhances opportunity identifications.

Table V

The table concludes that gathering information about market size and growth enhances opportunity identification. From the table it was gathered that 292 or 51.1 and 216 or 37.8 strongly agree and agree that gathering information about market size and growth enhances opportunity identification. To start are also influenced by other variables that have little or nothing to do with the ability to find market opportunity (Carter et al., 1996; Cooper and dinkerberg 1986). Kerzner () submits that from the theory of entrepreneurial alertness, the relevant domain on interest is the market or industry. In this theory, opportunity identification refers to the opportunity to offer new products, services, or processes for the market or industry which is market growth. This is marginal alert, when entrepreneurs take action in the marketplace, they may discovered business opportunities but they would identify and pursue business opportunities that either represent incremental improve (Gagho and Katz, 2001).

The hypothesis testing indicates that at P-value 0.000, which means that the variable is significant and it means cognitive ability that is the way we see and process information enhances opportunity identification by enhances opportunity identification by entrepreneurs in South-western in Nigeria.

Also from the other hypothesis testing which also indicates that at 0.000, it shows that academic education enhance opportunity identification by entrepreneur is South-western Nigeria. It means that the entire variables are significant.

Hypothesis test summary

Null hypothesis	Test	Sig,	Decision
Cognitive ability has significant effect on opportunity identification by entrepreneur in South- Western Nigeria.		One-sample chi-square test	Reject the null hypothesis
Academic education does not affect opportunity identification by entrepreneur in South- Western Nigeria		One-sample chi-square test	Reject the null hypothesis

Asymptotic significance are displayed. The significance level is.05

Implication

This adds to the theory of entrepreneurship. By showing that cognitive ability enhances opportunity identification by entrepreneurs, most especially in South-western Nigeria. This has implication for policy maker and support agencies

The outcome of this finding will better enhance the practice of entrepreneurship in terms of ascertaining that academic education enhances opportunity identification by entrepreneur. This study will also contribute to literature on opportunity identification and the perspective will be a valuable contribution to knowledge in entrepreneurial activities. In addition to the above, scholars should also conduct empirical research on how entrepreneurs identifies opportunities to transform static industries.

It was also attentions should be given to the limitations to the opportunity identification by entrepreneur across levels of analysis and geographical settings.

Conclusion

Cognitive ability involves the mental processes that occur within an individual in a bid to identify opportunities. It has been revealed that among a sample of entrepreneurs in South-western Nigeria cognitive ability that is the way we see and process information enhances opportunity identification. This paper is predicated in an important distinction. Attention should to assessment of entrepreneurs' ability to identifiable means instead; it attempted to discover an entrepreneur's cognitive ability to identify opportunities.

However, the ability also concludes that: academic education play a positive role in opportunity identification; that gathering information about competitors enhances opportunity identification; that pursuit of profit makeup motive enhance opportunity identification and that gathering information about market size and growth enhances opportunity identification.

The implication of the study is that non-alert people that is those that refuses to think outside the box are not even aware of market situations or event that lead to opportunity identification. They are not even aware of potential new opportunity for profit their goal is the continuation of the status, it means that it takes only who ware to think outside the box to identify and pursue business opportunities that either represent incremental improvement over existing goods and services.

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THE EFFECTIVENESS OF MINDFULNESS-BASED INTERVENTION IN ENHANCING SELF-COMPASSION AMONG OLDER ADULTS

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Abstract: Research has shown that there is a relationship between self-compassion and well-being among older adults, and that lack of self-compassion leads them to self-suffering, isolation and negative self-judgment, which affects their well-being. To address this, the current study attempts to determine whether mindfulness-based intervention could enhance self-compassion among older adults. Results have revealed that participants in mindfulness training increased their level of self-compassion. The findings are significant for guidance counsellors, psychologists, social workers and older adults and care givers.

Keywords: Older Adults, Self-Compassion, Mindfulness-Based Intervention

Introduction

Older adults, as a developmental period, are filled with many challenges. Early developmental theorists, particularly Erickson, believed that much of life are spent preparing for the middle adulthood stage and the last stages of the life span. At this stage approaching old age, people spend much time to reflect on life: those who feel that they have successfully accomplished this stage will have positive reactions in acceptance of the life they have lived, those who are unsuccessful during this stage can often feel that their lives have been wasted and may experience regrets with negative feelings of hopelessness, bitterness and despair (David, 2014). Some recent studies on self-perceptions of aging have found that those with more positive self-perceptions will have better functional health over time than those with more negative self-perceptions of aging, considering the baseline measures of functional health, self-rated health, age, gender, loneliness, race, and socioeconomic status (Becca et al., 2002). Holding negative perceptions of aging at baseline are associated with a decrease in self-reported performance in activities of daily living, an increased number of illnesses, decreased self-reported physical functions, self-rated health and increased risk of mortality (Wurm, et al., 2007; Wurm, et al., 2008).

The fact that the proportion of older people and global life expectancy has increased over the *last few centuries* (Björn Lindgren, 2016) likely raises the demand for old-age care. Thus, it is very important to find a direction to help older adults with resources for positive aging. It is likely that self-compassion is one such factor because recent studies have found that self-compassion plays an important role in the well-being of older adults (Phillips & Ferguson, 2012; Allen et al., 2012).

The construct of self-compassion, conceptualized by Neff (2003b), offers an alternative approach to thinking about well-being derived from Buddhist ideas over 2000 years old (Neff, Kirkpatrick, & Rude, 2007). Self-compassion, as defined by Neff (2003a; 2003b), has three components which mutually influence and engender each other, namely, self-kindness, awareness of a common humanity and mindfulness. An individual with self-compassion is able to view the self with gentleness and kindness even in the face of failure and pain; he or she is also able to experience feelings and emotions without pushing them away or becoming completely overwhelmed by them. Furthermore, the individual sees that all human beings can fail and experience pain.

The self-compassion construct has already caught attention and has shown great promise, demonstrating positive associations with numerous current markers of positive psychological functioning and well-being. For instance, Neff (2003) found that self-compassion was significantly correlated with positive health outcomes such as less depression, diminished anxiety and greater life satisfaction. Also, Hsieh et al. (2005) discovered that self-compassion was positively associated with goal mastery and emotion-focused coping strategies. Neff et al. (2007) found that self-compassion had significant positive association with self-reported measurement of happiness, optimism, positive affect, wisdom, personal initiative, curiosity and exploration; agreeableness, extroversion, and conscientiousness. Self-compassion has also demonstrated negative associations with depression, anxiety, and rumination (Neff, 2003b), as well as negative performance goals and avoidance-oriented strategies (Hsieh et al., 2005), with negative affect and neuroticism in addition (Neff et al., 2007). Most of the above-mentioned findings indicate that the higher level of self-compassion one experiences, the more positive one feels about oneself and the lower the level of psychopathologies such as a self-negative attitude.

Recently, some researchers who have tried to determine *if* there is a relationship between self-compassion and well-being of older adults have uncovered many interesting results. For example, self-compassion was found to moderate the relationship between physical health and subjective well-being in a way that individuals who have poorer health will benefit the most from by being self-compassionate. Participants with self-compassion reported being less bothered by the use of assistance than those low in self-compassion (Allen et al., 2012). Those older adults with higher self-compassion displayed greater psychological well-being even when they also had high stress or poor health (Jennifer, 2015). Self-compassion in older adults was found to be positively correlated with age, positively and uniquely related to psychological well-being, thus moderating the association between self-rated health and depression (Kristin Homan, 2016). Psychological well-being in the elderly can be increased by increasing religiosity and self-compassion in life (Payam et al., 2017). Self-compassion predicted positive responses to aging and that self-compassionate thoughts explained the relationship between trait self-compassion and emotional tone as well as the belief that one's attitude helped them cope with age-related events (Allen et al., 2013). Most of these results suggest that interventions designed to increase self-compassion in older adults may indicate a fruitful direction for future applied research.

Recently, there has been a good amount of interest in the mental health benefits arising from mindfulness (Brown and Ryan, 2003). Mindfulness, which involves bringing a certain quality of attention to the moment by moment experience (Kabat-Zinn, 1990), lies at the heart of Buddhist meditation practice and psychology (Siegel and Fulton, 2005). Psychotherapy patients are increasingly seeking psychotherapists who understand their meditation practice; therefore most therapists are familiar with meditation as a relaxation technique (Benson, cited in Agnes, 2009). Mindfulness practice brings about many psychological and mental health

benefits. For instance, mindfulness enables its practitioners to develop a stronger observing self and thus become less identified with the contents of consciousness (Segal et al., 2002). Mindfulness practitioners can see thoughts as merely thinking without feeding or fighting them (Sogyal Rinpoche, 1992). Mindfulness also allows us to stay present to the other person without being caught up in destructive emotions (Doherty, 1997). Moreover, mindfulness can also allow covert desensitization to unpleasant thoughts and negative feelings that make one suffer from oneself (Breslin and Mcmain, 2002). In addition, mindfulness training gives clear and specific instruction which enables its participants to follow and practice easily and one can practice anytime, anywhere, is *simple and requires less effort* (Thich Nhat Hanh, 2017).

Purpose of the Study

From the introductory information, it is clear that it is very important to help older adults enhance their self-compassion and that mindfulness intervention seems to be a useful approach. However, no empirical research to date has examined whether mindfulness intervention is effective in enhancing self-compassion among older adults. The main purpose of this study, therefore, is to determine if mindfulness-based intervention (*MIP*) can improve self-compassion among older adults. The current study primarily hypothesizes that the *MIP can increase self-compassion among older adults*.

Literature Review

Benefits of Mindfulness Practice

Mindfulness was found to be beneficial to the mind and body. A 2006 qualitative study followed the effects of one year of Transcendental Meditation on ten middle school students. Themes that emerged from individual interviews with students included a greater ability of self-control and improved social relationships, as well as better academic performance (Rosaen & Benn, 2006). Other investigators have evaluated the benefits of Yoga as well. Investigators found Sahaja Yoga Meditation, an awareness practice related to mindfulness, to be an effective intervention for children with ADHD and their families. Results included an improvement in the self-esteem of the children, a reduction in their ADHD symptoms, and an improved relationship between parent and child (Harrison et al., 2004). A study of Iyengar Yoga as a complement to medication in the treatment of depression found significant reductions in overall depression, anger, and anxiety among participants. Participants also consistently rated their moods higher after the completion of each class than before each one commenced (Shapiro et al., 2007).

Mindfulness intervention brings positive changes to children and adolescents with psychological disturbances. In one 6-week study with anxious children, teachers reported an improvement in academic functioning and decrease in symptoms of anxiety in the children (Semple et al., 2005). A mindfulness intervention for several adolescents with conduct disorder resulted in a significant decrease in aggressive behavior. They reported benefits from mindfully returning their attention to the soles of the feet during distressing situations (Singh et al., 2007). Mindfulness-based cognitive therapy significantly reduced observable internalizing and externalizing symptoms. Over 80% of children and parents involved in this study thought that schools should teach mindfulness (Lee, J., et al. 2008). In a recent study for adolescents with ADHD, mindfulness training significantly reduced symptoms associated with their disorder (Zylowksa et al., 2008).

Mindfulness intervention is also helpful in educational settings. A study of first and third grade children which involved a 12-week program of breath awareness and yoga showed improvements in children's attention and social skills as well as decreased test anxiety in

children (Napoli et al., 2005). Another program that combined elements of MBSR and tai chi for a small group of middle school students in a 5-week program found that students experienced a significantly increased sense of calm, connection to nature, and improved sleep after going through the training (Wall, 2005). Two pilot studies conducted through UCLA's Mindful Awareness Research Center indicate improvements in self-regulatory abilities among preschool and elementary school students who participated in an 8-week mindful awareness practices training program. Specifically, children who were initially less well-regulated showed the strongest improvements subsequent to training (Flook et al., 2008).

Mindfulness Practice and Older Adults

In areas of aging, mindfulness has brought about a good amount of benefits that improved limitations of older adults as evidenced by most recent studies and their findings. For example, elderly practitioners of mindfulness meditation experienced improved longevity (Alexander et al., 1989). The elderly expressed that they were able to reduce their feelings of *loneliness after taking part in* an eight-week meditation program for seniors, (Cresswell et al., 2012). Buddhism walking meditation (or mindful walking) was found to be effective in reducing depression, improving functional fitness and vascular reactivity, and appeared to confer greater overall improvements than the traditional walking program (Prakhinkit et al., 2014). Mindfulness meditation may help older adults sleep better (Black et al., 2015).

Research has since revealed that there is a link between self-compassion and well-being among older adults and suggested interventions designed to increase self-compassion in older adults for future applied research. Mindfulness-based intervention seems to be the model that can enhance self-compassion in such people since this form of exercise is acceptable to the modern lifestyle and can be practiced easily by the elderly who potentially have a number of limitations. In addition, studies on mindfulness-based interventions (MBIs) have gained wide recognition through such programs as Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy, Mindfulness-Based Relapse Prevention, and others (Kabat-Zinn J. et al., 2009; Segal ZV et al., 2012; and Bowen S. et al., 2010, cited in Diana Kachan et al., 2017). To date, however, research and interventions have not taken potential effectiveness of mindfulness-based intervention on self-compassion, especially for older adults. To address this gap, this study aims to determine whether mindfulness-based intervention is effective in enhancing self-compassion among older adults who may have negative aging experiences in life.

Method

This study made use of The Pre-test and Post- test Control Design. Participants were randomly assigned to one of two conditions: Experimental group or Control group.

Participants

The participants of this study were older female adults who were community volunteers at the Catholic Pastoral Center of the Saigon Archdiocese, Viet Nam. The age of 65 and above was expected. This venue was chosen since interviews with guidance counsellors in the center revealed that special cases could be found in this place and this population was chosen because studies indicated that females had lower levels of self-compassion than males (Lisa et al., 2015). One hundred of the volunteers were given Neff's Self-Compassion Scale (SCS). Those who were found to have low level of self-compassion were included as the participants of the study. Of the 100 who took the SCS, 30 of them received a score of low level of self-compassion. A random sampling technique was applied to the participants who were qualified for the study,

assigning them to experimental and control groups. The participants in the Experimental group (n = 15) attended ten group sessions, training them in the practice of mindfulness while the participants in the control group (n=15) received no treatment. Self-compassion scale was collected from all participants before and after intervention to see any significant difference. In addition, a following up using open-ended questions via e-mail after an interval of about three months was conducted to see if the program motivates the the participants in the Experimental group to continue practicing the mindfulness in their daily life.

Measures

The studies made use the long form of the Self-compassion scale (SCS) consisting of 26 items, constructed by Kristin Neff (2003), which is free for researchers to use (Neff, <http://self-compassion.org>). The scale is a self-attitude construct designed to measure the level of self-compassion among adult and adolescents, whose ages range from 14 years and older. The scale measures three components of self-compassion on six separate subscales: Kindness Versus Self-Judgment, Common Humanity Versus Isolation, and Mindfulness Versus Over-identification. This scale proved to be psychometrically sound (Neff, 2003).

Coding Key: Self-Kindness Items: 5, 12, 19, 23, 26 versus Self-Judgment Items: 1, 8, 11, 16, 21; Common Humanity Items: 3, 7, 10, 15 versus Isolation Items: 4, 13, 18, 25; Mindfulness Items: 9, 14, 17, 22 versus Over-identified Items: 2, 6, 20, 24. Subscale scores are computed by calculating the mean of subscale item responses. To compute a total self-compassion score, reverse score the negative subscale items before calculating subscale means - self-judgment, isolation, and over-identification (i.e., 1 = 5, 2 = 4, 3 = 3. 4 = 2, 5 = 1) - then compute a grand mean of all six subscale means. Researchers can choose to analyze their data either by using individual sub-scale sores or by using a total score. Average overall self-compassion scores tend to be around 3.0 on the 1-5 scale, overall score can interpreted accordingly: A score of 1-2.5 for overall self-compassion score indicates one is low in self-compassion, 2.5-3.5 indicates one is moderate, and 3.5-5.0 means one is high. Note that higher scores for the Self-Judgment, Isolation, and Over-Identification subscales indicate less self-compassion, while lower scores on these dimensions are indicative of more self-compassion.

Intervention

A basic definition of mindfulness is “Moment-by-moment awareness.” Other definitions include: “Keeping one’s consciousness alive to the present reality,” (Thich Nhat Hanh, 1976); “The clear and single-minded awareness of what actually happens to us and in us at the successive moments of perception,” (Nyanaponik, cited in Brown & Ryan, 2003); “Paying attention in a particular way: on purpose, in the present moment, and non-judgmentally,” (Kabat-Zinn, 1994); “A way of paying attention that originated in Eastern meditation practices,” (Baer, 2003). Mindfulness can be further elaborated as a process of regulating attention in order to bring a quality of non-elaborative awareness to current experience and a quality of relating to one’s experience within an orientation of curiosity, experiential openness and acceptance. We see mindfulness as a process of gaining insight into the nature of one’s mind in de-centered perspectives (Safran & Segal, 1990), on thoughts and feelings so that they can be experienced in terms of their subjectivity (versus their necessary validity) and transient nature (versus their permanence) (Bishop et al., 2004). When mindfulness is transported to the therapeutic arena, its definition often expands to include non-judgment: awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience from moment to moment (Kabat-Zinn, 2003). Psychological and behavioral versions of meditation skills usually taught in Eastern spiritual practice usually focus on

observing, describing, participating, taking a nonjudgmental stance, focusing on one thing in the moment, and being effective (Linehan, 1993). Mindfulness captures a quality of consciousness that is characterized by clarity and vividness of current experience and functioning, and thus stands in contrast to the mindless, less “awake” states of habitual or automatic functioning that may be long-term for many individuals (Brown & Ryan, 2003). Broadly conceptualized, mindfulness is a kind of nonelaborative, nonjudgmental, present-centered awareness in which each thought, feeling, or sensation that arises in the attentional field is acknowledged and accepted as it is (Segal et al., 2002). A stripped-down definition of mindfulness as awareness of present experience with acceptance can be found in most modern psychological literature on mindfulness (Germer, Siegel, & Fulton, 2005). The practice of mindfulness may increase awareness which can help one be free from destructive thoughts and emotions, thereby becoming more compassionate to the self (Germer, 2009).

Mindfulness-Based Intervention in the Current Study

The current mindfulness intervention program (MIP) consisted of ten sessions. Each session lasted for one and a half hours, two sessions per week. The participants in the experimental group received the mindfulness training program that aimed to help them become mindful of themselves physically, mentally, emotionally, relationally and spiritually. There were five (5) major techniques included in the program: (a) *body scan*, a process of moving attention from head to toes, observing sensations in the different regions of the body; (b) *mantra technique*, a meditation on a word or phrase giving one a meaning or a power of concentration when mental suffering arises such as self-negative judgment or unhappy thoughts about the self; (c) *emotion anchor*, a way of being free from one’s own emotional sufferings using deep breathing to enhance awareness of what is happening in the body; (d) *metta or loving-kindness meditation*, a good intention or compassionate thought one wants to extend to the self, to the other or to the universe; and (e) *centering meditative prayer*, a way of adding depth of meaning, developing the self and building of faith through the grace of contemplation on the sacred word that best supports one’s sincere intention to be in the presence of the Lord and to be open to His divine action within.

The setting of the intervention program was in the counseling room of the *Catholic Pastoral Center of the Saigon Archdiocese, Ho Chi Minh City, Vietnam*. The atmosphere was safe and comfortable for the participants to experience mindfulness practice. The intervention program was led by the researcher, who had been practicing mindfulness intervention, together with a guidance counsellor.

Results

The table below shows the profile of experimental and control groups before and after intervention. As shown in the table, the baseline analysis revealed that before intervention, the experimental group achieved a score of 2.35 in self-compassion while the control group received 2.42, considering that the two groups are low in the scale, and no significant difference between groups in the pre-test was observed as shown by their T_1 values of 1.871 that had a probability $p=0.82$ which is greater than the significance level of 0.05. Random grouping proved to be unbiased. After intervention, the experimental group showed a significant increase in the total mean of self-compassion from 2.35 (in the pre-test) to 3.62 (in the post-test) while the control group slightly increased from 2.42 to 2.44 (still considered as low). The observed difference between the post-test scores of the two groups was significant since the T_2 value of 12.51 had a probability $p=0.00$, which is less than the standard significance level of 0.05. This implies that there was a significantly positive change in self-compassion of participants in the

experimental group while those in the control remain unchanged, indicating that mindfulness intervention is effective in enhancing self-compassion among older adults.

Descriptive statistics for the Self-Compassion

Sub-scales of Self-compassion	Experimental				Control			
	Pretest		Posttest		Pretest		Posttest	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Self-Kindness (SK)	1.9333	.25820	3.8667	.63994	2.13	.35187	2.4000	.63246
Self-Judgment (SJ)	3.3333	.48795	2.4667	.61968	.51640	.61721	3.5333	.83381
Common Humanity (CH)	2.2000	.41404	3.7333	.59362	2.3333	.48795	2.4667	.51640
Isolation (I)	3.3333	.48795	2.6000	.50709	3.3333	.61721	3.7333	.79881
Mindfulness (M)	2.2000	.41404	3.6000	.50709	.13093	.41404	2.3333	.48795
Over-Identifying (OI)	3.5333	.74322	2.2000	.41404	3.4667	.63994	3.2667	.70373
Overall Self-compassion	2.3556	.26627	3.6222	.24774	2.4222	.28776	2.4444	.27217

Comparison of differences between groups before and after intervention

	Experimental		Control		Test of significant difference between groups
	Pre	Post	Pre	Post	
Overall Self-compassion	2.3556	3.6222	2.4222	2.4444	T ₁ =1.871; p= 0.82>0.05 T ₂ =12.51; p= 0.00<0.05

T₁ refers to result of test of significant difference for the experimental and control groups before intervention and T₂ for the two groups after intervention.

Discussion

Though given to a small population, the result of the current study shows that the participants in the experimental group after mindfulness training significantly increased their self-compassion as compared to the control group, indicating that MIP is effective. This means: 1) After learning and practicing mindfulness techniques, older adult participants recognized that being imperfect, failing, and experiencing life difficulties is inevitable, so they tend to be gentle with themselves when confronted with painful experiences rather than becoming angry or making *negative judgments* of themselves and accepting the reality of life limitations with sympathy and kindness and greater emotional equanimity during their reflection on their daily life; 2) After mindfulness training, participants were able to recognize that there was no

guarantee that people can always get what they want and that they may make mistakes every day, therefore suffering and personal inadequacy is part of the shared human experience – something that we all go through rather than something that happens to “me” alone, and 3) Finally, after the 10 sessions of mindfulness training and practice, the participants were no longer over-identified, neither suppressing nor exaggerating feelings, rather they were able to balance their negative emotions with openness and hold them in mindful awareness. This finding is consistent with previous studies: Gilbert & Procter (2006) claimed that self-compassion can be enhanced with mindfulness practice. Increases in self-compassion were also found after mindfulness training (Shapiro, Brow, K., & Biegel, 2007). Alberto et al., (2009) proved that mindfulness-based intervention was able to reduce ruminative thinking as well as to increase empathy and self-compassion. Buddhism walking meditation or mindful walking was found to be effective in reducing depression, improving functional fitness and vascular reactivity, and appeared to confer greater overall improvements than the traditional walking program (Prakhinkit et al., 2014).

The fact that mindfulness practice can enhance self-compassion may be explained as follows: Possibly, mindfulness training as required to give clear and specific instruction which enables its participants to follow and practice easily and one can practice anytime, anywhere; Perhaps this practice is *simple and requires less effort* (Thich Nhat Hanh, 2017). The finding that the participants in the experimental group became more compassionate towards themselves as compared to those in the control groups suggests that the mindfulness-based intervention was effective in enhancing older adults’ self-compassion. For this reason, training and the practice of mindfulness is encouraged.

The following engagement activities of the participants in the experimental group can initially confirm that mindfulness can enhance self-compassion in older adults: Firstly, 15 or 100% of the participants in the experimental group consistently participated in the program from the start through to post-assessments (post-test and follow-up), indicating their strong desire, motivation, interest and commitment to the program. This also suggests that the schedule (free time) of the program and its duration from one to one and half hours, may have been acceptable to the participants. Secondly, the experimental group gave positive feedback that the program had indeed enhanced their self-awareness (see Appendix A). Finally, mindfulness intervention program motivated the participants in the experimental group to continue practicing mindfulness in their daily life. This finding is supported by positive responses to two open-ended questions in follow-up emails after an interval of about three months in which the participants in the experimental group revealed that they had continued practicing mindfulness in their daily life (see Appendix B). This finding indicates that the participants in mindfulness training indeed experienced the techniques and that those techniques were helpful and easy to apply at any convenient time and place. For this reason, mindfulness is encouraged as a practice because if one does a little of it every day, mindfulness is cultivated. If one does more everyday practice, and adds this to the regular periods of formal practice and retreat practice, the effects are more dramatic (Lazar et al, 2005).

Based on the above mentioned findings, we came up with the following suggestions:

Since the Mindfulness Intervention Program in the current study proved to be effective in enhancing the self-compassion of older adults, it is strongly recommended that the guidance counsellors be encouraged to implement the intervention program for those older adults with low self-compassion. Social workers and psychologists are highly recommended to be included in the training since the program offers a highly relational understanding of mindfulness practice that supports moment-by-moment work with groups and individuals. Everyone with an interest in helping others to enhance self-compassion using mindfulness intervention should

give the participants specific instruction and techniques and more practice since the observations from this experimental study have revealed that the more the participants apply the techniques they learned in the treatment sessions, the more they get motivated to practice. Consequently, the more they practice, the better they feel.

Future research: This study was limited to a medium sample size with 15 participants for the experimental group and 15 for the control group. However, the analyses of outcome data for the study hypotheses yielded statistically significant results as described in the summary of results. This suggests that further research using larger sample sizes and different populations may be worth conducting, especially with older male adults. Any future study should also investigate factors that may predict the level of self-compassion, and include follow-up assessment, to determine whether the benefits of this current mindfulness-based intervention have an enduring characteristic in enhancing self-compassion.

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Appendix A

Feedbacks from experimental group participants about Mindfulness Intervention Program

1. “The most meaningful thing that I learned from the mindfulness training program was that it helped me look into myself and become aware of just how important I am to me. As I am aware of myself, there is no reason for conflict to exist within me.”
2. “Feeling good about myself is the most beautiful thing I found out in this program”;
3. “I realize that by becoming kind to myself, can I be loved by others”;
4. “I used to compare myself with other people but then I realized that everyone is unique. I should not compare myself with others and should feel blessed with what I have. This program gives me an important sense of self-acceptance.”
5. “Spending time for myself and others gives me better feeling in my daily life”; “From now on, I will try to discover good things in myself.”
6. “I can make myself better by applying the simple techniques I have learnt from the program such as loving-kindness meditation and the mantra technique.”
7. “There is a need for me to connect to myself, to others and to God.”

Appendix B

Reponses to open-ended questions in the follow-up e-mail

What effects did the Mindfulness-Based Intervention Program have on your life?

Did you continue practicing the mindfulness techniques in your life?”

1. “I am continuing the practice of mindfulness techniques because it helps me a lot, especially when I have trouble in sleeping and when I am stressed. I find them effective in calming myself down and being in control. I find it nice to connect with myself”.
2. “Before, I used to hate myself and give lesser importance to the things that I have, and instead of being happy with what I have, I always had a pitying attitude toward myself, but since we have discussed that it is very much important to gain one’s importance”.
3. “I was able to love myself first before loving other people. I used to be insecure with a lot of things and most of the times I didn't believe in my own skills. The techniques guided throughout the sessions helped me to appreciate more of myself and to trust my abilities”.
4. “Thank you for teaching me the different things in the mindfulness program. Staying silent when I am bothered is what the program has helped me.”
5. “I am still glad to learn good things from the mindfulness. Honestly, I am trying to do what I learned from the mindfulness training program and I will keep trying because I

am sure that it will help me a lot now and in the future. I am also sharing it with my friends.”

6. “I would like to say that I am very glad to learn from that kind of mindfulness program and this is very useful for me because in any situation like there is a conflict time; for example I am very angry. I used the emotion mindfulness that the program taught me. I also share it with my friends, and they say that is nice and they also like to practice it.”
7. “I can absolutely say that with mindfulness practice, my life seems quite a bit better than usual.”

TRENDS IN NEWS COVERAGE: CONTENT ANALYSIS OF A MALAYSIAN NEWSPAPER

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Abstract: *This paper describes a content analysis of the most English newspaper in Malaysia – the Star on the continued two days. It has found that the hard news occupies most space of the newspaper than soft news. Among them, the categories of sports, business, and social problems appears most often. Generally, the headlines and sentences are concise and simple. It spends about half of the space to cover the advertisements. The result also shows that the top prevailing ads are property, automobile, public service products, and education. And the advertisers prefer colour ads than black and white ads. An essentially significant finding is that positive news of the government and intriguing reports of opposition party are the common phenomenon on the Star newspaper.*

Key words: *News Coverage, the Star, News Categories, Media Ownership.*

Introduction

History of the Star

The Star is an English-language, tabloid-format newspaper in Malaysia. The latest figures released by the Audit Bureau of Circulation (ABC) for the first half of 2016 shows that *the Star* remains the nation's highest circulated daily with a total average daily paid circulation of 359,442 (n.d., 2017).

The daily newspaper was first published on 9 September 1971 as a regional newspaper in Penang. It went into national circulation on 3 January 1976 as the office moved to Kuala Lumpur. In 1981, it moved its headquarters from Kuala Lumpur to Petaling Jaya which is also its current premise to accommodate staff and technology devices. As of September 2016, *The Star* is effectively controlled by the Malaysian government—the Malaysian Chinese Association (MCA), the major shareholder at 42.46%.

The Star weekday paper is packaged as a 4-in-1 paper, comprising the Main Paper, StarBiz, Star2 and Star Metro. Besides of the newspaper, *the star* also has online newspaper, e-Paper, and stream TV news now.

The Influence of News Media

Our everyday lives are saturated by various kinds of media, such as the Internet, television, newspaper, books, magazines and more. The media helps us disseminate information but also influences us greatly. McCombs and Shaw's agenda-setting theory (1993) contends that mass media tells people what to think about. Media sets the agenda and determines what is important. Through the order, font size, space, and repeating times of the story, they impress upon readers what stories they assume the readers need to pay attention to. Second-level agenda-setting theory (Ghanem, 1997, p. 3), also known as media framing, discovered that media possesses

persuasive power. Media frame stories with a set of attributes that affect how the audience perceives stories.

Facing the current revenue models, the media owners hire journalists so that they can redefine newsworthiness while making rules for journalists. Journalism is no longer free considering the interest of media owners.

Wilson and Ogden (2015, p.34) believe that the media frames stories and thereby injects bias, whether intentionally or not. The news is a brief report from detailed stories, and journalists decide what to include. But the company's interest will become the first consideration when choosing what to retain.

Literature Review

Commercial interference in media independence

The media owners are not philanthropists. Their responsibility is not only to supply information for the public but also make money for survival. Therefore, commercial interference has changed the role of journalism.

On the one hand, they cooperate with other corporations, own other utilities or find sponsors. Kellner (1990, p.82) contends that most media organizations are heavily involved in many other industries apart from media. Once they have interest relationships with the third party, news will be deliberately slanted. As a result, the news report is no longer the truth, but the owners' choice. They will pick out "good" opinions and ignore the "bad" ones, in which the defining factor is whether these opinions contribute to their self-interest.

On the other hand, for company boom under fierce competition, journalists have to focus on what inspires readers' interests rather than what benefits them. McQuail (2010, p.55) contended that more fears are voiced out about the enlightening role of journalism as they increasingly seek to make profits in a highly competitive marketplace where entertainment has more market value than education or art.

Political interference in media independence

Furthermore, political interference also obstructs a news organization's independence. For one thing, the government enacts laws and regulations which media organizations must obey. Conversely, the politicians also fear the power of the media, which induces their desire to control the media and thereby manipulate public opinion.

Because of the political environment, media practices are totally different between democratic societies and totalitarian societies. In totalitarian countries, the state controls and monitors all media practices (Croteau & Hovnes, 2013, p. 73). State-owned news organizations play well as propaganda bearing arms of the state: publicizing a narrow set of images and messages to promote government status. Authoritative governments hire desirable writers to spread their messages while, at the same time, using censorship to monitor potential political threats. In extreme cases, journalists can even be imprisoned or killed for challenging state politicians. Before the Beijing Olympics, the China government bans all media to report the Pro-Tibetan independence, East Turkestan movements and food safety issues such as "cancer-causing mineral water."

Although democratic societies have more freedom of press and expression, they are still subject to government regulation. Even though the media outlets are not owned by governments, their potential power on public opinion makes them the subject of political control. In the 2016 election, Trump effectively worked the media as a free platform for his message and a chance to build a following. According to Thomas E. Patterson (2016), "Trump is arguably the first bona fide media-created presidential nominee. Although he subsequently

tapped a political nerve, journalists fuelled his launch.” (as cited in Graber & Dunaway, 2017, p. 2)

Technology impact

Technological developments in recent decades have profoundly transformed communication society, like the internet, social media, mobiles phones, and more. These electronic tools have provided breathtakingly dynamic, radically decentralized and surprisingly fast means for people to communicate with others.

Currently, the media environment is being shaped by seemingly two contradictory trends. For one thing, new media technologies have lowered production and distribution costs of media companies, expanded the range of available delivery channels. For another thing, ownership concentration of mainstream commercial media alarms public concern about democracy, with a small number of multinational joint enterprises dominating all sectors of the journalism industry. Jenkins (2006) found that concentration of media ownership is obvious as all parts want to work together to pursue maximum profits.

Winseck (2008) found that source diversity becomes more concentrated within countries, regionally and globally. Noam (2009, 2016) also found that all American industries involved in media have increased in concentration after 1996, and basically have increased in concentration since 1984.

Media concentration is a global trend which also brings Journalism a disaster to promote democracy. Meier and Trappel (1998) said that media diversity is a main precondition ensuring effective citizen participation in democratic decision-making process. Since media concentration reduces the variety of voices which public are exposed to, it is hard to realise effective freedom of expression and information. While pluralism is the key feature in an ideal democratic society.

Methodology

Like prior study, the qualitative methods (content analysis) will be used to investigate the trend in Malaysian newspaper from the aspect of news categories, advertisements, priorities, and political reports. Qualitative research will give an in-depth analysis of implicit meanings related to Asian American female images in new media advertising.

The samples is selected from the biggest English newspaper in Malaysia – the *Star*. The whole newspaper issued in two continual days (November 15, 2017 and November 16, 2017) will be analysed and coded by two lecturers in Journalism department from Xiamen University Malaysia. Disagreement among the coders will be resolved in consultation with the research. The coders will code the following categories: the category of news; the category of ads; the priority of newspaper; and the political influence in news report.

Results and Findings

News Categories

The *Star* newspaper is a national newspaper which covers both national and international news. The newspaper is divided into four main interest segments, namely nation, opinions, world, and sports news. Nation news are usually published within the first twenty pages of newspaper and followed with views, world and the last segment is sports.

According to Table 1, on November 15, the newspaper has 161 news in total. Hard news takes up 80.5%. The top three news categories are sports, business, and social problem.

Each of them accounts for 25.5%, 16.1% and 16.1% respectively. Political news follows closely at 14.2%.

According to Table 2, on November 16, the main parts of the news beat are almost the same. There are 218 news in the whole newspaper. Hard news covers up to 62.4%. The top three are still sports, business, and social problem at 19.7%, 14.2%, and 13.8% in order. Environment and education are tied for fourth at 4.1%.

Because of the occurrence of World Cup qualifying match, the sports news raises public's interest and concern. Thus, many sports news is republished by *the Star* as they purchase wire feeds from international wire services such as Associated Press (AP) and Reuters. As most Chinese Malaysian are performing in the trade industry, *the Star* also pays more attention to business news. Because social problems involve large population's attention, it also becomes a popular news category.

Table1: News Categories of the Star on Wednesday, 15 November (Main, Metro, Biz)
Total Number: 161 news

Type	Number	Percentage
sports	41	25.5%
Business	26	16.1%
Social Problem	26	16.1%
Political	23	14.2%
International	11	6.8%
Personal opinion	7	4.3%
Lifestyle	6	3.7%
Education	5	3.1%
Digital trend	4	2.4%
Technology	3	1.8%
Environment	3	1.8%
Entertainment	3	1.8%
Health	3	1.8%

Table2: News Categories of the Star on Thursday, 16 November (Main, Metro, Biz)
Total number: 218

Type	Number	Percentage
Sport	43	19.7%
Business	31	14.1%
Social problem	30	13.8%
Education	9	4.1%
Environment	9	4.1%
International	8	3.7%
Politics	6	2.8%
Personal opinion	6	2.8%
Health	5	2.3%
Travel	5	2.3%
Digital trend	5	2.3%
Lifestyle	3	1.4%
Technology	3	1.4%
Entertainment	1	0.5%

Headlines and Language

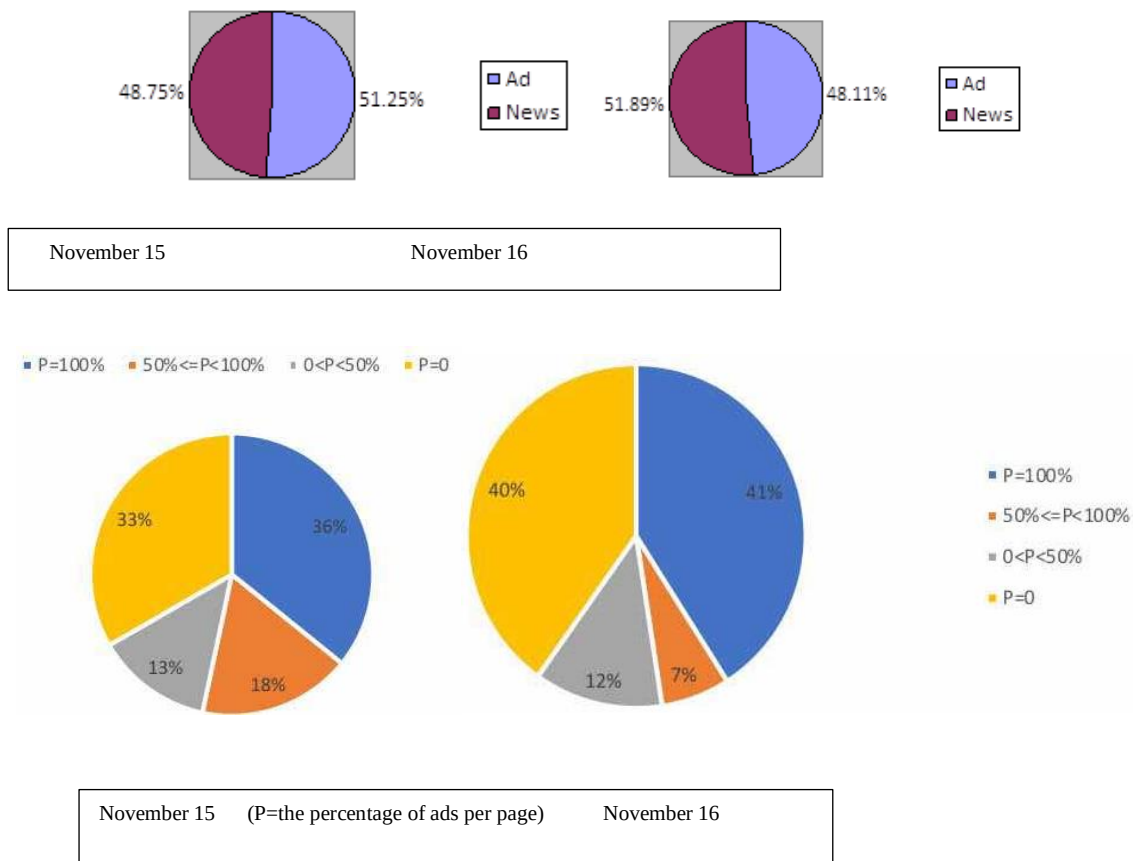
The headlines of *the Star* are concise and short. They range from four to eight words. Besides, no articles and redundant words will appear in headlines. Usually it consists of one verb and nouns, such as “Tanjung MCA Youth chief loses entire family in fire”. And abbreviations are also used to simplify it. Many news also utilizes sub-headlines to elaborate the story.

As for the language, they use easy and simple words to write news. Their hard news is one sentence-one paragraph. Mostly they choose active voice and visual elements to tell stories directly. They use inverted pyramid as the story structure. They try to make the stories understandable but sometimes, the sentence structure is a bit complex and long. For example, the lead is “Barely two weeks after his 72-year-old father died of cancer, Tanjung MCA Youth chief Lim Swee Bok suffered another tragic loss when his entire family perished in a fire which gutted his two-storey house in Pintas Cecil 5 here”.

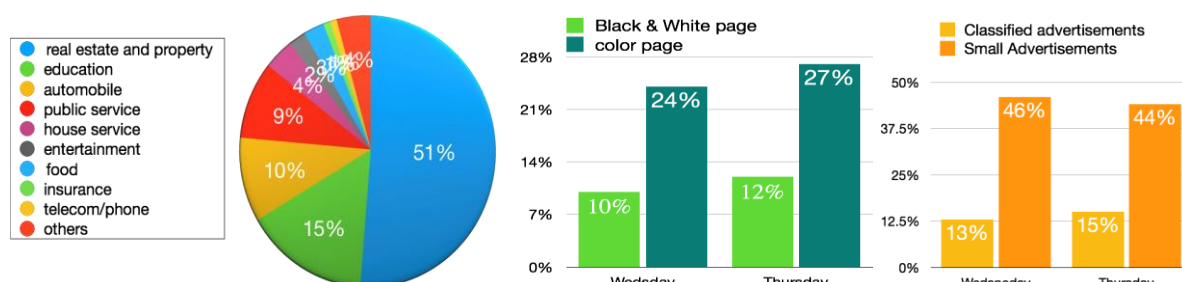
Advertisements

The report of *the Star* on two days shows that the advertisements occupies for about 51.25% of the whole newspaper on Wednesday and accounts for 48.11% on Thursday.

On November 15, 36% of pages are filled with all advertisements while 54% of pages are dominated by the advertisements. Among the six sections (Main Paper, Metro, Star2, StarBiz, Star Search, and Star Special), the Main Paper and Metro have the lowest advertisement proportion at 33.27% and 22.5% respectively. On November 16, 41% of pages are filled with all advertisements while 48% of pages are dominated by advertisements.



The report also finds that the top prevailing ads are property, automobile, public service products, and education. On Wednesday, property advertisements, automobiles, public service and education take up 50%, 10%, 10%, and 9% respectively. On Thursday, the property ads, public service, automobile and education accounts for 51%, 22%, 9% and 8% respectively. The colour advertisements are more than two times of black & white advertisements. And the display advertisements are much more than the classified advertisements because of the flexibility of its size on one page.



Priority

Based on the statistics of the proportion of news and advertisements, it is easy to conclude that the newspaper gives priority to advertisements rather than news. The ads even occupy more space than news. And they even put ads on a whole page more often.

According to Brian Martin, the executive editor in *the Star*, he told us on our class visit to *the Star* company in 2017 that in most cases, advertising department arranges the advertisements before the sub editors put the news and arrange the layout. In other words, news has no choice but to compromise to the space left by advertisements.

Newspaper, as a traditional mass media, most of its income is from advertisement. According to the research of Picard (2004), "In 2000 advertising provided 81% of the total income of daily newspapers." Therefore, *the Star* prioritizes advertisement to maintain its income.

Ownership

The biggest stakeholder of *the Star* is MCA, a key party of the ruling coalition Barisan Nasional (BN). Traditional media ownership in Malaysia is heavily concentrated by BN (Nain, 2017). Considering the fact that BN is the largest party in the Parliament of Malaysia and have dominated Malaysian politics, the effect of media ownership for *the Star* is clearly reflected in the reports that are related to the politics. Generally, *The Star* manifests a supportive, rather than critical attitude towards government.

For example, a story about Prime Minister Datuk Seri Najib Tun Razak entitled "Najib promises development that will take country to new heights" becomes the page lead story. It reports Najib's ambition of bringing more people-centric infrastructure projects and the government has "clear and concise public development programmes". Overall, the story like this would create a positive image of government. Thereby, the audience would perceive that their leaders are on the right track and doing the right thing, and it might shape their attitude toward government. These reports, to some degree, reflects the stand of the media--firm supporter of government.

In addition, *The Star* would publish news to promote government's policies or ideas, mainly by quoting the government officials. *The Star* apparently is a desirable platform for government to voice out their ideas. For instance, the news entitled "Ministry: All must help combat trafficking" quotes Deputy Home Minister Datuk Masir Kujat, calling for all parties work together to combat human and wildlife trafficking. In another news entitled "Mastering Bahasa Malaysia is beneficial", Deputy Education Minister Datuk Chong Sin Woon is the only source. He emphasizes that Malaysian Chinese schoolkids will be groomed to master Bahasa Malaysia better with government's effort. By publishing those stories, government definitely find a soft but effective approach to deliver their thoughts to the public.

The way *the Star* treats opposition party's voice is intriguing. The editor arranges two stories at the same page, very close to each other. One is "Dr. M likely to contest in GE 14", another is "Branch and division delaying Pribumi AGM" (Ahmad, 2017). It is known to all that Dr. Mahathir and his Parti Pribumi Bersatu perhaps would be a threat to Prime Minister Najib and his UMNO in the coming election. Thus, the combination of "Dr. M likely to contest in GE" and "his party even can't hold its annual general meeting" implies the deficiency of Mahathir.

On November 16, "Tanjung MCA Youth chief loses entire family in fire" (Ali & Lim, 2017) appears on the very front page 3, and the whole page has only this one news. It contains three big photos to demonstrate the tragedy. If the people read this news, they will increase good feeling of MCA in the subconscious. In this news, "MCA" occurs three times. "MCA" is used directly in the headline and the lead.

Conclusion

Because of the economic crisis caused by the new technology, *the Star* newspaper has to give priority to advertisements and their shareholder. Thus, positive news of the government and intriguing reports of opposition party are the common phenomenon on *the Star* newspaper. Considering the fact that BN is the largest party in the Parliament of Malaysia and have dominated Malaysian politics, the effect of media ownership for *the Star* is clearly reflected in the reports that are related to the politics. Generally, The Star manifests a supportive, rather than critical attitude towards government. They will also give more reports about Chinese as MCA represents for the interest of Malaysian Chinese.

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THE EFFECT OF INTELLECTUAL CAPITAL ON JOB SATISFACTION OF BANK EMPLOYEES IN PADANG

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Abstract: *The objective of this study was to determine and analyze: 1) the effect of human capital on job satisfaction of bank employees in Padang, 2) the effect of structural capital on job satisfaction of bank employees in Padang, and 3) the effect of customer capital on job satisfaction of bank employees in Padang. The sampling technique was the cluster proportional random sampling. The type of data used was primary data obtained from questionnaires that were distributed to respondents. The data analysis technique for hypothesis testing was multiple linear regression analysis using the SPSS Program ver. 24. The test results showed that the ability of banks to continuously develop and educate employees through the use of human capital had a significant influence on their employees' job satisfaction. The application of structural capital on banks such as in the form of system and program development and clear recognition of Intellectual Property Rights did not have a significant effect on the employees' job satisfaction. The existence of a good relationship between the company and its partners through the application of customer capital had a significant influence on employee job satisfaction.*

Keywords: *Human Capital, Structural Capital, Customer Capital, Job Satisfaction*

Introduction

In the current era of globalization, it is inevitable to see an intense competition in all fields within an organization. Therefore, careful preparation is needed to deal with these problems; particularly in the field of human resources (HR). Human Resources department as one of the driving forces of the company is expected to improve the company's performance in order to face the competition in the era of globalization.

The majority of today's business organizations are less effective in achieving their business objectives because they are more likely to focus on the role of financial capital instead of the intellectual capital they have. The fact that some multinational companies control the world economy in the era of globalization is largely determined by their ability to manage their intellectual capital. Intellectual capital from human resources of an organization can be seen from the quality of ideas, information, knowledge and expertise, and commitment that their human resources have. If the competencies possessed by the employees have the opportunity to be actualized and integrated into the management process, then this intellectual capital is believed to be able to significantly increase asset capabilities to increase profit, performance, job satisfaction, customer satisfaction and related parties in the organization (Orhan and Kenan, 2015).

A bank is a company that utilizes high technology and provide high service so that the demand for excellent service is important in this competitive field. Employees in the banking

industry even face a lot of workloads, which sometimes force them to work on Saturdays and Sundays. Therefore, the issue related to employees' job satisfaction is crucial for the industry.

According to Handoko (2001), employees who experience job satisfaction will do their jobs better. Employees who are usually satisfied with what they get from the company will provide more than expected and they will continue to improve their performance. On the other hand, employees who have low job satisfaction tend to see work as tedious and boring, so they work in a forced and careless manner. For this reason, it is imperative for companies to recognize what factors that make employees satisfied to work in the company. By achieving employees' job satisfaction, productivity will increase. Job satisfaction reflects a person's feelings for his job.

The issue related to job satisfaction was also found in bank employees in Padang. Due to the high workload, bank employees must work more than 1-2 hours after their normal working hours every day and they even have to work overtime on Saturdays and Sundays. This often becomes the source of complaints among employees and it also triggers stress because they do not really like their working hours. They are often overworked, and sometimes they are not being paid for overtime. Handoko in Yuki (2016) further explains that job satisfaction is a pleasant or unpleasant emotional state with which employees view their work. This attitude is reflected in the morale of work discipline and work performance. Satisfaction in work is the job satisfaction enjoyed while working by obtaining work praise, a proper work placement, treatment, equipment, and a good working environment.

The banking sector is one of the sectors that utilize a rather intensive intellectual capital. A bank is an industry that is full of risks, starting from the source of funds, the allocation of funds to productive assets, and various service activities carried out are full of risks, such as online banking that customers do without a bank employee's interference. Besides, banks use large amounts of cash and other current assets, and this requires the importance of developing intellectual capital in banks so that banks gain a competitive advantage and succeed in a knowledge-based economy of today.

Intellectual capital is a long-term capital which consists of qualified human resources, a good and sustainable relationship, and a good organization to provide added value in the economy. Guthrie (2000) uses the term intellectual capital to describe all assets and resources that are non-tangible or non-physical in an organization, which includes processes, a capacity of innovation, patterns and invisible knowledge of its members and collaboration networks and organizational relationships. Intellectual capital is also defined as a combination of intangible resources and activities that allow organizations to transform a set of materials, finance, and resources in a system that will ultimately create stakeholder value.

Furthermore, Bontis et al (2000) classified intellectual capital into 3 groups, namely human capital, structural capital, and customer capital. Human capital is related to the ability, skills, and expertise of employees in an organization in terms of business problems. Structural capital relates to supporting infrastructure, organizational processes, and databases that enable human capital to carry out its functions, while customer capital deals with comprehensive knowledge of the field of marketing in customer relations, which includes the development of knowledge about customers, interactions with customers and human relationship.

Intellectual capital that the employees have will improve their competence and commitment, and the three variables will affect employees' job satisfaction in work. Increased knowledge, skills, and the intellectual intelligence that employees gain through intellectual capital will improve employees' competencies in completing tasks and responsibilities assigned to them (Doni and Leni, 2015). With adequate intellectual capital, it is expected that employees can contribute all of their potential and abilities to improve their performance, and

if this is adequately valued by management, these employees will feel satisfied with their work. Business organizations in the era of globalization are expected to keep improving employees' job satisfaction through increasing intellectual capital. As a result, the organization has a competitive advantage and survives in a world of intense competition.

Previous research has shown that intellectual capital has a positive effect on employees' job satisfaction in organizations (Doni and Leni, 2015). Bontis et al (2000); Hill & Jones (1998); Black & Boal (1994) and Kaplan & Norton (2000) conclude that intellectual capital simultaneously influences employees' job satisfaction in working for an organization or company. This indicates that intellectual capital plays a role in stimulating the optimization of job satisfaction in organizations or companies.

Based on the description of the background of the problems, the purpose of this study is to determine and analyze: 1) the effect of human capital on the job satisfaction of bank employees in Padang, 2) the effect of structural capital on job satisfaction of bank employees in Padang, and 3) the effect of customer capital on job satisfaction of bank employees in Padang.

Literature Review

Job Satisfaction

Job satisfaction is an important part that individuals have at work. Every individual worker has different characteristics, which means that the level of job satisfaction also varies. High and low job satisfaction can have different effects and it depends on the mental attitude of the individual concerned. Robbins (2006) states that job satisfaction is a general attitude of an individual toward his work. Kreitner and Kinicki (Wibowo, 2008) state that "job satisfaction is an affective or emotional response to various aspects of one's work". Handoko (in Yuki, 2016) defines job satisfaction as a pleasant or unpleasant emotional state with which employees view their work. Based on the definition above, it is concluded that job satisfaction is a feeling of pleasure or displeasure of employees towards their work as a result of a thorough evaluation of aspects of work.

There are various theories on job satisfaction as reviewed by experts, but the theories related to the interests of the discussion in this study emphasize more on: a) Discrepancy Theory; b) Justice Theory (Equity Theory); and c) Theory of Two Factors (Two Factor Theory). Based on these theories, this research, in its operational level, uses the concepts proposed by George and Jones (1997) to measure job satisfaction, namely through the dimensions of work situations, social influences, values, and personality.

Job satisfaction can be measured from various dimensions. Every dimension produces an overall feeling of satisfaction with the work itself. According to Robbins & Judge (2009), there are 5 factors that support job satisfaction, which are:

- a. Work that is mentally challenging
- b. Appropriate compensation
- c. Supportive working conditions
- d. Supportive coworkers
- e. The suitability of personality with work

Intellectual Capital

There are various definitions of intellectual capital in various literature. Among them is the definition proposed by Bukh et al. (2005), in which intellectual capital is a variety of knowledge resources in the form of employees, customers, processes or technology that can be used in the process of creating value for the company. Bontis et al. (2000) state that researchers generally

identified three main constructs of IC, namely human capital (HC), structural capital (SC), and customer capital (CC).

HC represents the individual knowledge stock of an organization that is represented by its employees. HC is a combination of genetic inheritance, education, experience, and attitude on life and business. SC covers all of the non-human storehouses of knowledge in organizations, which in this case include databases, organizational charts, process manuals, strategies, routines and all things that make a company's value greater than the material value. The main theme of CC is the knowledge that is inherent in marketing channels and customer relationships that an organization develops through the course of business (Bontis *et al*, 2000).

Out of several definitions of intellectual capital, there are few major similarities, namely that intellectual capital is a variety of knowledge, experience, and expertise related to employee expertise, good relations with customers, and information technology capacity owned by companies that significantly contribute to the value creation process, which provides a competitive advantage for the company.

Intellectual Capital Components

Intellectual capital consists of two elements: human capital and structural capital; both are efficient intangible assets that can increase the value of the company, including the physical elements that are incorporated in customer capital. The Intellectual Capital components include (Bontis N. K., 2000):

1. Human Capital

Human capital includes an intellectual force derived from human beings that the company have, namely employees who are competent, committed, motivated at work, and very loyal to the company.

2. Structural Capital

Structural capital encompasses all non-human storehouses of knowledge in organizations (Bontis N., 1998), consisting of databases, organizational structures, a series of processes, strategies, and everything that creates a higher corporate value than its material value.

3. Customer Capital

Customer capital is a harmonious association network relationship between the company and its partners, either in the form of suppliers, customers and/or the government and society.

Conceptual Framework

Based on the theoretical study described in this research, a logical conclusion is those intellectual capital variables that consist of dimensions of human capital, structural capital, and customer capital, if managed properly, will be able to create job satisfaction for employees. The relationship between the intellectual capital variable as an independent variable and employees job satisfaction as the dependent variable is shown in Figure 1 as follows:

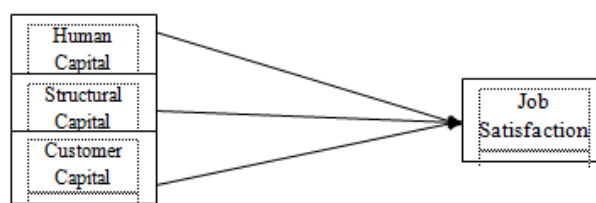


Figure 1. Research Model

Hypothesis

Based on the theory and background of the problems stated above, the following hypotheses were formulated:

H1: Human capital has a positive and significant effect on job satisfaction of bank employees in Padang.

H2: Structural capital has a positive and significant effect on job satisfaction of bank employees in Padang.

H3: Customer capital has a positive and significant effect on job satisfaction of bank employees in Padang City.

Research Method

This is causative research, which seeks to explain the effect of intellectual capital on job satisfaction of bank employees in Padang. The purpose of this study was to test the hypotheses using the survey method and the data used are primary data collected through questionnaires. The population in this study were all employees in seven conventional banks in Padang which are grouped by ownership, namely; State-Owned Enterprises (BUMN), Regional-Owned Enterprises (BUMD) and private ownership. The population in this study amounted to 1,292 people.

The sample was determined by cluster proportional random sampling technique. By using the Slovin formula, the sample size in this study was 305.44 or rounded up to 306 people. Out of 310 questionnaires distributed to the employees, there were as many as 198 returned questionnaires, and questionnaires that were feasible to use for data analysis consisted of 134 questionnaires. The data analysis technique for hypothesis testing employed a multiple linear regression analysis using the SPSS Program ver. 24.

Research Results and Discussion

Prior to testing the hypothesis, the normality test was conducted to find out whether the data are normally distributed or not. The assumption test conducted in this study was the normality test using the Non-parametric One-Sample Kolmogorov-Smirnov Test method. The normality test of the data obtained a Standardized Residual sig. of $0.200 > 0.05$, which means that the variables in this regression model had a normal data distribution.

After the data were normally distributed, the model was tested by conducting an F-test to find out whether Intellectual Capital which consists of human capital, structural capital, and customer capital can influence employees' job satisfaction and whether the model built in this study is indeed worthy of investigation. The results of the F-test using an ANOVA analysis is shown in the table below:

Table 1: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29,173	3	9,724	32,606	,000 ^b
	Residual	38,772	130	,298		
	Total	67,945	133			

a. Dependent Variable: JS

b. Predictors: (Constant), CC, HC, SC

Source: Primary Data Analysis (2018)

Table 1 displays that the F value is 28,671 with a sig. value of 0,000 < 0,05, which means that based on the F test conducted, the intellectual capital dimension is proven to have a significant effect on employees' job satisfaction. Thus, these results show that the research model is acceptable. The next part, hypothesis testing, was performed using a t-test. The results of hypothesis testing are shown in the following table:

Table 2: Results of Multiple Regression Research Variables

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1	(Constant)	,421	,414	1,019	,310
	HC	,396	,117	,285	,373
	SC	-,009	,102	-,010	,933
	CC	,559	,119	,482	,000

a. Dependent Variable: JS

Source: Primary Data Analysis (2018)

Table 2 shows that human capital has a positive and significant effect on job satisfaction of bank employees in Padang, as seen from a sig. value of 0.001 < 0.05. This means that the first hypothesis of this research is acceptable. This also shows that banks have a high commitment to improve the quality of human resources (HR), which results in employees' satisfaction at work because they are able to do their best at work.

Contrary to the results of the first hypothesis, the second hypothesis of the study is rejected, which means that structural capital does not significantly influence employees' job satisfaction, as seen from the sig. of 0.933 > 0.05. These results indicate that structural capital applied by banks in Padang, such as the development of systems and programs, even the application of technology infrastructure, can result in the decrease in employees' job satisfaction.

For the third hypothesis, it is shown in Table 2 that the sig. value of customer capital is 0,000 < 0,05, which means that the third hypothesis of the study is accepted, that is, customer capital has a significant effect on job satisfaction. A good and maintained relationship between the company and its partners can provide satisfaction in working for employees.

The positive constant values illustrate that the job satisfaction of the employees is not only influenced by the intellectual capital dimension but also other factors that can affect employees' job satisfaction. The effect of intellectual capital on job satisfaction is shown in Table 3 below:

Table 3. Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,655 ^a	,429	,416	,54612

a. Predictors: (Constant), CC, HC, SC

b. Dependent Variable: JS

Source: Primary Data Analysis (2018)

Table 3 above shows that the adjusted R square value is 0.416; this indicates that the contribution of intellectual capital variables to the job satisfaction variable is 41.6%, while the rest 58.4% is determined by other factors not examined in this study.

Discussion

The test results supported the hypothesis that human capital has a positive and significant effect on job satisfaction of bank employees in Padang. This research is in line with the results of research by Adigüzel and Kayadibi (2015) which show that the management of Human Capital (HC) will be able to provide job satisfaction to employees. Akintayo (2011) also states that the development of human capital (HC) is a key element in improving the assets and employees of the company to increase productivity and maintain a competitive advantage. Therefore, to maintain competitiveness in organizations, human capital is an instrument used to increase productivity and job satisfaction for workers. This means that every activity carried out by the company in providing a learning experience and education as well as encouraging employees to carry out innovations in their work can play a pivotal role in providing job satisfaction to employees due to the ability of employees to carry out their work properly. If the company is able to make employees succeed in their work, then employees will feel fulfilled with the feelings of progressing and not failing (a sense of accomplishment). Nawawi (2008) further argues that they will achieve happiness because they have contributed significantly to the company. Employee satisfaction plays a very vital role in their performance in any organization [Latif, et al. (Th) 23]; Perera, et al, (th) 38].

Structural capital includes all of the non-human storehouses of knowledge in organizations (Bontis N., 1998), which means that structural capital is anything that is not related to humans that consists of databases, organizational structures, a series of processes, strategies, and everything that creates a higher corporate value than the material value. Based on the results obtained from hypothesis testing, structural capital (SC) was shown to have a negative but not significant effect on job satisfaction of bank employees in Padang. The non-existent of the effect of structural capital on employee job satisfaction indicates that structural capital has not been able to fulfill the company's routine process in producing an optimum performance for its employees so that it does not have an effect on generating employees' job satisfaction. Companies that have a strong structure should have a supportive culture that allows their employees to try new things, to learn and to practice them (Bontis et al., 2000).

Based on interviews conducted with several bank employees, the problems in the structural dimension of capital in the banking sector include the lack of a good information technology infrastructure to fully support the employees at work, too much bureaucracy in the organization and the rigid procedures of activities at the company; all of these affect the employees' job satisfaction negatively. However, the negative effect of structural capital on job satisfaction is not significant, which means that not all of the components of structural capital which, if improved, could increase the dissatisfaction of employees.

Based on the results of the study, the third hypothesis is supported which states that relational capital (customer capital) has a positive and significant effect on the job satisfaction of bank employees in Padang. This means that employees can maintain a sense of friendship with fellow coworkers and superiors, and vice versa; employees can also maintain good relations with customers and company partners. This good relationship has a positive and significant influence on employees' job satisfaction. The results of this study are not in line with Longo and Mura's research (2011), whose research results state that relational capital does not have a significant effect on job satisfaction. However, the results of this study are in line

with the results of research by Orhan Adigüzel and Kenan Kayadibi (2015) which show that Relational Capital (RC) affects the job satisfaction of employees.

Relational Capital consists of a network of organizational relationships, collaboration between employees, and suppliers, clients or other stakeholders. Based on the results of the study, a good relationship between employees and consumers and suppliers has a positive influence on work performance (Thompson, 2005) and relational capital is also believed to improve career achievement and job satisfaction (Zhang. et al, 2010).

Conclusion and Suggestions

Conclusion

Based on the collected data and the results of tests carried out on the problem using a multiple linear regression model, it is concluded that:

1. The ability of banks to continuously develop and educate employees through the use of human capital had a significant influence on employees' job satisfaction since employees can do their jobs better.
2. The application of structural capital to banks, such as in their system and program development and clear recognition of Intellectual Property Rights, did not have a significant influence on employees' job satisfaction.
3. The existence of a good relationship between the company and its partners through the application of customer capital had a significant influence on employee job satisfaction.

Suggestions

Based on the conclusions related to the influence of intellectual capital on the job satisfaction of bank employees in Padang, companies and banks are suggested to do as follows:

1. For banks, it is suggested that banks further develop the potential of human capital and customer capital in order to improve employees' job satisfaction since the two intellectual capital dimensions have a significant influence on employees' satisfaction at work.
2. To improve employees' job satisfaction, companies need to improve the application of structural capital, such as by providing training that is appropriate for employees and by updating every technological development available.
3. To maintain good relations with its partners, it is recommended that companies implement and run a Customer Relationship Management program so that relationships with partners will always be well-maintained in the long term.

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PREPARATION FOR SELF-RELIANCE OF PERSONS BEFORE ENTERING AGING IN THAI-MALAYSIA BORDER AREA CASE STUDY SAMNAK KHAM COMMUNITIES MOO1, SAMNAK KHAM, SADAO DISTRICT, SONGKHLA PROVINCE

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Abstract: *This research is a mixed method. The purpose is to study the guidelines preparing for self-reliance before into the elderly. Ban Samnak kham Communitis Moo 1 Samnak Kham, Sadao, Songkhla. The population sample group representing households aged 20-59 year-olds 266 people. The respondents were 12 persons involved in preparing for into the elderly. Data were analyzed using Descriptive statistics and Content analysis. The results revealed that the overall image level of preparation for into the elderly were moderate ($\bar{X} = 3.23$) The sample was prepared at a high level include Religion and Faith ($\bar{X} = 3.61$) Economic ($\bar{X} = 3.36$) and Housing ($\bar{X} = 3.27$) respectively. The way to prepare for the elderly finding)1(Economic, there is a need to saving some money for future use and finding an interesting career in becoming a source of income in the future. (2) Health, It must be continuous exercise and eat five useful foods.)3(Housing, Must be adjusted to suit the age range. (4) Social, There must be a strong incentive to participate in social activities. (5) Religion and Faith, apply religion to daily life to be conscious and makes calm mind.)6(Education, should have studied both ordinary knowledge and religious knowledge to be used the anchor of the soul. (7) Family, family members need to be prepared to cope with the elderly and the family needs to planning for the elderly.*

Keywords : middle age, elderly, preparation, border area

Introduction

Background and Signification of the Research

Thai society has become to "The Elderly Society" since 2009. As a result from the proportion of the population and the average age of the elderly increased in women around 74.5 years old and in men around 69.9 years old. For the Elderly in Thailand, 2016 found that there were 10,225,322 people aged 60 and over)registration Statistics, Department of Administration, 2016(. In the next 10 years, Thailand will become "Completely elderly society" when the

population aged 60 and over accounts for as much as 20 percent of the total population)Rossarin Patarakvanich and others,2558:2(. When the elderly population rapidly increases, it will affect both the elderly and the population in working age, such as public health, social welfare and more. Preparing to accept physical and psychological deterioration and adapt to social situations. Environment is important. It must be prepared for the health, housing, economy and social participation. In order to be able to help themselves the most, depending on the other person, the least will be able to go to seniority with quality) Chanchai Jandee and Teera Ritrod,2008(.

Nowadays, the social situation has rapidly changed from an agricultural country to a highly competitive industrialized country. In particular, the prosperity of the border areas, especially the prosperity of trade same with The Thai-Malaysian border in the south of the country where growing fast in many ways. This is because it is bordered by Malaysia. It is a center of trade of goods and is a source of economic prosperity especially the area in Tambon Samnak kham where designated as a Special Economic Zone, as announced by the National Peace Corps. This is make the district of Samnak kham is known and there are tourists were very interested)Municipal district of Samnak kham, 2561(. As a result, the community has a different way of life than any other area, but may be similar to other geographic areas. The rapidly growing populations living in the area will have to adapt to the changes in daily life that will translate into social conditions in the area. The researcher considers that the most important factor in supporting this population is the preparation for adolescence to improve the quality of the elderly to reach the elderly. As well as quality of life, it is important to be consistent with the changing culture and society)Teerasak Aranpitak:62(. Based on the information, the results and the findings of the researcher mentioned above, it reflects the different scenarios that indicate the importance of being prepared for all those who are going to be older. The researcher is of the opinion that the study of self-reliant self-sufficiency to have a good quality of life. This is important for people who are in their early teens especially middle-aged people are considered to be transitional age into adulthood. Therefore, the preparation to deal with such changes is of primary importance in preparing for the future in the future. This article was provided by the researcher. Preparation for self-reliance before entering the elderly will lead to the preparation of self-reliance of the elderly before entering the age and to adapt to other communities in a sustainable way in the future.

Objective

This article aims to study the way to prepare for dependency before entering the old age in Thai Malaysia border.

Benefit

The results of the self-reliant self-sufficiency analysis Family level and the social level of the area will lead to the development of immunity and the promotion of older people in the community, and the information will be beneficial to local agencies such as health promotion hospitals, parishes, municipalities, and other relevant agencies to preparing for self-reliance before going to the elderly to develop for the preparation for the elderly.

Scope of the Research

Content, study the general context of the person before entering the elderly and study the preparation of self-reliant persons before entering the elderly. And link analysis with promoting self-reliant self-sufficiency of elderly persons in the Thai-Malaysian border area.

Area, this study will cover Moo 1, Tambon Samnak kham, Sadao District, Songkhla Province.

Time period, study self-reliance preparation before entering the elderly at Moo 1, Tambon Ban Kham, Sadao District, Songkhla Province, and August - December 2018.

Population, Representatives of households aged 20-59 located in the 1st Samnak kham, Tambon Ban Kham, Sadao District, Songkhla Province.

Research Methodology

Research Methodology self-reliance preparation before entering the elderly in the Thai-Malaysia border area at Samnak kham Moo 1, Tambon Samnak kham, Sadao District, Songkhla Province which is a mixed method. The population is representatives of households aged 20-59)Phassana Jullarat,2548(. At Samnak Ban Kham Moo 1, Tambon Samnak kham, Sadao District, Songkhla Province, there are 687 households and the samples used in this research is representatives of households aged 20-59 were 266. And the participants is relevant in preparing for adulthood such as education, economics, religion and health by particular selection around 12 persons. The tool is a questionnaire which the content validity was verified by 3 experts. And then analysis the confidence level is .965. The interviews were validated by 3 experts.

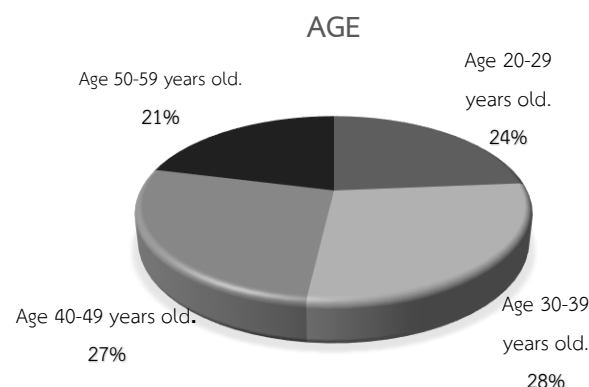
Protection the right of participants in research, the researcher collected the sample data by describing the research objectives, explaining the rights of the sample and ask for cooperation to collect information and interviews. Researchers introduce themselves to interviewers and create a friendly atmosphere by chatting with them. Researchers told the purpose of the interview and bring the results back to the interviewees to review the information. Analysis of data from the questionnaire was performed using descriptive statistics and content analysis.

Research finding

Guidelines for preparation for self-reliance before entering the elderly in the Thai-Malaysian border area. At Ban Samnak Kham Community, Moo 1, Tambon Samnak Kham, Sadao District, Songkhla Province. The researcher has summarized and presented the results of data analysis in 2 parts as follows.

Part 1: Quantitative data analysis of self-reliant before entering the Thai-Malaysia border. The details are as follows:

1. General data analysis of 266 participants is as follows.



There were 152 females, accounting for 57.1%. Most of them had a bachelor degree of 93, accounting for 35.0%. Mostly in marital status were 190 peoples or 71.4%. The income between 5,001 - 10,000 baht was 162 people or 60.9%. The majority of the respondents live in the family with 241 persons, representing 90.6%. Most of them do not have congenital disease was 236 people accounted for 88.7%. Who have 4 members in family were 79 households, representing 29.7%.

An analysis of the preparation for adolescence for participants representing households aged 20- 59 years. The details are as follow the chart 1:

Chart1 Mean, Standard Deviation, and Level of Preparation for elderly

Preparation guidelines	$\bar{X}$	SD	Preparation level
Economic	3.36	0.943	moderate
Health	3.15	0.847	moderate
Residential	3.27	0.832	moderate
Social	2.81	1.047	moderate
Religion and belief	3.61	0.767	High
Education	3.23	0.862	Moderate
Family	3.18	0.933	Moderate
Total	3.23	0.890	Moderate

Guidelines for preparation for adolescence in Moo 1, Ban Samnak Kham, Tambon Ban Samnak Kham, Sadao District, Songkhla Province. All 7 aspects are in moderate level. The highest average of preparation is as follows.

1. Religion and belief, there are the preparation of the mind, using the principles of religion, having learned to understand oneself and trying to correct their own shortcomings and having confident to face the events or changes that will occur in the level of satisfaction. ($\bar{X} = 3.77$, $\bar{X} = 3.67$, $\bar{X} = 3.65$)
2. Economic, there are preparing and planning funds for their children's scholarships, dealing with their existing debts before entering the elders and having plans to use the money in the future. It was occur in the level of satisfaction. ($\bar{X} = 3.47$, $\bar{X} = 3.42$, $\bar{X} = 3.32$)
3. Residential, there are planning for home improvement to suit the lifestyle of the elderly, housing and community issues are safe. And the issues are planned facilities. It was occur in moderate level. ($\bar{X} = 3.47$, $\bar{X} = 3.42$, $\bar{X} = 3.32$)

Part 2: Qualitative data analysis of self-reliant before entering the Thai-Malaysia border. The details are as follows:

1. Economic aspects of the research. Those who are going to go to the elderly should have the savings to use when needed. Financial planning is required from the age of labor to use in the elderly. Elderly benefits may not be just for pay. And in the field of careers, it's not just those who are going to be in the old age that need to be prepared. Choose a career that can feed yourself in the future. But the professional agencies involved be ready to provide career support to these groups as well.

2. Health, Those who are going to be old must have a continuous preparation. Exercise must be appropriate for fitness and age at least 30 minutes. Choose to eat five groups of health check. Have a physical examination to screen the disease. Avoid food and drink that has a negative impact on disease.

3. Residential, Research indicates that to improve the spread The home is more convenient and easy to use, such as the bathroom. These various bedrooms are to be renovated to accommodate the use of people with physical changes. And to prevent accidents that could happen if not safe and appropriate

4. The social aspect of research is that. Those who are into adulthood should participate in social activities such as sports clubs, elderly clubs. To create a relationship. Good mental health. It is a development of the emotional and intellectual for him. Preventing Depression When I go to the elderly. His social context is diminishing, but the elderly still have social needs. Therefore, there must be a common activity to replace the missing.

5. Religion and Belief Research indicates that Who will enter old age of religious principles should be used in everyday life. Because of his lifestyle that goes with the convention. As a result, the mind becomes calm. Releasing the mind from work tired. The mental stability Can act It was a rationalist. The research also found that. In the introduction to the Islamic community and the orphans, the elderly and patients infected bed. Focus on teaching religion in order to gain the knowledge of life after death according to Islamic principles.

6. Educational Research found. The study can be divided into two issues are the issues of the learners themselves. And wherein the source of knowledge. For those students who will enter old age. Education should be a study of the changing conditions of today to adapt to the changes. Studies have careers that can be used when visiting the elderly to provide a source of income. Prepared by health education. Nutrition so that it can be adapted for use on into old age. And should be studied both common knowledge and religious knowledge. In order to take advantage and as an anchor of the soul. And a source of knowledge about the unit would have to cope with an aging society is increasing. This course is appropriate for learners with access to the activity or project.

7. The family of research found that. In the family, family members are important persons to take care of the elderly. Therefore, it is necessary to prepare the knowledge for coping with the elderly in the family, with changes in physical, mental, emotional, family members must be planned for the elderly. It is a backward plan to make life in the umbrella with the elderly at the end of life happily. Besides that, love Family warmth is the most important thing that can make the elderly happy. And good mental health.

Discussion

The results of the research shows that

Economic, the elderly are prepared at a moderate level)3.36(. They plan to use money for themselves and their children. And they have to deal with their debts before they enter the old age. That is according to the findings. Those who are going to retirement age must have financial planning for the future and must be prepared for a career or self-employment in the future. Professional and career-related agencies must also provide career support to these groups as well. The measures to promote the work and income of the elderly. This finding was consistent with the research conducted by Panuwat Meechana et al.)2560(. Learn the right career. And early aging should find a career before entering the elderly. Regularly depositing money with the bank to prepare for adulthood. In order to be able to sustain the elderly with quality.

Health, research indicates that those who are into adulthood need to be prepared for fitness with age and fitness. Complete Nutritional Choices Avoid foods at risk of disease. Must have annual health checkup and screening. And the research found. Elderly people in the area were prepared at a moderate level (= 3.15). Eat five groups and always make clear. According to findings found in the preparation for adulthood in the age of cancer, Should eat clean food safe. The food consists of 5 groups, ignoring food and drink, intoxication, or tea, coffee, get 3 meals and drink at least 10 glasses of water a day, do not eat too much or too little sleep. 7-8 hours to fully relax the body. The body and mind fresh. Regular exercise In addition, it is consistent with the research conducted by Kanjana Dolah and colleagues (2561). The mind is the way. Do not think too much mind.

Social, research indicates that those who are going to the elderly in the area are prepared at a moderate level $\bar{y} = 2.81$. They must attend social activities to create a relationship and good mental health. It can develop emotion and intelligence for themselves. In order that prevent the occurrence of depression, because when it comes to the elderly, their social context is reduced, but there is social needs. Therefore, there must be a common activity to replace the missing. This finding is consistent with the theory of aging proposed by Saner Intarasuksri)2000: 12-13(social change the role and social role of the elderly will be reduced. Because of the lack of flexibility in thinking, acting, dealing with others. It culminates in keeping away from society. And it is also consistent with the research of Montree Praserttrunguang and Dusadee Ayuwat)2016(studied how to create the alternative to self-reliance of the new elderly and found that creating self-reliant choices of a new generation of elderly is the process of allocating resources under social conditions by creating sub-interactions.

Residential, the research indicates that in this area, there is a moderate level of preparedness $\bar{y} = 3.27$ (the way to prepare this is need to improve the house for convenient use. To suit the use and physical condition of the elderly and also to prevent accidents that may occur. This is consistent with the concept of preparation for being elderly Wanra Chuenwatthana)2013(said that older people generally live with their children. But the elderly alone should plan their housing early so that they are ready and secure in the end of their lives. They must adjust home and the environment is appropriate for the condition of the elderly and the needs of the elderly. Educational, the research indicates that those who are going into adulthood need to study both the ordinary knowledge and the older religious knowledge. To use in life and be a spiritual anchor. Study the changing conditions of the present society in order to adapt to change. They must have a career in health, nutrition, so that they can adapt to their own. In addition, relevant agencies must provide appropriate knowledge support in accordance with the National Elderly Plan. Educational and lifelong learning measures to promote access and develop educational services. And life-long learning. Both non-formal education and formal education for understanding life. And the development of each age. And to prepare for adulthood. The samples in the study area were at a moderate level $\bar{y} = 3.23$. They were prepared with the knowledge about the changes in the elderly. Learn about how to behave when you are older. This is in accordance with the findings. And this finding is consistent with the research of Archanya Ratana-Ubol (2009) studied the state of problems, needs, and patterns of non-formal education and formal education. The pattern of activities to prepare for admission to the elderly of urban, rural and rural working adults is divided into 2 main types: non-formal education and informal education. Non-formal education is an activity to provide basic knowledge for living. Continuing Education Information on the changing social situation includes knowledge about health, hygiene, mental health, financial preparation, occupations, and social welfare for the elderly, hobbies and leisure, etc.

Religion and belief, research indicates that the elderly in the area were very well prepared $\bar{y} = 3.61$ (preparing yourself by applying the principles of religion to your life and learn more about the religion. It also found that the way to prepare for religion and belief. Those who go into the age should apply the principles of religion to the lifestyle in order to make a living in a regular way. This is consistent with research by Siriporn Sunthavachat)2008(the study of dharma practice and the training of body and mind development of the elderly in Thailand. The results that the elderly have received after the practice. The elderly will have psychological changes such as anger, depression. Be conscious in thought Feel comfortable Leave a disturbance. From illness and wealth and affliction. In practice, some older people may have new ideas about life, such as volunteering ideas, compassion, knowing others and consciousness in action.

Family, research indicates that those who go to the elderly in the area are prepared in the medium level)= 3.18(and also found that the way to prepare for adulthood in the family. Family members are important persons to take care of the elderly. There is a need to prepare the knowledge to cope with the care of the elderly in the family, with changes in both physical and mental emotions. Because they are close to the elderly. And they need to plan for the elderly and related organizations in the area must also be undertaken in the care of the elderly. In response to the National Elderly Plan Strategy 3: Social Protection for the Elderly. Family members and caregivers are encouraged to have the potential to care for the elderly by providing knowledge and information to family members and caregivers about beneficial services. This finding was consistent with the research conducted by Wanphen Punnaraj and colleagues)2557(who proposed the appropriate model for elderly care in the community said that families and communities are the main institutions for the care of the elderly. 1(There is supportive system for elderly people to help themselves. 2(Promote and support the elderly in the family with their children.

THE EFFECT OF CORPORATE SOCIAL RESPONSIBILITY AND INTELLECTUAL CAPITAL ON BUSINESS PERFORMANCE OF THE SHARIA BANKS IN INDONESIA

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Abstract: *The objective of this study is to evaluate and analyze 1) the effect of corporate social responsibility on the business performance of Islamic banks in Indonesia, 2) the effect of intellectual capital on the business performance of Islamic banks in Indonesia and 3) the mutual effects of the corporate social responsibility and the intellectual capital on the business performance of Islamic banks in Indonesia. The research type of this study was causative research. Data used in this study was secondary data. The object of this research was the report on the corporate social responsibility and the annual financial statements of Islamic banks in Indonesia during the 2009 to 2017 period. In testing the hypothesis, the technique of in data analysis was the multiple regression analysis by means of the SPSS software. The results showed that the intellectual capital (Value Added Intellectual Coefficient) had a positive and significant effect on the bank performance (Return on Assets) of Islamic banks. The corporate social responsibility had a negative and insignificant effect on bank performance (Return on Assets) of Islamic banks. The corporate social responsibility and intellectual capital mutually and significantly affect the business performance of Islamic banks in Indonesia.*

Keywords: *Corporate Social Responsibility, Intellectual Capital, Business Performance*

Introduction

At the end of 2016, Indonesia was the world fourth destination for investment after India, Japan and China, where most of the investment took place in the banking industry. The survey results of United Nations Conference on Trade and Development (UNCTAD) in The World Investment Report 2017, Investment and the Digital Economy stated that the foreign direct investment for Indonesia globally increased as much as 5% or into USD 1.8 trillion in 2017. The high investment that entered Indonesia at the beginning of 2017 had put the country into the fourth ranks of the world investment destination with the investment rate for the banking sector during 2016 as it reached 20.1% (Liputan 6, 2017). There are two types of banking industry In Indonesia, namely sharia-based banking (Islamic banks) and conventional banks. Islamic banks are the banks that collect funds from the public and redistribute them back to the community and participate in providing services in the traffic of payment and it is operated by implementing the sharia principles. Islamic banks perform their business operations based on the sharia principles, they avoid the usury practice and replace it with the investment concept that is based on profit sharing from financing the trade.

To find out the business performance of a bank, the financial statements that are periodically presented by the bank are used. According to Kasmir (2014), the assessment of the business performance of a bank can be seen in several aspects, including the Liquidity, Solvability, and Profitability. The most

widely used ratio in assessing the business performance of banks is the return on assets (ROA). ROA is used to measure bank profitability because Bank of Indonesia as the supervisor and the controller of all the banks in Indonesia prioritizes a bank's profitability based on the assets that are mostly coming from the public savings. Therefore, in this study, ROA is used to measure the business performance of the banks.

Gantino (2016) argues that one factor that affects the business performance of a company is the corporate social responsibility (CSR). Basically, the CSR activities of Islamic banks are closely related to the Sharia-based Banking principle as the consequence of its operation that is based on Islamic teachings. The social activities of Islamic banks are an added value which will result on the increase a long-term profitability and goodwill, as obtained from the positive image of their business and to increase the stakeholder's trust in the performance of Islamic banks (Anto & Astuti, 2008).

The increase of the business performance of a bank should be supported by efficient asset management. Banks should manage and utilize their assets as well as possible to generate income from the banking operation. Moreover, the existence of knowledge society has changed the value creation of an organization. The future and the prospects of the organization will then depend on the ability of the management to utilize the hidden values of intangible assets (Ikhsan, 2004 in Astuti, 2005). In the conventional accounting systems, the intangible assets are not reported. Many companies focus more on their tangible assets. Therefore, it is important to evaluate these intangible assets, which one of them is the intellectual capital.

VAIC is a method developed by Pulic in 1997, it was designed to present information about the value creation efficiency of tangible assets and intangible assets owned by a company. This model starts with the company's ability to create the value added (VA). Pulic (1998) believed that VA is the most objective indicator in assessing business success and in explaining a company's ability to create the value (value creation). Thus, efficiency is the ability to create value-added from good management of intellectual capital components through the VAIC method (Ihyaul, 2008).

The VAIC method measures the efficiency of three types of company inputs, namely the human capital, the structural capital, and the physical and financial capital. The method consists of:

1. Value-added capital employed (VACA), which is an indicator for VA created by a unit of physical capital. This ratio indicates the contribution of each unit of CE on the value added of the organization.
2. Value-added human capital (VAHU), which indicates how much VA that could be generated from funds that are spent on labor.
3. Structural capital value added (STVA), which indicates the contribution of structural capital (SC) in value creation. STVA measures the number of SCs needed to produce 1 rupiah from VA and it indicates the success of SC in the value creation.
4. After obtaining the values of Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), and Structural Capital Value Added (STVA), it will generate the Value Added Intellectual Coefficient (VAIC).

Results of previous studies as conducted by Lestari (2012) have concluded that intellectual capital had a positive effect on the company performance. A study conducted by Muthia & Zulva (2017) also concluded that Corporate Social Responsibility had a positive effect on company performance. In this study, the researchers used two indicators that influence the company performance, namely corporate social responsibility (CSR) and intellectual capital.

Literature Review

Return on Asset (ROA)

Bank of Indonesia (2004) defines return on assets (ROA) as the profitability ratio which is used to measure the company's effectiveness in generating profits through utilization of the owned assets. The Statistics for Financial Institution (2009) explains that a higher ratio indicates a higher profit achieved by the bank and a better bank's position in terms of asset utilization.

Return on assets shows the extent of net income that could be acquired from the total assets owned by the company, so this ratio uses the number of income after tax and the company's asset (in average). Net income after tax is the net income earned by the company from the core business (net operating income) or from outside the company's core business (non operating income) for one period after it is subtracted with the income tax. The total assets are any rights that can be utilized for the company's operation; one of the assets that can be included in the asset column is in the form of buildings or facilities. Therefore, if a company has a building that is worth one billion rupiahs, then the asset is counted as one billion rupiahs.

Corporate Social Responsibility (CSR)

Corporate social responsibility (CSR) is the responsibility of the company to be ethical toward the stakeholders, to minimize the negative impacts and to maximize the positive impacts that cover the social, economic and environmental aspects (or the triple bottom line) (Wibisono, 2007), in order to achieve sustainable development goals. The Act of the Limited Liability Company No. 40 of 2007, in article one point three, states that corporate social responsibility (CSR) is the company's responsibility to social and environmental issues as a form of commitment to participate in a sustainable economic development and to improve the quality of life and the benefit of environment, both for the firm themselves, for the local communities, and for the society in general.

The CSR used in this study employed the Islamic Social Reporting (ISR). ISR is a standard for social performance reports of the companies that are based on Islamic law. Social Reporting is an extension of a financial reporting system that reflects new and broader premises about the society, regarding the role of business communities for the economy (Hannifa, 2002). Islam has clearly explained the rights and obligations of the individuals and organizations based on the Quran and Hadeeth. Siwar and Hossain (2009) stated that the basic foundation of Islamic religion is the aqidah (belief and faith), worship, and morality and ethics.

Islamic Social Reporting (ISR) uses the sharia principles as its basic foundation. Sharia principles in the ISR have produced the aspects of the material, moral and spiritual that become the main focus of social activity reports of the company. ISR emphasizes more on social justice in its reporting aside from reporting on the interests of the environment, minority, and employee. This study uses the ISR framework with the main reference of Haniffa (2002) which is modified with the items found in the study of Othman et al. (2009). Followings are the six revealing themes in the ISR used in this study:

- a. Funding and Investment.
 - 1) Usury (interest-free).
 - 2) Gharar (Uncertainty).
 - 3) Zakat.
 - 4) Policies for late payment of accounts receivable and the elimination of uncollectible accounts.
 - 5) Value Added Statement
- b. Products and Services.
 - 1) Products that are environmentally friendly (green product).
 - 2) The halal status of a product.
 - 3) The quality and safety of a product.
 - 4) Consumer complaint handling.

- c. Employee

Haniffa (2002) and Othman and Thani (2010) explained in their research that the public wants to know whether every employee in the company has been treated fairly and reasonably through information disclosure, such as wages, job characteristics, working hours per day, annual holidays, health insurance and welfare, policies related to the time and place of worship, education and training, equality of rights, and the appropriate work environment.

d. Society

The company provides assistance and contributions to the community with the purpose of increasing economic growth and helping to solve social problems in the community, such as by contributing to eradicating illiteracy, providing scholarships, and others (Othman and Thani, 2010).

e. Environment

This concept emphasizes the principle of balance, simplicity, and responsibility in preserving the environment. Therefore, information related to the resources utilization and programs used to preserve the environment should be included in the disclosure of the company's annual report (Othman and Thani, 2010).

There are categories in these indicators and each category contains better details about the area of specific disclosure, and the indicators are marked using the code of 0 or 1. It is marked 0 if there is no information is disclosed and it is marked 1 if the company has performed several activities that are relevant to the encoded category.

Intellectual Capital

The definition of intellectual capital in Indonesia has been indirectly mentioned in PSAK No. 19 Revision 2000 (Indonesian Institute of Accountants, 2012) on intangible assets. Intangible assets are defined as non-monetary assets that could be identified and do not have a physical form.

Bontis (2000) defines intellectual capital as intrinsic knowledge inside the marketing channels and customer relationships developed by the organization through its business operation. Roos et al. (2008) stated that intellectual capital can be related to other disciplines such as corporate strategy and the production of measurement tools.

Based on the opinions of the experts, it is concluded that intellectual capital is an asset for companies in establishing the employees' personality and character, so it could be the basic formula to form an efficient organization. Basically, the intellectual capital is established from the ability of the company's management in managing the existing resources.

Value Added Intellectual Coefficient (VAIC™)

The method of value added intellectual coefficient (VAIC™) was developed by Pulic in 1997, and it was designed to present information about the value creation efficiency of the tangible assets and intangible assets owned by the company. The (VAIC™) is an instrument to measure the performance of a company's intellectual capital. This approach is relatively easy and very possible to do because it is constructed from accounts in the company's financial statements (balance sheet, income statement).

The model starts with the company's ability in creating the value added (VA). Value added is the most objective indicator to assess the success of a business and to show the company's ability in creating value. The VA is calculated as the margin between output and input.

The main components of VAIC as developed by Pulic could be seen from the company's resources, namely the Human Capital, Structural Capital, and Capital Employed:

a. Human Capital Efficiency (HCE)

HCE indicates how much Value Added (VA) that could be generated from funds spent on the labor (Tan et al., 2007). Human capital represents a company's ability to manage the knowledge capital of the individuals in the organization, and it is represented by its employees as the company's strategic assets due to their knowledge possession. The relation between the VA and HC indicates that the HC exists to create value within the company. HC is obtained from the expenses related to the employees such as salary, benefits, and others.

b. Structural Capital Efficiency (SCE)

Structural Capital Efficiency (SCE) indicates the structural capital contribution that is needed to produce 1 rupiah from a company's value added. In this Pulic model, SCE is calculated by dividing Structural Capital (SC) with Value Added (VA). SC is obtained from VA subtracted by HC. SCE shows the contribution of structural capital in the value creation, and the smaller the HC contribution in the value creation, the greater the SC's contribution (Tan et al., 2007).

c. Capital Employed Efficiency (CEE)

CEE is an indicator for value added that is created from one unit of physical capital on the company's value added. CEE is a ratio between Value Added (VA) and a physical model that works (CE). CE is obtained from the total equity and the company's net income. In the process of value creation, the potential of intellectuals that is represented in the employee costs is not counted as an expense (input). Pulic assumes that if one unit from CE on a company has produced a greater return, it means that the company is better at utilizing the CE (or available funds) (Tan et al, 2007).

Conceptual Framework

The relationship between the corporate Social Responsibility and intellectual capital variable as an independents variable and business performance as the dependent variable is shown in Figure 1 as follows:

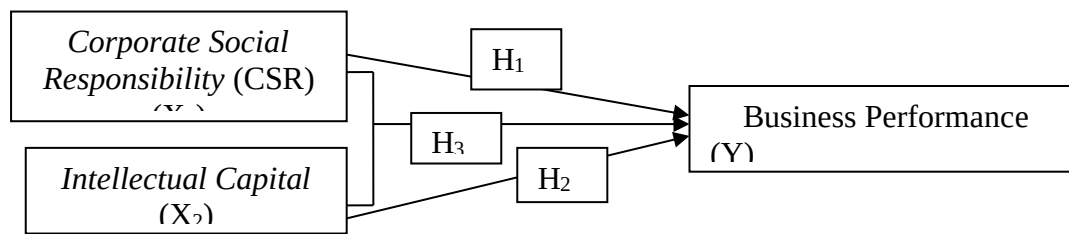


Figure 1. Research Model

Hypothesis

Based on the theory and background of the problems stated above, the following hypotheses were formulated:

- H1: Corporate Social Responsibility has a positive and significant effect on Business Performance of the sharia banks in Indonesia.
- H2: Intellectual capital has a positive and significant effect on Business Performance of the sharia banks in Indonesia.
- H3: Corporate Social Responsibility and Intellectual Capital has a positive and significant effect on Business Performance of the sharia banks in Indonesia.

Research Method

In this study, the object of research is the annual financial statements of Islamic banks in Indonesia, from 2011 to 2017 with a total of 77 annual reports of the Islamic banks. The data were analyzed using a multiple linear regression analysis approach and the SPSS software.

Operational Definition of the Research Variables

1. Return On Assets

The ratio of return on assets is stated as:

$$ROA = \text{Net Income after Tax} / \text{Total Asset}$$

2. Corporate Social Responsibility Index (CSRI) is stated as:

$$CSR_{Dj} = \frac{\sum X_{ij}}{n_j} \times 100\%$$

Note:

CSR_{Dj}: CSR Disclosure Index of company j

n_j : total item for the company j, n_j ≤ 79

X_{ij} : dummy variable: 1 = if the item i is disclosed; 0 = if the item i not disclosed

3. Value added intellectual coefficient (VAICTM)

a. Value Added Capital Employed

$$VACA = VA/CE$$

$$VA = \text{Output} - \text{Input}$$

Note :

An output is total sales and other income.

Input is the total expense other than the labor expenses.

CE is capital employed (funds available from equity and net income).

b. Value added human capital (VAHU)

$$VAHU = VA/HC$$

Note:

HC is the labor expenses (the salary expense as stated in the financial statements).

c. Structural capital value added (STVA)

$$STVA = SC/VA$$

Note:

$$SC = VA - HC$$

The final ratio to measure the the VAICTM is:

$$VAICTM = VACA + VAHU + STVA$$

Research Results and Discussion

After data about the Return on Assets (ROA) were accumulated, the intellectual capital and corporate social responsibility (CSR) from each Islamic banks were classified. The first step was to perform the outlier test on the data. Before the outlier test was carried out, data were previously standardized using the Z score, so new variables such as ZROA, ZVAIC, and ZCSR emerged. These standardized data were then processed with the outlier tests using the box-plot method on each variable. The outlier from the ZROA variable is the data no. 22, 42, 56, 68, 69, and 70. The outlier from the ZVAIC variable consists of data no. 20, 25, 56, 68, and 69. The ZCSR variable does not have outlier. Based on the results of the outlier test, there are 8 outliers consisting of data No. 20, 22, 25, 42, 56, 68, 69, and 70. Data that were identified as outlier were then excluded from the research, and the data were then processed into the next test, the normality test.

The normality test was performed by regarding the skewness and kurtosis values. Data will be stated as normal if the skewness and kurtosis values are between + 2.5 and -2.5. Table 1 shows the results of the normality test using the SPSS software.

Table 1. Normality Test

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Zscore(ROA)	-,231	,289	2,174	,570
Zscore(VAIC)	,428	,289	1,886	,570
Zscore(CSR)	,050	,289	-,678	,570

Source : Primary Data Process (2018)

Normality test in Table 1 shows that the values of skewness and kurtosis are in the range of + 2.5 and -2.5. Thus, it can be stated that the data used in the study were normally distributed. After the data had fulfilled the overall requirements, such as that there were no outlier and the data were normally distributed, then the analysis of multiple linear regression was performed. The regression results are shown in the table below:

Table 2. Multiple Regression Result

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
	B	Std. Error			
(Constant)	,163	,040		4,064	,000
Zscore(VAIC)	,281	,103	,316	2,729	,008
Zscore(CSR)	-,041	,040	-,119	-1,031	,306

a. Dependent Variable: Zscore(ROA)

Source : Primary Data Process (2018)

Based on the results in Table 2, the equation of the multiple linear regressions is formulated as follows:

$$Y = 0.163 + 0.281VAIC - 0.041CSR$$

From the above equation, the explanation is:

- The constant value is 0.163 and has positive direction, which means that even without the existence of VAIC and CSR variables, Islamic banks in Indonesia are still be able to have good performance through generating profits for the company, with a positive ROA value.
- The regression coefficients of the variables (intellectual capital — value added intellectual coefficient) are 0.281 and are in a positive direction. This means that VAIC has a positive influence on the company's performance in generating ROA. If the value of VAIC increases, the company's ROA will also increase, presuming the influence of other variables is zero.
- The regression coefficient of the variable (corporate social responsibility) is 0.041 and is negative. This means that the CSR has a negative effect on the company's ability to generate ROA. If the CSR increases, then the company's ROA will decrease, assuming other variables' effect is zero. After the data were analyzed with a multiple linear regression, then to find out the influence of the independent variable on the dependent variable, an analysis of coefficient determination (R^2) was performed. The results of the coefficient determination test (R^2) in this study can be seen in the table below:

Table 3. Koefisien Determinasi

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,343 ^a	,118	,091	,33248912

a. Predictors: (Constant), Zscore(CSR), Zscore(VAIC)

b. Dependent Variable: Zscore(ROA)

Source : Primary Data Process (2018)

From Table 3 above, it can be seen that obtained value of the R Square is 0.118. That is, the performance of Islamic banks in Indonesia during the 2009-2017 period can be explained through the independent variables of Intellectual Capital and corporate social responsibility which amounted to 11.8%. The remaining 88.2% is explained by other variables that were not included in this study. This means that in achieving the business performance of Islamic banks in Indonesia that is measured by return on assets (ROA), only a few were affected by the variables of Intellectual Capital and corporate social responsibility. Although it has a slight effect, these two variables collectively have a significant effect to increase the ROA of Islamic Banks in Indonesia as seen in Table 4 below.

Table 4. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,975	2	,488	4,411	,016 ^b
	Residual	7,296	66	,111		
	Total	8,271	68			

a. Dependent Variable: Zscore(ROA)

b. Predictors: (Constant), Zscore(CSR), Zscore(VAIC)

Source : Primary Data Process (2018)

The Effect of Intellectual Capital (Value Added Intellectual Coefficient) on the Bank Performance (Return on Assets) in Commercial Islamic Banks in Indonesia

Based on the results, it was found that the intellectual capital has a positive and significant effect on the performance of the go-public Islamic banks in Indonesia on the period of 2011-2017. This is proven by the positive result of the intellectual capital coefficient test of 0.281 and the calculated t-value of 2.729 with a significance of $0.008 < 0.05$. The significant value indicates that the alterations in intellectual capital have affected the performance. That is, if the intellectual capital is changed, then it will affect the bank performance. Thus, the first hypothesis which states that the intellectual capital has a positive and significant effect on the performance is accepted.

This explains that intellectual capital that has been spent by Islamic banks directly affects the bank's efforts to achieve a better performance. In this case, the bank has been able to utilize its intellectual capital to achieve the company's goal, namely by increasing the company's profit by increasing the return on assets (ROA). It means that in the context of the banking industry in Indonesia, especially Islamic banks, banks have been able to optimally manage and develop their intellectual property to win the competition, using the company's competitive advantage as indicated by the impact of IC on increasing the company's ROA.

The Effect of Corporate Social Responsibility on Bank Performance (Return on Assets) of Islamic Banks in Indonesia

McGuire et al (1998), in Balabanis, Phillips, and Lyall (1998) explained that a company's reputation could be increased with the presence of CSR activities, which can improve a bank's relations with the investors and governmental institutions, and these relationships are reflected in the economic benefits of the company. This will trigger the improvements in the company's finances, which increase the company's profits and it will be followed by an increase in the financial performance of the following year.

However, based on the study results, it was found that the corporate social responsibility has a negative and insignificant effect on the performance of Islamic banks in Indonesia during the 2011-2017 period. This is proven by the test results of the coefficient of corporate social responsibility which is a negative of 0.041 and the t-value calculated is -1.031 with a significance level of $0.306 > 0.05$. This significant value indicates that the disclosure of the corporate social responsibility does not affect performance. It means that disclosure of corporate social responsibility of Islamic banks is considered to have a negative impact on company profits since the excessive CSR activities will increase the company's load, and it will then reduce the company profits, even though the decline in company profits is not significant. Thus, the second hypothesis which states that the corporate social responsibility has a positive and significant effect on the performance is rejected.

The insignificance of the results is interpreted as the higher the index of CSR disclosure of the company does not have a significant effect to increase the returns on assets for the company's operation or the return on assets (ROA) obtained by the company. This study supports the results of the research by Fauzi et al (2007), that the corporate social responsibilities do not show a significant relationship with the ROA. This result is supported by the argument that the existence of CSR activities is a cost that could reduce or could not significantly increase the company's net income. An increase in assets, if it is not balanced with an increase in profit, will result in a low ratio of return on asset (ROA).

The Collective Effect of Corporate Social Responsibility and Intellectual Capital on the Business Performance of Islamic Banks in Indonesia

Based on the results, it was found that the corporate social responsibility and intellectual capital collectively affect the business performance of Islamic banks in Indonesia. The results of this study are in line with the research conducted by I Gusti (2017) which states that the intellectual capital, corporate social responsibility, and good corporate governance collectively affect the company's performance (ROE). This reflects the company's responsibility to the stakeholders to be ethical, to minimize the negative impacts and to maximize the positive impacts, and that this act of responsibility affects its business performance. Meanwhile, the intellectual capital is an asset for companies in establishing the employee's personality and character, so that it could be the basis to form an efficient organization. Basically, the intellectual capital could be established from the ability of the company's management in managing the resources so that it could improve its business performance.

Conclusion

Based on the results of data processing, it is concluded that:

1. Intellectual Capital (Value Added Intellectual Coefficient) has a positive and significant effect on bank performance (Return on Assets) of Islamic Banks in Indonesia.
2. Corporate Social Responsibility has a negative and insignificant effect on the Return on Assets of Islamic Banks in Indonesia.
3. Corporate social responsibility and intellectual capital collectively affect the business performance of Islamic Banks in Indonesia.

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EMPOWERING FEMALE STUDENTS THROUGH HIGHER EDUCATION (CASE: HUMANITIES STUDENTS)

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Abstract: *Human resources, specially educated people, are one of the most important factors in the development of societies. So, one of the most important functions of higher education system is to develop skilled and competent human resources. In other words, higher education plays a major role in empowering graduates to do team working, gaining new knowledge and skills, using new technologies, ability to communicate efficiently, time management, and so on. Over the past years, the access of female students to higher education has increased significantly in many countries, including Iran. According to the mentioned themes, this paper focused on the important issue of empowering female students through higher education. The statistical population included female students in the field of Humanities at University of Tehran. A sample of 132 students was randomly selected by using random sampling method. A questionnaire was developed to collect data and its reliability confirmed by application of Cronbach's Alpha. After collecting questionnaires, data were analysed descriptively and inferentially using SPSS/Windows and Microsoft Excel. The findings showed that female students had high-level of psychological empowerment. There were significant correlation between students' psychological empowerment and their academic performance. Also, significant correlation between students' psychological empowerment and their attitude toward employment were found. Empowerment has many benefits and based on the findings, it is important that universities pay special attention to empowering female students.*

Keywords: *Higher education, female students, empowerment, academic performance, Humanities, Iran*

Introduction

Human resources is one of the most important and key capital of any society and optimum use of the other sources depend on the competent and empowered human resources. Today's complex economy need to have a fundamental strategy for sustainable competitive advantage. So, it is not only requires graduates with high academic qualifications as represented by the subject and degree, but also equipped with a number of skills and competencies (Suarta et al., 2017). In this regard, empowerment strategy is crucial for the growth of human resources (Fallah, 2018). The recruitment of graduates in the labour market is due to the abilities and competencies that part of them must be developed during the university year (Knight & Yorke, 2003). So, university plays a major role in the empowerment of human resources (Fazel et al., 2018). The quality of higher education will be optimal when it comes to empowering graduates and meeting the needs of the community and if the higher education system do not adapt itself to changes, it will lose its usefulness and efficiency.

The term 'empowerment' has been used frequently in different fields of study (Chamberlin, 1997; Naryan, 2002; Adams, 2003; Laverack, 2004). The term has come to mean different things to different audiences (Robinson, 1994). It emerged from social and educational psychology as a 'strategy for individuals to retain control of key aspects of their lives' (Cunningham et al, 1996, p. 144; cited in Lawson, 2011). Empowerment refers to 'a process through which people and/or communities increase their control or mastery of their own lives and the decisions that affect their lives' (Kreisberg, 1992, p. 19). Empowerment suggested the potential to positively affect result and outcomes that have benefits for both individuals and organizations (Liden et al., 2000). Empowerment can be considered as a process

where learners improve their competencies, improve their professional development and solve their problems (Short et al., 1994). Structural and psychological approaches to empowerment are cited in previous researches and in the literature (Liden & Arad, 1996). According to Seibert et al. (2004), structural empowerment refers to a work environment. In contrast, psychological empowerment refers to an internal psychological state. The psychological approach to empowerment focuses on individuals and empowerment viewed as a personal attribute (Conger & Kanungo, 1988). Hodkinson & Sparkes (1993) suggested three dimensions of empowerment including: (1) Personal effectiveness: refers to being able to do things oneself, through skills and competencies such as communication and problem-solving skills. (2) Community: the ability to work with a group to attain social change. (3) Critical autonomy: the ability to think for oneself. Spreitzer (1995), according to Thomas and Velthouse's (1990) model, defined psychological empowerment as a motivational construct consisted of through four dimension, including: (1) meaning (2) competence (3) self-determination and (4) impact.

(1) Meaning: refers to "the value of a work goal or purpose, judged in relation to an individual's own ideals or standards" (Thomas and Velthouse, 1990, p. 668). It defines the fit between the task requirements of a job and employees' values, beliefs, and behaviors (Brief & Nord, 1990).

(2) Competence: refers to "an individual's belief in his or her capacity to perform activities with skill" (Spreitzer, 1995, p. 1443). It defines as the belief that the individual has the skills and abilities to accomplish a task well (Gist, 1987).

(3) Self-determination: refers to the feeling of having control over one's task. It shows the individual's sense of having a choice in regulating actions (Deci et al., 1989).

(4) Impact: refers the belief that an individual has important influence on outcomes (including administrative or operational) at work (Ashforth, 1989).

Totally, human resources, specially educated people, are one of the most important factors in the development of societies. Providing this valuable capital is one of the main responsibilities of the higher education system. Higher education is not just an investment in human resources, but also allows individuals to develop skills that shape their behaviour, beliefs, and roles in society (Belfield et al., 1999). Higher education plays a major role in empowering graduates to do group work, gaining new knowledge and skills, using new technologies, ability to communicate, handle various tasks, time management, planning ability. So, the quality of higher education will be optimal when it empowers graduates and meets society's needs. Also, one of the most important functions of the higher education system is to develop skilled and efficient human resources. Over the past years, the access of females to higher education has improved significantly in many countries, including Iran. In Iran, increasing participation and access of females to all levels of education have been a significant phenomenon. On the other hand, females' employment is one of the major issues in societies and they can influence development processes in societies. According to the mentioned issue and the proportion of females in higher education, this paper studied on the important issue of higher education and empowering females.

Methods

This quantitative research is an applied research. The statistical population included female students in the field of Humanities at University of Tehran. A sample of 132 students was randomly selected by using random sampling method. A questionnaire was developed to collect data. To assess psychological empowerment, the Psychological Empowerment Instrument developed by Spreitzer (1995) was used. The validity of the questionnaire was confirmed by the views of a number of professors and its reliability confirmed by application of Cronbach's Alpha. Cronbach's alpha for different parts were more than 0.7, showed an acceptable reliability of the questionnaire variables. So, the questionnaire delivered to the study sample. After collecting questionnaires, data were analysed descriptively and inferentially using SPSS/Windows, Microsoft Excel, and AMOS Graphic. The descriptive statistics included frequencies, percentages, and mean. Inferential statistics included correlation coefficients. In addition, Structural equation modelling conducted to establish the effects of independent variables on dependent variables.

Results

Psychological empowerment mean score of female students was 47.3 of a maximum possible score of 60. It is recognizable that the students had high-level of psychological empowerment. The results of mean scores for the four subscales (including meaning, competence, self-determination, and impact) showed in Fig 1.

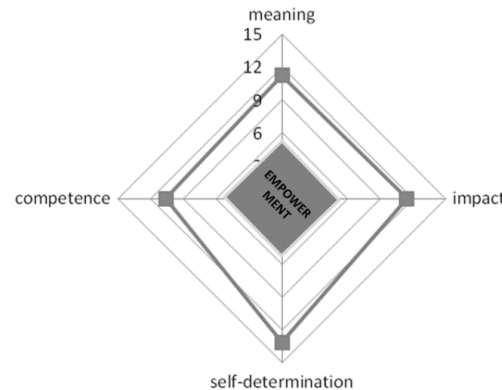


Figure 1: Psychological empowerment mean score of female students

Students' viewpoints regarding higher education effect on empowerment showed that higher education has significant effect on the dimensions of empowerment including meaning, competence, self-determination, and impact.

Pearson correlation analysis was used to examine the relationship between students' psychological empowerment and academic performance. According to the correlation coefficient, there was significant correlation between students' psychological empowerment score and their academic performance ($r = .327$; $sig. = .000$).

To examine the relationship between psychological empowerment and female students' attitude toward employment, Pearson correlation analysis was applied. The findings (Table 1) showed that there were significant correlation between attitude toward employment and meaning, competence, self-determination, and impact ($p < 0.01$).

Table 1: Results of Correlations analysis

Variable	Label	r	sig.
Meaning	M	.427	.000
Competence	C	.254	.000
Self-Determination	SD	.231	.000
Impact	I	.177	.003

In order to indicate the effects of students' empowerment on attitude to employment, structural equation modelling was conducted. Model fit was confirmed through assessing fit indices. Both Chi-Square and CMIN/DF value for model indicated an acceptable fit between the hypothetical model and the sample data. comparative fit index (CFI) greater than 0.90 indicates a good fit to the data, and the Root Mean Square Error of Approximation (RMSEA) scores ≤ 0.06 signify close fits.

According to the standardized coefficients, amongst observed variables of the latent variable empowerment, meaning had more weight than the other variable in assessing the latent variable according to its standardized estimate (.61). Empowerment had positive effect on attitude to employment (Fig. 2).

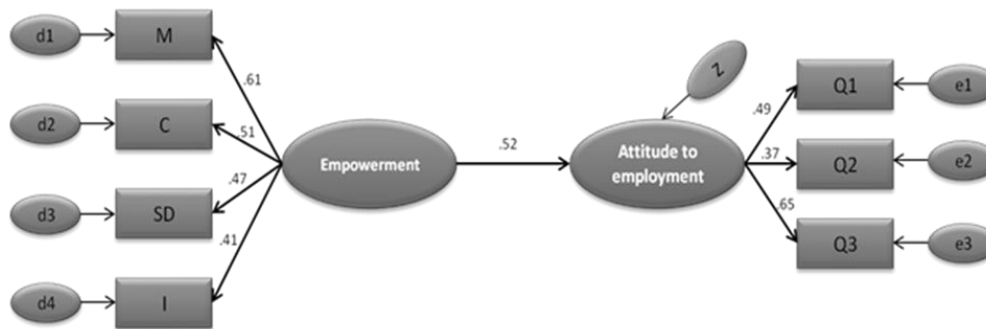


Figure 2: Female students' empowerment and attitude to employment

Conclusion

Education is at the heart of societies and vital for the growth and development of human beings (Rahman and Uddin, 2009). An important role and function of education is to foster students for future responsibilities, by empowering them with essential knowledge, skills, and attitudes to their success (Dewey, 1938; Pouratashi and Rezvanfar, 2010). Therefore, graduates' academic performance and their successfully enter to labour market depend on knowledge and skills that part of those be improved through higher education. In other words, since the major part of labour market are higher education graduates, the role of higher education in empowering graduates is essential. Higher education with the training competent and empowered people, provide graduates who cause developing the country. Higher education should enhance the skills of graduates in terms of personality traits, specialist knowledge and skills, communication features, and economic characteristics. Empowerment is associated with increasing performance, increasing job motivation, higher morale, improving the quality of activities and occupation, increasing self-esteem, and improving relationships and participation.

The findings showed that female students had high-level of psychological empowerment. There were significant correlation between students' psychological empowerment and their academic performance. Also, significant correlation between students' psychological empowerment and their attitude toward employment were found. Empowerment has many benefits including: feeling of merit, feeling of independence, feeling of effectiveness, and trust in others. Higher education plays a major role in empowering females to do team working, gaining new knowledge and skills, using new technologies, ability to communicate, time management, and handling assigned tasks. Accordingly and based on the findings, it is important that universities pay special attention to empowering female students.

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STRATEGIC ALIGNMENT BETWEEN PRODUCT MARKET STRATEGY AND COMPETITIVE STRATEGY OF SMEs: A STRATEGIC MANAGEMENT PERSPECTIVE.

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Abstract: *The primary objective of this study is to examine the strategic alignments and implementation perspective of manufacturing based SMEs in Nigeria especially as they relate to the alignments between growth strategy, competitive strategy and performance and the impact of these components on the market penetration strategy, product development strategy and cost leadership strategy of these firms. The total number of questionnaires distributed only two hundred and seventy seven (277) of such usable questionnaires retrieved from managers-owners of these SMEs served as our primary source of data while the methodology for the research was via a cross sectional survey design method. Preliminary and hypotheses testing was however done using two instruments via SPSS and PLS-SEM. The two instruments were adopted in order to ensure a proper analysis and validation of hypotheses. Finding from the study subsequently showed that both the market penetration and product development strategies of these firms did not only significantly influenced their competitive strategies but greatly influenced their cost leadership strategies, which in turn helped to enhance their capacity for competitiveness and competitive advantage. The study in addition also showed the mediating role of cost leadership strategy on the relationship between product development strategy and the differentiation strategy. Nonetheless although findings from the study were supported by both resource Based View (RBV) and Dynamic Capabilities View (DCV) it goes to show that owners-managers of SMEs in Nigeria can re-strategize and improve their capacities for competitiveness and competitive advantage by rebuilding and integrating their strategic orientation to upscale their competence as well as performance.*

Keywords: *Differentiation Strategy, Cost Leadership Strategy, Market Penetration Strategy, Product Development Strategy.*

Introduction

There are several concepts and theories that have contributed to our understanding of strategic management perspective in an organization. However a few of these theories are centered on arguments with regards to the impact of strategic management alignment approaches in enhancing organizational resources effectiveness competitive environments (Rashidirad, Soltani, & Syed, 2013; Walter, Kellermanns, Floyd, Veiga, & Matherne, 2013) For example there are arguments to the effect that if an environmental change is slow and relatively predictable, organizations may benefit from creating mechanical structures, which maximize efficiency, while on the other hand if the change is rapid and disorganized, systemic structures are likely to give efficiency and eventually allow flexibility to create the most value for its stakeholders (Boyd et al., 2012).

Literatures establishing some empirical evidence on the strategic alignment between strategies include Hernández-Perlines, Moreno-García, and Yañez-Araque, 2016; Lechner and Gudmundsson, (2014) Santos-Vijande, Lopez-Sanchez, and Trespalacios, (2012). Strategic alignments are said to

matters a lot to SMEs (Lechner & Gudmundsson, (2014). However, there is lack of empirical evidence on the mediating effect of cost leadership on the relationship between product market strategies and differentiation strategy. Indeed it has been confirmed that there are less than 5% mediation studies in strategic management journals when compared to other journals (Boyd et al., 2012). This is particularly true of the SMEs in developing economies where studies on strategic alignment are still not fully explored.

Other arguments are those surrounding the domains of product market development strategic decision-making product market development strategy is the core strategic management of an organization, which is also referred to as a growth level strategy (Ansoff, 1965). However, Teece, Pisano, and Shuen, (1997) believed that the ultimate focus of strategic management should be on how organizations succeed and sustain competitive advantage and not otherwise. Several theories advanced over the past few decades have in this regard paid more attention to a firm source of competitive advantage.

The inclusion of context dimensions in the analysis of operations strategy is one other factor that is likely to compel one to re-consider that it influence on a firms' results a phenomenon which may as well vary depending on what situations are regarded as contexts (Oltra & Flor, 2010). Adopting a dynamic capabilities view and considering the situations, which make the influence of product market strategy more effective, may qualify this notion and this is in Particular with regards to the manufacturing based SMEs, which are struggling to compete effectively, as a result of globalization, technological development, changes in customers' desires, stakeholders expectations, environmental difficulty and instability (Hilman & Kaliappen, 2014).

Numerous studies have paid attention to the impact of these factors and those of cost leadership strategy, process innovation, and performance, but such studies only focused on the specific (Hilman & Kaliappen, 2014). Thus, even though previous studies have made valuable contributions to the body of literature, there is still the need for studies to focused on integrating these strategic resources in the context of manufacturing based SME in Nigeria. So far literature has only shown the increasing application of these strategies in the developed and developing economies to enable firms enhance their competitiveness (Allen & Helms, 2006; Hilman & Kaliappen, 2014).

Therefore, the aim of this study is to provide an insight into this existing gap. The study is in other words an investigative bridge on the integrative strategic alignments between product market strategy, cost leadership strategy and the differentiation strategy of manufacturing based SMEs in Nigeria and how this has impacted on their performance and survival and also how this has helped manager's-owners decision making process.

However, because the investigation of these issues are considered very vital, the study has decided to test the context of research alignment holistically from a strategic management perspective point of view as this is considered best for the decision making process which in turn helps to sustain competitiveness and competitive advantage among manufacturing based SMEs in developing countries especially, Nigeria. Other investigations by this study include that on the mediating role of cost leadership strategy and its impact on the relationship between market penetration, product market strategy and their effect on firm's competitive advantage (differentiation) especially in the context of the Nigerian manufacturing sector. Thus, the study aims to determine as well as assesses whether a specific product-market strategy is related to a specific competitive strategy and whether this has any effect on a firm's competitive advantage.

Literature Review And Hypotheses Development

Differentiation Strategy

Researchers on strategy have out grown question with regards to the relationship between strategic content and process. Studies that so far carried out are meant to validate Porter's, Beard & Dess, Miles and Snow's strategic typologies (Slater & Olson, 2000) and the effect of strategic decision making

(Slater & Olson, 2001) on a firm's performance. It is said that for an organization to become a leader in an industry it must be competitive in its market drive (Allen, Helms, Jones, Takeda, & White, 2008). Competitive strategy is therefore the most useful strategy from a strategic management perspective point of view (Allen et al. 2008). Seeing how this is important Porter (1985) developed three essential business strategies that include cost leadership, differentiation and focus strategies.

Be that as it may differentiation strategy can be said to be realized only when an organization focuses on its product market strategies in order to provide a unique or give superior value to its customers (Gorondutse & Hilman, 2017). To effectively implement this strategy, an organization is expected to have a sophisticated and deep understanding of customer's interest and be up to date on technology and innovations (Spencer, Joiner, Therese, & Salmon, 2009). To achieve this a firm must build its competency on its product image so as to reflect the environment in which it is operating, such as its quality of the product and distribution systems (Mwangi & Omhui, 2013). Therefore, implementing differentiation strategy would enable firms to be creative, more competitive over their competitors, and gain customers loyalty, which also allows them to improve their competitiveness and sustain competitive advantage over their competitors (Abiodun, 2014; Lillis & Sweeney, 2013). Resource-based view posits that for an organization to achieve competitive advantage, it must focus its attention on the formulation valuable strategies that are rare, imitable and substitutable (Barney, 1991). Barney's theory was later criticized for being static, and for failing to address issues with relating to changing market influence and the reality of a firm's evolution (Wang, Dou, Zhu, & Zhou, 2015).

What it mean's is that no strategy should be static but rather should adhere to changing times. This is because a strategy used for its operational capabilities may require the implementation of different strategies by competitors or the implementation of similar strategies in different ways (Lillis & Sweeney, 2013). Put simply the implementation of differentiation strategy is unpredictable as it is likely to necessitate the use of different strategic by an organization in order to sustain its competitive advantage (Hayes, 2009). Previous studies have examined the relationship between entrepreneurial orientations and differentiation strategy (Lechner & Gudmundsson, 2014). Strategic choice by SMEs are therefore binding and equally said to lead to the implementation of differentiation strategy (Li & Dimitratos, 2014). An organization which has different approaches to strategies, is likely to continuously integrate, configure and build strategies that are distinct and challenging to be replicated by its competitors (Teece et al. 1997). Thus, product market development strategy is a matter that is important to manufacturing based SMEs as it help their competitive strategy as well help them to improve and sustain their competitive advantage.

Market Penetration Strategy

Market development and Market penetration strategy are concepts developed by Ansoff (1957) as fundamental strategies for firm's growth and survival in a competitive environment. Though the concept has been described differently as growth strategy and generic business strategy (Henry Mintzberg, n.d.), market penetration is the first strategy which a firm pays attention to in order to increase its sales and improve its existing and potential market share over its competitor's (Hussain, Khattak, Rizwan, & Latif, 2013). Firms with this strategy usually focus on achieving market share by improving their market competitiveness (Hutzschenreuter et al., 2014).

However, although manufacturing based SME owners and managers may differ in their product market development approaches and perception, which may necessitate the implementation of strategic decisions (Lawal, Ajonbadi, & Otokiti, 2014), competitive advantage depends increasingly on firm's product-market ability to provide excellent long-term customer value (Santos-Vijande et al., 2012). Linked to this are organizational processes simultaneous implementation of the competitive strategy, especially by the manufacturing based SMEs (Santos-Vijande et al., 2012). We also must not forget that market share is significantly related to competitive strategies, such as introducing a new product into a new market which as well requires a specific strategy to enable firm promotes and build sales to

improve competitiveness (Ansoff, 2002). Creating a favorable competitive advantage depend significantly on the firm advertising aggressive pricing as well as attractive dealer spur (Santos-Vijande et al., 2012). Therefore, market penetration is something, requiring continuous surveillance of product market facilities, technologies, and the opportunities to implement the best strategy (differentiation). Thus, based on the above this paper hypothesizes that:

H1: Market penetration is related to implementation of differentiation strategy

Product Development Strategy

Product development is defined as that product innovation (Henrique & Gilberto, Miller, 2013), which seeks to find new business opportunities in order to enhance competitive advantage and achieve higher performance (Barbero, Bueno, & Barringer, 2012). Most sustainable firms rely heavily on innovation to create a new product as it has significant effects on market share, market expansion, and performance (Felekoglu, Maier, & Moultrie, 2013). Gmelin and Seuring (2014) examined the importance of product lifecycle management and concluded that firms must have a well-defined strategy so as to be able to develop competitive product that can be produced and delivered on time and as scheduled.

This idea of a product market strategy is intended to help position a firm's brand as different from competition and this is also with the intention to ingrain in the minds of its customers, especially when supply and demand are relatively homogeneous (or the business chooses to ignore heterogeneity) (Shaw, 2012). Product development strategy is one of the ways available to achieve differentiation strategy, such as determining what makes a firm different from its competitors (Allen & Helms, 2006), like product quality, firm's image, delivery systems and marketing approach. This aside, the cost leadership strategy implementation requires adequate investment in manufacturing efficiency, material and resource control and cost minimization in functional areas such as research and development (R&D) and marketing activities (sales, services, and advertising) (Armstrong, 2013). These processes allow firms to have competitive advantage and improve their market share relative to their rivals, thus allowing firm's to spread out their cost of production and sustain a product life management distinctive from competitors.

What it means is that, product-market strategy have the tendency to influence firms to implement a differentiation strategy. A firm with a good brand image, technological edge and product quality is perceived as unique by consumers (Kotler & Keller, 2008). Particularly if in addition to these it has an excellent dealers network and several distribution systems that adequately satisfy customers need and add more value to their satisfaction, which may in turn result in customers loyalty, greater power of supply and higher margin (Armstrong, 2013; Turner, 2012; Kotler & Keller, 2008). Based on the above review this paper hypothesizes thus that;

H2: Product development is related to the implementation of a differentiation strategy.

Cost Leadership Strategy

An organization is said to be capable of achieving a cost leadership advantage if it pursues a forward, backward or horizontal integration strategy. Firms seeking to implement cost leadership strategy must focus on activities related to lowest cost and cost structure in their product market strategy such as utilization efficiency, economic of scale, technology development and marketing activities (Allen et al., 2008; Porter, 1985; Slater & Olson, 2001) Note that. Cost leadership strategy is mostly implemented by the big organization and perceived as low-cost provider by the customer (Allen & Helms, 2006). Cost leadership strategy enables firm to have a competitive advantage over its competitors in the industry (Mwangi & Omhui, 2013). Cost leadership strategy is considered useful to the manufacturing-based SMEs particularly if a firm has distinctive competency in the management of its production and marketing practice (Lechner & Gudmundsson, 2014; Li & Dimitratos, 2014). Lechner & Gudmundsson,

(2014) acknowledged that manufacturing-based SMEs have the capacity to successfully integrate their product market strategy with cost leadership through cost efficiency, cost control, monitoring workforce, and aggressive marketing activities. Therefore, cost leadership strategy is what enhances a firm's competitiveness and market sustainability (Mwangi & Omhui, 2013).

This notwithstanding previous studies have found empirical evidence on the effect of cost leadership on performance (Allen & Helms, 2006; Hilman & Kaliappen, 2014; Slater & Olson, 2000; Mwangi & Omhui, 2013), and differentiation (Lechner & Gudmundsson, 2014; Oltra & Flor, 2010). Few studies have also established the mediating effect of cost leadership (Hernández-Perlines et al., 2016; Lechner & Gudmundsson, 2014). Importantly it was therefore significant to extensively explore the mediating effect of cost leadership in the relationship between product market strategy and differentiation strategy. Following this, the study interrogatively hypothesised;

H3: Is there the mediating effect of cost leadership on the relationship between market penetration and differentiation strategy.

H4: Is there the mediating effect of cost leadership on the relationship between product development and differentiation strategy.

Theoretical Framework

The framework below illustrates the strategic alignment between product market strategy and competitive strategy and how this enables manufacturing based SMEs sustain some level of competitive advantage.

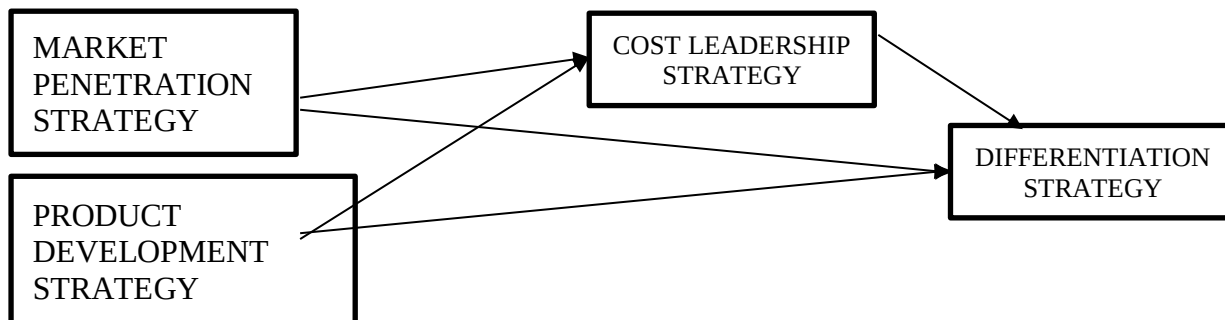


Figure 1 Conceptual framework

Figure 1.Theoretical framework

Methodology

Sample and Data Collection

The population of this study is 1,814 manufacturing based SMEs registered with government agencies (NBS & SMEDAN, 2012). The Northwest is the most populated region in the country with states; like Kaduna, Kano and Sokoto State. About 1,420 of manufacturing based SMEs' are located in these three states. The population of this study is in line with the previous study of Hilman and Gorondutse (2015). However, the sample for this study is 302 SMEs, based on Sekaran and Bougie (2013) sampling table. To avoid any nonresponses error or sampling issues, 50% of the sample were added (Dillman, 2007). A total of 453 questionnaires were distributed to owners and managers of SMEs out of which 303 questionnaires were gathered representing 67% responses rates. However of this number only 277 cases at 61% response rates were used for the final analyses and hypotheses testing, after a data screening procedure-using SPSS.

Result And Analysis

Measurement Model Analyses

The study examined the construct validity, in accordance with the two-step modeling approach as recommended by Hair et al. (2014). The study started with measuring the convergent validity and reliability, as well as discriminant validity. The table below represents the internal consistency reliability. As a rule of thumb, the construct validity is to confirm if the loadings are between 0.4 to 0.7, composite reliability (CR) is greater than 0.7 and it average variance extracted (AVE) is higher than 0.5 (Hair et al., 2014; Henseler, Ringle, & Sarstedt, 2014). Loadings with less 0.7 may be deleted to determine the threshold of CR 0.7 and AVE 0.5 and above respectively (Hair et al., 2014).

In this regard, items were deleted because of their low loadings to meet the threshold of CR and AVE. For instance, items deleted include three (3) from MPS, three (3) from MDS, three (3) from CLS and four (4) from DFS. Therefore, the CR value for the constructs met the recommended threshold value, as shown in Table 1 below. The values range between 0.748 to 0.821, which indicates the reliability of the measurement model as established. The AVE values, which ranged from 0.500 to 0.534, indicate the convergent validity as being established. The analyses, which confirmed the convergence validity of the constructs/latent explains half of the variance of its indicators.

Table 1. Result of Measurement Model

CONSTRUCT	ITEMS	LOADING	AVE	CR
Market Penetration	MP_3	0.605	0.500	0.748
	MP_4	0.749		
	MP_6	0.758		
Product Development	PD_1	0.700	0.509	0.756
	PD_2	0.711		
	PD_4	0.728		
Cost Leadership	CL_2	0.839	0.529	0.767
	CL_3	0.567		
	CL_4	0.750		
Differentiation	DF_2	0.708	0.534	0.821
	DF_4	0.694		
	DF_5	0.756		
	DF_7	0.763		

This study validates the discriminant validity, which ensure that the measures of a construct are theoretically not related to each other (Hair et al., 2014). The most conventional approach in assessing discriminant validity is Fornell-Lackert criterion (Hair et al., 2014). Therefore, in this study, discriminant validity was measured by comparing the square root of the AVE for each construct with the correlation presented in the correlation matrix. Table 2 below represents the results of the Fornell-Lackert. Hence, proceed to hypotheses testing.

Table 2. Discriminant Validity (Fornell-Lackert)

Constructs	1	2	3	4
MP	0.707			
PD	0.342	0.713		
CL	0.228	0.485	0.728	
DF	0.338	0.500	0.364	0.731

Hypotheses Testing (Structural Model)

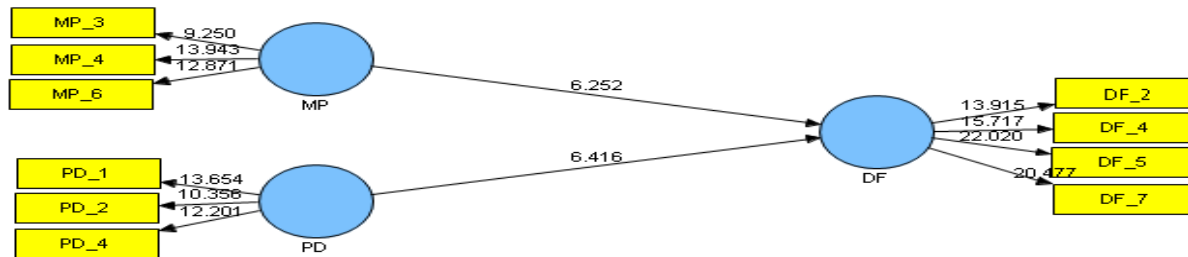


Figure 2. PLS-SEM Bootstrapping (Direct Relationships)

This study examined whether or not there exist a direct relationship between market penetration and market development in the differentiation strategy of SMEs in Nigeria. The interpretation of the results is summarized and presented in Table 2. In H1, the result showed that market penetration has a positive significance influence on differentiation strategy (Beta =0.355; t =6.252, $p > 0.01$). The finding is similar to the finding of Alkasim, Hilman and Manaf (2017) Han, Dong, and Dresner (2013) and Hussain et al. (2013). Similarly, result in hypothesis H2 indicates that product development has a significant positive effect on differentiation strategy (Beta =0.374; t =6.416, $p > 0.01$). The result is consistent with the findings of Leitner (2014) Hussain et al. (2013). Thus, the H1 and H2 tested in this study are supported.

Table 3. Structural Model (Hypotheses Test)

Hypotheses H1 & H2	Original Sample (O)	Standard Error (STERR)	T Statistics (O/STERR)	P Value	Decisions
MP -> DF	0.355	0.057	6.252***	0.00	Supported
PD -> DF	0.374	0.058	6.416***	0.00	Supported

Note*** $p < 0.01$

This aside, the current study examined the effect size f^2 to determine the level of contribution made by each construct to the main construct in the structural model (R^2 0.464). Assessment was based on the threshold for effect size as suggested by Cohen (1988), where 0.02 is considered to be small, 0.15 is medium and 0.35 as larger. The result indicates the measurement of the total effect size f^2 contributed by each construct. Relying on the rule of thumb for f^2 , the effect size for the MPS at f^2 0.158 was explained to be medium, while with PDS effect size, the relationship was interpreted to be medium at f^2 is 0.180.

Indirect Relationships

The mediation effect was determined based on the indirect effect as shown in Table 4. While the standard error (SE) was determined from bootstrapping results of the indirect effects (bootstrapping $a*b$). However, value was determined as $a*b/SE$ (Hair, Hult, Ringle, & Sarstedt, 2016). Thus based on the results below as in H3: cost leadership mediated the relationship between product development and differentiation (Beta =0.046, $t =2.217$, $p>0.05$). Whereas on the other hand, H4: cost leadership does not mediate the relationship between market penetration and differentiation (Beta =0.020, $t =1.495$, NS). However, the condition of mediating effect indicated that the two constructs have a significant positive effect on the mediator as indicated in Figure 5. Thus, the indirect effect was empirically supported for only H4, as presented in Table 5. The confidence interval also relied on the standard bootstrapping error (Hair et al. 2014; Hayes & Preacher, 2010).

Table 4. Structural Model (Mediation Test)

HYP TEST	Beta $a*b$	Std. Error	T Std. $a*b$	P Value	Decisions
MP ->CL*CL-> DF	0.020	0.013	1.495	0.14	N-Supported
PD ->CL*CL->DF	0.046	0.021	2.217**	0.03	Supported

Note** $p<0.05$; NS=not significant

Accordingly, the study assessed the effect size f^2 to confirm the level of contribution by each construct on the main construct in the mediating model (R^2 value) as suggested by Cohen, (1988). Consistent with the rule of thumb for f^2 , the effect size for the MPS effect size was considered as small, with the f^2 of 0.138. So also was the PDS, which has small effect size with an f^2 of 0.127. As with the mediation of CLS, the result shows that CLS does not affect the main construct NA.

Further to this the study assessed the predictive relevance of the model to validate the ability of the predictive relevance of the model. The predictive relevance was evaluated using blindfolding procedure to confirm whether the Q^2 was greater than zero (Hair et al., 2014). The analysis of the predictive relevance, which indicates the model as being established, where the Q^2 value for CLS achieved greater than zero (0.064), and DFS achieved greater than zero with 0.200.

Discussions

The findings of this study confirm the influence of MPS, PDS on the implementation of a competitive strategy for the manufacturing-based SMEs of Nigeria. The findings of the study is a confirmation of previous studies, which acknowledged the effect of product market strategy (Uko & Ayatse, 2014; Hussain et al., 2013; Titman, John Wei, & Xie, 2013), as well competitive strategy as firm's strategic orientation for creating a competitive business environment (Hilman & Kaliappen, 2014; Lechner & Gudmundsson, 2014; Mwangi & Omhui, 2013). The present study found that owners and managers of manufacturing based SMEs in Nigeria identify with and acknowledge the significance of the strategic alignment between firm's strategies as mechanism for improving competitiveness and for having a sustained competitive advantage, which further supports the dynamic capabilities view DCV (Teece & Pisano, 1994; Teece et al. 1997).

Hypotheses; H1 indicates that market penetration strategy has a significant impact on differentiation strategy. The result shows that MPS was able to explain how 6% of manufacturing based SME's competitive advantage relies on differentiation. The result is similar to the findings of Hussain et al. (2013) and Han et al. (2013). As with H2 as expected the results found that 37% of PDS has more significant influence on the differentiation strategy of SMEs. This result is consistent with the studies of Hussain et al. (2013) and Leitner, (2014). Han et al. (2013) suggests that market penetration can be attributed to industrial specific characteristics, such as product processes, product features, and demand patterns.

With H3 the result revealed that MPS has a positive influence on CLS. So the H4 where PDS showed significant influence on CLS than MPS. The findings of this research could have been as a result of the similarities in the functions of the strategies such as aggressive sales, increased competitiveness, increased market share, cost efficiency, managing competitors, and economics of scale (Santos-Vijande et al., 2012; Lechner & Gudmundsson 2014).

Conclusion

The findings of this study is a clear justification on why manufacturing-based SMEs in Nigeria must focus attention on creating a strategic alignment orientation in determining product market strategy and in the implementation of a competitive strategy, to sustain competitive advantage. In their effort to create competitiveness and enhance competitive advantage, owners-managers of manufacturing based SMEs in Nigeria may need to consider the current model and the findings of the current study to align market penetration strategy, market development strategy and cost leadership strategy as a blueprint for their strategic orientation. In essence, the findings of this study recommends that firms strategy implementation evaluation and the strategic integration between strategies should and must be considered useful in creating a sustainable competitive advantage.

Finally, this study was limited to the manufacturing based SMEs in Nigeria. It examined only two types of product market strategy, as well as only two competitive strategies. The present study employed cross-sectional research design. With regards to the source of data, only one source was used in gathering data as represented by the owners-managers of manufacturing based SMEs in Nigeria. However, the present study suggested that future studies must focus on the limitations mentioned above in order to provide comprehensive results capable of validating these current findings.

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RELIGIOSITY TO RESIGN IN CONVENTIONAL BANK AND FINANCIAL INSTITUTIONS

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Abstract: *This article aims to examine the theory of religiosity that affects the behavior of someone who decides to resign from his job at conventional banks and financial institutions which are considered to be contrary to the teachings of ^{religion} which he adheres in particular Islam. From the visible phenomena of a number of banks in Indonesia, including PT Bank Danamon Indonesia Tbk (excluding subsidiaries), the number of Danamon employees in 2017 decreased by 6,021 compared to 2016, which also fell 4,391 people. Adira Finance, Adira Quantum and Adira Insurance) the number of employees decreased by 7,609. Bank Mandiri recorded a total of 633 fewer people, Bank Negara Indonesia Tbk (BNI), the number of employees decreased by 975, Maybank also experienced a decrease in the number of employees. In 2017, based on unaudited financial statements, the number of Maybank employees was recorded to decrease 181 people (Detik finance March 8 2018), in addition to literature studies we also looked at and grouped the characteristics of those who had resigned and made sure what was their main reason to resignation, where there were 30 respondents surveyed found a phenomenon that the researcher classified 21 people as responding to factors related to religion (Religiosity), meaning that 70% of all respondents answered that the main factor that caused the resignation was a factor of increasing awareness in the religious values, while 30% answered with varied answers. must be given a solution or policy, so that the economy can be saved by saving these religious and productive people to work that is in line with his beliefs.*

Keyword : Religiosity, Resign, Conventional Bank, Financial Institution

Introduction

This industrial revolution era 4.0 uses internet and artificial intelligence more often which is worrying since it will decrease the use of labor in many industries including banking and financial industry. Such condition is worsened by the number of employees resignation from banks and conventional financial institutions because of their understanding regarding their religious values, especially Islamic religion which considers the practice of usury conducted by banks and conventional financial institutions is contrast to the religious values. Then, how about the productivity of a country? Such a thing is feared to affect the economy and social life of a community. This is in line with Roy A Rapport's statement that from the beginning of humanity, ritualization and religion serve the purpose in organizing social groups, including their economic activities (Rappaport, 1999).

According to the data collecting from several banks including PT Bank Danamon Indonesia Tbk on a basis of the bank only (does not include the subsidiaries), the number of Danamon employees in the period of 2017 was 16,811 people. This number decreased by 6,021 compared to the period of 2016 which was 22,832. The number of 22,832 also decreased by 4,391 people compared to the period of 2015 which is as many as 27,223. However, on a consolidated basis (including the subsidiaries of Adira Finance, Adira Quantum and Adira Insurance), the number of employees is 36,410. This number also decreased by 7,609 compared to the period of 2016 which was

44,019. The highest decrease of the number of employees occurs at the level of staff and officer. However, the level of manager increases instead. In addition to Danamon, the state-owned bank, PT Bank Mandiri Tbk (Bank Mandiri) also experienced a decrease in the number of employees. From the annual financial report, the total number of Bank Mandiri employees was 38,307 people, which was 633 fewer than the number of employees in the period of 2016 which was 38,940. The number of permanent employees of Bank Mandiri was 30,464, increases by 440 people compared to the period of 2016 which was 30,034. In addition, for the contract employees, there were 7,704 in 2017. It decreased by 990 people compared to the period of 2016 which was 8,694 people. Meanwhile, trainees recorded were 136 people. Additionally, PT Bank Negara Indonesia Tbk (BNI), has a number of employees of 27,209. It decreased by 975 people compared to the Period of 2016 which was as many as 28,184 people. The number of BNI permanent employers was 24,641, which was an increase compared to 2016 with 24,270 people, while the number of contract employees were 2,568, which decreased to 3,914 people in 2016. The number of BNI employees included in the baby boomers category was 367 people, for Gen X was 10,768 people and Gen Y was 16.0 74 people. Maybank also experienced a decrease in the number of its employees. In 2017, based on unaudited financial statements, the number of Maybank employees was 6,727, decreased by 181 compared to 2016 which was 6,908. This number also decreased by 513 compared to the period of 2015 which was 7,421 people (Seconds of finance of March 8 2018). In order for an economy to create a technical progress which has a possibility to make a big leap of modern growth, it requires a culture of innovation which involves new ideas which sometimes radically respected and encouraged, its heterodoxy and competitiveness is calculated, tested for novelty, compare and spread if it is found to be superior according to criteria beforehand (Smith, Revolution, & Revolution, 2004). The more religious knowledge a person has can affect their behavior and mindset, including on their important decision making in their life. Therefore, there is a two-way interaction between the dynamics of scientific knowledge and religious beliefs, which is proven to be able to cause a different long-term result across countries (Benabou, Ticchi, Lucca, & Alberto, 2014). Economic growth is a narrative or a story socially shared and reproduced as well as examines the economic growth as ideas, myths, memes and religion as a way of completing narrative representations and interpreting them in the dimensions of economic growth. Economic life cannot be separated from religious beliefs, even though the decisions taken would threaten the future, the family economy post resigned, decreased productivity, and many other problems which emerge after that. Therefore, researchers want to prove theoretically whether this religiosity factor can be a driving force for someone to make decisions in their lives, including resigning from a comfortable job.

Literature Review

Religiosity

Stark and Glock (1968) argued that spirituality is a religious commitment, a determination and intention related to religious life. In their explanation, Stark and Glock mention 5 dimensions of religious commitment, those are:

1. Dimension of belief, which is the belief of the truth of is the faith principles.
2. Dimension of practical (ritualistic), consists of two aspects, which are ritual and devotional. Ritual means a formal worship which is basically a form of repetition of a religious experience that has occurred in the early days of the formation of religion itself. Meanwhile, devotional is worship carried out privately and informally, such as praying and fasting.
3. Dimension of experience, which is the experience of directly and subjectively meeting with God. In other words, it refers to experience the God's presence and work in his life. This religious experience can be the beginning of one's faith, but it can also occur after someone believes in a particular religion.

4. Dimension of knowledge which is knowledge of the basic elements of the faith, or what we often know as dogmas, doctrines or teachings of the church. This is definitely very much related to the first dimension (belief).
5. Dimension of ethical, in which people act their faith in their daily lives. This ethical dimension includes behavior, speech, attitudes and orientation of his life.

A research conducted by Huber & Huber, 2012 on The Centrality of Religious Scale (CRS) revised the dimensions above to:

1. Intellectual dimension: From a sociological perspective, intellectual dimension refers to social expectations of religious knowledge owned by its people. In this case they are also expected to be able to explain the transcendence, religion and religiosity. In personal religious construction, this dimension describes interest, hermeneutical skills, thinking style and interpretation, as well as science. The general indicator of intellectual dimension is the frequency of thinking about religious issues. This shows how often religious knowledge is obtained through thought process which leads to the core of the intellectual dimension.
2. Ideology dimension: The ideology dimension refers to social expectation that religious people have beliefs about the existence and essence of the relationship between God and His people. In religious construction, this dimension represents trust, unquestioned convictions, and plausibility pattern. The general indicators of this dimension focus on realistic reasons for the God, for example, for what purpose you believe in the existence of God. The basis of this belief is related to religious holidays, because this is an advanced concept and dogma about the essence of God through the real life. Considering God in a reasonable way with a specific construction can be a relevant psychological aspect.
3. Public practice dimension: public practice dimension refers to the social expectation that religious people are a religious community manifested in public participation in religious rituals and communal activities. In one's religious construction, this dimension represents a pattern of action and a sense of belonging with fellow religious people because of God. This dimension can be measured by finding out the frequency of someone doing religious activities in their social environment or called religious services. In interfaith studies, it is recommended to label religious activities in accordance with the religion adopted.
4. Private practice dimension: The private practice dimension refers to religious people who are devoted to individual or personal religious activities. In one's religious construction, this dimension represents the pattern of behavior and the style or way a person attempts to get closer to God. This can include prayer and meditation, in which by doing so they try to get closer to their God.
5. Religious experience dimension: The religious experience dimension refers to religious people who have some kind of direct contact with reality, which affect them emotionally. In one's religious construction, this dimension represents the individual's perceptions of experiences and religious feelings that have been experienced. In order to analogize private practice, it can be seen from the experience gained from his religion. Therefore, both of these can reflect individual religious experience.

Religiosity indicators (Stark and Glock 1970)

1. Dimension of Belief
2. Dimension of Practical (Ritualistic)
3. Dimension of Experience
4. Dimension of Knowledge
5. Dimension of Ethical

According to Avner Seror in the article of a theory on evolution of religious norms and economic prohibition, he assumed that religious norms are determined by the agents' satisfaction from being the

members of the community which provides social services and public goods. The economic ban is supported by the threat of social exclusion from the religious community. There is no inherent conflict between religion and usury or innovation: if such doctrinal conflict emerges, it will be endogenous towards the strategic concerns of the ulama (Avner Seror, 2018).

According to Bénabou et al. (2015), economists have recently begun to study the relationship between religion and scientific production which explains the effect of "erosion of beliefs" from secular science and innovation on religion and faith. They point out that scientific innovation can lead to three results, those are:

1. "Secularization" regime with scientific progress without obstacles and decreasing the religiosity,
2. "Theocratic" regime with high religiosity and restrictions, and
3. The "American" regime which combines scientific progress without any obstacle with stable religiosity.

Resignation

Employee's resignation is the discharge of an employee from a company because of the employee's decision. The resignation of an employee causes the breaking of the employment relations with the company, therefore the rights and obligations of both the employee and the company end. According to Mathis and Jackson (2006), the reasons of employees' resignation are: (1) Components of organizational, values and culture, strategies and opportunities, are well-managed and results-oriented, continuity and work security; (2) Career opportunities, continuity of training, development and guidance, as well as career planning; (3) Employee relationship, fair/ non-discriminatory treatment, support from the supervisors/management, relationship with the co-workers; (4) Appreciation, salaries and competitive allowance, differences in performance appreciation, recognition, special allowance and bonus; (5) Design of tasks and work; responsibility and work autonomy, work flexibility, work conditions, work/life balance. When employees are dissatisfied, employees will tend to resign from the company. On the other hand, if the conditions are getting better, then employees will stay longer in the company.

Harvard Business Review Question (2002) explained several reasons of employees' resignation, those are: (1) The company's leadership shift; (2) Conflict with immediate supervisor; (3) Close friends leave; (4) An favorable change of responsibilities. Employees' resignation requires company to find a new employee so that the company's work program continues to run even though the work continuity and productivity of the employees and company will experience a little of disruption. Excessive entry and exit of employees will harm the company due to decreased productivity, increased training time and costs, increased recruitment and selection time, decreased work efficiency, and other indirect losses such as customer service and commitment.

Meanwhile, Doepke and Zilibotti (2014) discussed the two-way relationship between culture and economic growth by assuming that endogenous technical changes are encouraged by an innovation in which agents allocate their effort on the entrepreneurial or non-entrepreneurial activities. Employee choice depends on risk tolerance or patience, which is subject to the cultural transmission. They point out that there are several long-term balanced growth paths in which entrepreneurs are higher in developing countries.

Avner Seror (2018) focused his research on the limitation which affect the job decisions. They deserve special attention because they affect the economic results when it is carried out by the majority religion. One interesting result which emerges from the dynamic theory presented is that in the condition of Equilibrium, only agents with a weak preference in upholding religious learning will choose economic activities in discriminated sectors. We must emphasize the rules of Islam/ Christianity which prohibits Muslims/ Christians from borrowing money with interest to open the way for minorities to enter such work. This is consistent with the theory of Jewish work decisions in the advanced Middle Ages in the case of Europe (see Botticini and Eckstein, 2012, chapter 8).

Government Role

Platteau (2017) conducted a study on the relationship between religion and politics in Muslim countries. He argued that the decentralized structure of Islam allows autocrats to maintain their position by instructing the religion. Decentralization also implies that secular rulers must build alliances with the Islamic scholars which is relatively more conservative in Western Europe.

Kuran (2012) discussed more specifically why religion is able to promote inefficient rules in economy basis. In addition, he showed that economic prohibitions can allow the Islamic scholars to gain political power. This prediction is in accordance with the proof provided by Chaney (2016), which documented the decrease of the proportion of books dedicated to scientific topics in the twelfth-century Islamic world. He showed that empirical patterns were consistent with the institutional changes in which conservative religious elites gained significant power in political leadership.

Some authors have studied more specifically on the relationship between the legitimacy of religion and the economic prohibition. Rubin (2011) shows that the prohibition of usury can be explained by the initial relaxation level of the prohibition of usury in Western Europe, both directly and by reducing the costs felt by protestants from the decrease of economic ban.

Rubin (2017) pointed out that religious legitimacy is central thing in the evolution of pre-industrial societies which can contribute greatly to socio-economic growth which is relatively limited in the Middle East during the second millennium Era.

The results of AvnerSeror's research (2018) explained the historical patterns in which religion becomes more conservative and at the same time, Islamic scholars can increase their political power. For example, the resurrection of Sunni which began in the Middle East during the eleventh century which was characterized by a higher suspicion of scientific production and the increase of the Islamic scholars' political power.

Conclusion

In this article, we presented a theory which tries to explain why religion has repeatedly prohibited several economic activities throughout the history. I pointed out that the prohibition on certain economic activities from the majority religion triggers the specialization of religious work, because only the minority who chooses the activities that go beyond the prohibition. In turn, the specialization of religious work can produce strong hatred in the majority religion.

This affects the development of cultural changes by consolidating the majority religion. The religious prohibition on usury and religious restrictions on commercial activities implied, for example by Islamic partnership law has allowed the Islamic scholars to distribute their norms and increase the scope of their control over the public, since they greatly affect the workforce organization. From 30 respondents interviewed, we classified that 21 people answered the main decision of resignation is because of factors related to religion (Religiosity) which means that 70% of all respondents answered the main factors that caused the resignation decision was the factor of increasing awareness and understanding in religious values, while the other 30% respondents answered with various answers. They deserve special attention because they affect the economic results carried out by the majority religion in a country.

Therefore, we must reaffirm the Islamic rules that prohibit Muslims from lending money with interest so that it does not make the religious minorities to have such work. This is consistent with the

theories about Jewish work decisions in the Middle Ages explained by Baron (1952) in the case of Muslim countries and by Schwarzfuchs (1966) in the case of Europe (see Botticini and Eckstein, 2012, chapter 8) for deep insights discussion of the work decisions of the Jewish minority during the Middle Ages).

Thus, the government must always strive for policies that favor the religion rules, especially the majority religion believed by the people in the country. Such thing is because Economic activities cannot be separated from the understanding of Religion and Religion will be the determining factor of the Economy of a Country.

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ZAKAT AND ITS ROLE IN THE DEVELOPMENT OF COUNTRIES' RESOURCES

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Abstract: *This study aims at studying the importance of Zakat and its role in the development of countries' resources by following the analytical descriptive approach. The study focuses on some concepts related to Zakat in terms of its language and terminology and its importance in Islam, as well as the legitimacy of zakat and how to invest its money. In order to achieve the required development of the country's resources, the necessary funding should be allocated to activate its role in every resource of the country. Zakat is one of the development methods that fit our beliefs and Islamic values in the light of Quran and Sunnah and the actual economic and social conditions of our Islamic societies and the problems and constraints that confront us and in line with the changes in the different conditions to reach the comprehensive development in the country through finding productive projects for employment and providing basic needs. By this, it solves economic and social problems by reducing unemployment by increasing job creation, and its contribution to the distribution of wealth and income so as not to remain in the hands of a few.*

Keywords: Zakat, Resources, Development

Introduction:

Zakat in Islam occupies a high position and high status, and the rank of advanced, it is a corner of the basic pillars, and a ritual of the major religious rituals, and a duty of the sureties of the sure knowledge of religion necessarily, and although Zakat is a financial worship apparent great benefit to the needy and needy, but it can represent human development In any society in which it applies: in the economic, social, religious, cultural, and other fields.

This is an indicative of the virtue and importance of Zakat, and its great role in society. Its role is not limited to worship, but rather it represents the financial and economic resource of the Islamic economy, and it provides much to the Islamic community with its contribution to achieving the desired development and improving human life for the better. Zakat fights compactness and encourage investment and fight poverty, and provides an adequate investment climate for financing infrastructure projects, which is the way to change the behavior of individuals and reduce the problems between people.

Study Importance:

The evidence in the subject of Zakat refers to the issue of the great contribution that Zakat gives to the Islamic community and its contribution to achieving the required development and upgrading the human life for the better. This has been proven through the various stages of time that the nation has undergone since its inception till today, which is easily followed by the researchers.

This study presents the aspects of legitimacy and behavior that affirm the positive role of Zakat in the development of society and its resources. It is a reminder to the nation, its institutions and its members of this great benefits and the wide door that has been neglected for many years and there is only a small group of people who pay attention to its importance. This demonstrates the great importance and great role of Zakat that can be played in the renaissance of the Islamic nation today.

Research Problem:

The problem of study can be formulated in the following questions:

- 1- What is the concept of Zakat and what is its importance?
- 2- The legality of investing Zakat funds?
- 3- What is the importance of zakat in the development of countries' resources?
- 4- What is the role of Zakat in economic development?
- 5- What is the role of Zakat in social development?

Study Goals:

- 1- Statement of the concept of Zakat, and its importance in Islam.
- 2- Clarifying the legality of Zakat funds and how to invest them.
- 3- Disclosure of the importance of Zakat in the development of countries' resources.
- 4- Recognize the role of Zakat in economic development.
- 5- Recognize the role of Zakat in social development.

Study Methodology:

The research included five sections:

Section 1: Definition of Zakat and its importance in Islam

Section 2: The legality of investing Zakat funds

Section 3: The importance of Zakat in the development of countries' resources

Section 4: The role of Zakat in economic development

Section 5: The role of Zakat in social development

Definition of Zakat and its Importance in Islam

Definition of Zakat

Zakat is defined as growth and increase, and as Ali said "Knowledge increase by spending" and Zakat the plant if it grew and increased, and may be used for purity, Allah Almighty said (Truly he succeeds that purifies it)⁽³²⁾ which means purify it from impurities, Allah Almighty said (Therefore justify not yourselves) ^{(33), (34)}

The researchers took care of Zakat as a language and jurisprudence indication, and considered it from different point of views, but in their definitions, they did not depart from this content.

In the reform, Zakat is defined as the performance of a right, in specific funds, in particular, for a specific person, from money that has met the year and the quorum, and the legislator is appointed it ⁽³⁵⁾.

³² Shams (The Sun): 9

³³ Najm (The Star): 32

³⁴ Ibn Manzoor 1414H, Lisan Al-Arab, 3rd edition, Dar Sader - Beirut 7/46, Mohammed bin Yacoub Al-Fayrooz Abadi 2005, Al-Qamoos Al-Moheet (Ocean Dictionary), publisher Resala Institution, Beirut - Lebanon, p. 1292, Muhammad Ibn Muhammad Ibn Abd Al-Razzaq Al-Husseini, Taj Al-Aroos from Jawaher Al-Qamoos (The Bride Crown from Jewels Dictionary), Publisher: Dar al-Hidayya, 38/220-221, Muhammad Rawas Qalaji 1408AH-1988AD, Dictionary of the Language of the Fuqaha, Publisher Dar Nafaes p. 129, Razi Ahmed bin Faris 1399AH-1979AD, Glossary of language standards, Publisher: Dar Al-Fikr 3/17-18, Fayoumi, Ahmed bin Mohammed, Al-Mesbah Al-Moneer in Ghareeb Al-Sharh Al-Kabeer (The Lamp Enlightening in a Strange Big Explanation), Publisher: Science Library - Beirut 1/254

³⁵ Al-Dasouqi, Muhammad Ibn Ahmad, Al-Dasouqi's Commentary on the Great Commentary, Dar Al-Fikr 1/430, Ibn Abidin, Muhammad Ibn Omar 1412AH – 1992AD, The response of al-Muhtar on the Dor Al-Mokhtar, 2nd edition, Beirut, Dar al-Fikr, 2/256-257, Al-Nawawi, Yahya bin Sharaf, Total

In view of the definitions of the jurists, we find that these definitions are close in meaning, although the words differ in terms of expression and style (long or short). It is an obligation related to money paid by the Muslim on conditions to purify him of immorality and his return to generosity and goodness, and others deserve it on conditions to erase himself from jealousy, hatred and hostility to the rich.

Zakat Legitimacy

Zakat is obligatory and obedience to Allah Almighty, performing it is obligatory, and the evidence has been combined with its hypothesis from the verses of the Holy Quran, the Sunnah of the Prophet, and the consensus.

Evidence from the Holy Quran

Zakat has been mentioned in the Quran several times and has been linked to prayer in twenty-six places, which came in various ways and expressions, such as ordering it sometimes, or by stating something of its ruling, or by praising its actor or warning against negligence, some of these places are:

Allah Almighty Says: “And be steadfast in prayer; practice regular charity” ⁽³⁶⁾, and says “Who are active in deeds of charity” ⁽³⁷⁾, and says “And there are those who bury gold and silver and spend it not in the way of God: announce unto them a most grievous penalty” ⁽³⁸⁾.

Evidence from Sunnah

The Prophet (peace and blessings of Allah be upon him) gave us a number of hadeeths that indicate the legitimacy of Zakat. Some of these hadeeths are:

- a) It is reported on the authority of Abu Huraira that a bedouin came to the Messenger of Allah (ﷺ) and said: Direct me to a deed by which I may be entitled to enter Paradise. Upon this he (the Holy Prophet) remarked: You worship Allah and never associate anything with Him, establish the obligatory prayer, and pay the Zakat which is incumbent upon you, and observe the fast of Ramadan. He (the bedouin) said: By Him in Whose hand is my life, I will never add anything to it, nor will I diminish anything from it. When he (the bedouin) turned his back, the Prophet said: He who is pleased to see a man from the dwellers of Paradise should catch a glimpse of him ⁽³⁹⁾.
- b) Narrated Ibn 'Umar: Allah's Messenger said: Islam is based on (the following) five (principles): 1. To testify that none has the right to be worshipped but Allah and Muhammad is Allah's Messenger. 2. To offer the (compulsory congregational) prayers dutifully and perfectly. 3. To pay Zakat (i.e. obligatory charity). 4. To perform Hajj. (i.e. Pilgrimage to Mecca) 5. To observe fast during the month of Ramadan ⁽⁴⁰⁾.

Consensus

Explanation of the polite "with the completion of the Sabki and the Mutyeen", Publisher: Dar Al-Fikr, 5/324-325, Al-Mawardi, Ali bin Muhammad Al-Baghdadi 1419H/1999, the great container in the jurisprudence of Imam Al-Shafei, a brief explanation Al-Muzni, Dar al-Kitab Al-Alami, Beirut, 3/71, Ibn Qudaamah, Abdullah bin Ahmad al-Maqdisi, 1388AH-1968AD, Al-Moghni, Publisher: Dar Al-Nasher Cairo Library, 2/427, Al-Mardawi, Ali bin Sulaiman 1415AH – 1995AD, the fairness in the knowledge of the most correct of the dispute, 1st edition, Egypt, Press Hager, 3/3.

³⁶ Baqara, (The Heifer): 43

³⁷ Muminun, (The Believers): 4

³⁸ Tauba (Repentance): 34

³⁹ Narrated by Al-Bukhaari the chapter on the obligation of zakat, 1310, and Muslim in the Book of Faith 16, and Ahmad in Musnad 8159

⁴⁰ Narrated by Al-Bukhaari in his Saheeh Book of Modern Faith 7, and Muslim in his Saheeh Book of Faith 21

Where the nation to agree unanimously on the premise of zakat and its obligation and that it is one of the pillars of this right religion as the Sahaba agreed to fight its preventers ⁽⁴¹⁾.

The Importance of Zakat in Islam

Zakat is the third corner of the pillars of Islam, Allah Almighty linked between Zakat and prayer in many verses, Allah Almighty says: “So establish regular Prayer and give regular Charity; and obey the Apostle; that ye may receive mercy” ⁽⁴²⁾, and says: “[They are] those who, if We establish them in the land, establish regular prayer and give regular charity” ⁽⁴³⁾, and says: “and establish regular Prayer, and give regular Charity; and obey God and His Apostle” ⁽⁴⁴⁾.

Islam has made zakat the test of faith and the proof of sincerity. It is a distinction between Islam and disbelief, between faith and hypocrisy, and between piety and immorality. “Zakat in Islam is a distinct system that differs from the previous religions, from precepts and preaching, make desirous of benevolence and charity, and warns of stinginess and constipation, and it is another thing, contrary to taxes and excuses that were collected by kings and emperors” ⁽⁴⁵⁾.

Zakat is able to achieve social solidarity among the members of the Muslim community one, and it heals the soul of the one who pays Zakat and purify the heart of the poor destitute; so he does not look at the money of others with sorrow, envy and remorse, but looks at him and wish him more; because he gave him of his money, and purge himself of robbery, assault and theft.

Zakat is a financial worship, and a right to Allah Almighty from us, and has a good economic impact on the individuals, the societies and the countries. Muslims pay out Zakat with faith in Allah as it contributes in improving the standard of living, health and education of the poor, which qualifies them to become a workforce involved in economic development. In view of the importance of zakat in Islam, the legislator authorized the task of collecting, distributing and mandating the money of Zakat to the guardian or his representative and booked it a place in the Muslims’ treasury. Although it is a part of it, this doesn’t prevent it from being independent of it; because Zakat has its own sources and expenses, and this is confirmed by what the judge Abu Yusuf said in his letter to the Caliph Harun al-Rashid, recommending him: “It is not necessary to add the money of the taxes to the money of the charities as the money of the taxes is for all Muslims but the money of the charities is for who Allah Almighty mentioned in the Holy Quran ⁽⁴⁶⁾.

The guardian or his representative shall have the authority to manage zakat’s funds in terms of collection and distribution, as it is considered to be the work of the sovereignty of the country or the person who is responsible for its affairs according to the agreement of most of the scholars. This is an evidence of the fact that Allah Almighty addressed his Messenger (peace and blessings be upon him): “Of their goods, take alms, that so thou mightiest purify and sanctify them” ⁽⁴⁷⁾.

The speech as unanimously agreed by the commentators is not specific to the Prophet Mohammed peace be upon him only but each ruler responsible for the country and its citizens. As well,

⁴¹ Al-Nawawi, Total Explanation of the Manners 5/326, Ibn Qudaamah, Al-Mughni, 2/427, Al-Humeiri, Ali Bin Muhammad 1424AH – 2004AD, Persuasion in Issues of Consensus, 1st Ed., Dar al-Farouk Hadith 1/193, Muhammad Ibn Ali al-Shawkani 1413AH - 1993, Neil Al-Awtar, Publisher: Dar al-Hadith, 4/138

⁴² Nur, (Light): 56

⁴³ Hajj, (The Pilgrimage): 41

⁴⁴ Ahzab, (The Confederates): 33

⁴⁵ Yusuf Al-Qaradawi, 1393 AH, 1973AD, Zakat Jurisprudence, 2nd Ed., Egypt, Al-Resalah Foundation, p. 88

⁴⁶ Abi Yousef, Yacoub Ibn Ibrahim, Al-Kharaj, 1st Ed., Egypt, Al-Azhar Library of Heritage, p. 93

⁴⁷ Tauba (Repentance): 103

the Prophet Mohammed peace be upon him used a man from the lion on the charity of Bani Salim called Ibn Al-Lutaibah and when he came, he settled an account with him ⁽⁴⁸⁾.

While others see Zakat as individual obligation on every person who bears responsibility and be held accountable. If the state does not manage and supervise Zakat funds, it is no less than organizing them in non-governmental bodies that collect and distribute them to those who are entitled to them.

While, in the current era, countries differ in the management of zakat funds, including making zakat by force of law and adopting the principle of obligation such as Saudi Arabia, Pakistan and Sudan, while some countries left zakat optionally for the taxpayer, supervised by Jordan and Kuwait. On the other hand, Zakat is due to popular efforts and to zakat committees such as Egypt, Lebanon, Palestine and others.

The Legality of Investing Zakat Funds

The basic principles of the building and the formation of the Islamic economy depends on the foundations that clearly indicate the control of the human material, and his ability to manage its economic affairs, including that the real owner of money is Allah Almighty and that the human is Allah's vicegerent on earth to use and develop this money in order to develop the countries. Allah says: "and spend (in charity) out of the (substance) whereof He has made you heirs" ⁽⁴⁹⁾. Also, Allah Almighty has ridiculed what in this universe to serve human and to practice his economic activity, as he says: "Do ye not see that God has subjected to your (use) all things in the heavens and on earth, and has made his bounties flow to you in exceeding measure, (both) seen and unseen?" ⁽⁵⁰⁾.

The Islamic economic theory is derived from the Quran and the Sunnah. It is based on constants that do not change or transformed and the Islamic economic system, like other Islamic Shari'a systems, stems from the Islamic doctrine, which has characteristics that distinguish it from the rest of the physical systems ⁽⁵¹⁾.

Among the provisions of the Islamic sectarianism is the principle of investment, which is a reason for the development of capital, and increase the prospects of dealing, so Islam urged i and called for hard work as Allah Almighty says: "It is He Who has made the earth manageable for you, so traverse ye through its tracts and enjoy of the Sustenance which He furnishes: but unto Him is the Resurrection" ⁽⁵²⁾.

Between both Zakat and investment there is a relationship in that they mean the growth of funds and increase and get reward if the work was to seek the pleasure of Allah. As for the legitimate ruling on investing Zakat funds in projects of interest, this issue was not known to the old jurists and they did not talk about it in the modern form found in our contemporary reality, but contemporary scientists have talked about them in different point of views between supporters and opponents. Both of them used the source of the evidence from the Quran and the Sunnah as a proof of his saying. But what is inclined is that it is permissible to invest zakat money because the Prophet Mohammed (peace and blessings be upon him) and after him the caliphs used to invest Zakat money before giving it to those who deserve it. This is evidenced by the hadeeth of the Al-Arnein, "It was narrated that Anas (may Allah be pleased with him) Some people from `Uraina tribe came to Medina and its climate did not suit them, so Allah's Messenger (peace be upon him) allowed them to go to the herd of camels (given as Zakat) and they drank their milk and urine (as medicine) but they killed the shepherd and drove away all the camels. So, Allah's Messenger Prophet Mohammed sent (men) in their pursuit to catch them, and they were brought,

⁴⁸ Narrated by Al-Bukhaari in his Sahih Al-Zakat 1404, and Muslim in his Sahih of the Principality 3413

⁴⁹ Hadid (Iron): 7

⁵⁰ Luqman (The Wise): 20

⁵¹ Sayed Qutb Islam and the problems of civilization, Anwar Degla Press, Baghdad, p. 23

⁵² Mulk (Dominion): 15

and he had their hands and feet cut, and their eyes were branded with heated pieces of iron and they were left in the Harra (a stony place at Medina) biting the stones”⁽⁵³⁾.

Also, the Holy Quran has mentioned the categories and beneficiaries of Zakat without resorting to the means and left to diligence as long as the goal has been achieved. The Council of the Islamic Jurisprudence, held at the third session of its conference in Amman in 1986 decided that: “it is permissible in principle to employ Zakat funds in investment projects ending with the ownership of the beneficiaries of zakat, or is affiliated with the authority responsible for the collection and distribution of Zakat, provided that the urgent need for the beneficiaries and the availability of adequate guarantees for the loss⁽⁵⁴⁾.

As well as the third symposium on contemporary Zakat cases in Kuwait in 1992, where it issued the fatwa on the possibility of investing Zakat funds under its controls, “The symposium confirms the decision of the Islamic Jurisprudence Academy regarding the use of Zakat funds in projects with an interest, and that it is permissible in principle, subject to the provision of its controls”⁽⁵⁵⁾. We can say that it is permissible to invest Zakat money, but some controls and conditions are necessary to be identified⁽⁵⁶⁾:

The investment should be considered a real interest that is worthy of the beneficiaries such as providing a permanent resource to help these beneficiaries or increasing Zakat funds if they are less. Also, the benefit derived from these projects is within the framework of the original needs that must be provided from Zakat such as food, clothing, housing, medications and any other necessities. Also, it is a must that the people responsible for this matter to appreciate the existence of the interest.

Zakat funds must not all be spent in investment projects, part of it must be transferred to the urgent disbursements, which require the immediate disbursement of Zakat funds.

Zakat funds should be invested in legitimate ways and in legitimate areas. It is not permissible to trade in money or to deal with usury. This is generally forbidden in investing. In Zakat funds, this is forbidden in the first place.

All measures shall be taken to ensure that the utilization of the assets of enterprises and their lands are limited to those who are entitled to Zakat, and the rich shall not benefit from it in return for a material consideration to be spent on the interests of the project.

The supervision and management of the projects shall be entrusted to the competent and economic experts, the religious secretariat, and may involve a number of experienced clerks in the board of directors of the institution. This increases their satisfaction with zakat and increases the trust of the zakat payers.

The establishment of any project shall be preceded by a feasibility study to ensure that the profit is likely to be obtained. If the probability of loss is high and the risk is high, such projects may not be commenced.

The project can be consolidated at any time, and the composition is the conversion of the physicals to the money by selling it, for example.

If the project was closed for any reason, the price and all that remains of it becomes within the funds of Zakat, where it is due to the beneficiaries of Zakat as usual.

⁵³ Narrated by al-Bukhaari in his Sahih Al-Zakat 1405, and Muslim in his Sahih Al-Qasamah, Al-Qaradim and Al-Qasas 3162

⁵⁴ Journal of Islamic Fiqh Academy 1988AD, Organization of the Islamic Conference, 3/88

⁵⁵ Muhammad Al-Zuhaili 2007, Evaluation of Contemporary Applications of Zakat – Pros and Cons, Scientific Research Published in University of Sharjah Journal 4/2, p. 19

⁵⁶ Ashqar et al. 2004, Fiqh Research in Contemporary Zakat Cases, 3rd Ed., Dar Al-Nafae, 2, 534-533 / 886

These projects must be owned by a trustworthy Islamic body, and all possible legal procedures, which ensure the survival of the ownership of Zakat funds to that entity must be taken, so as not to lose their assets and do not turn into a non-Zakat destination.

The Importance of Zakat in the Development of Countries' Resources

In the era of the Prophet Mohammed (peace and blessings be upon him), the Muslims house of money was the place where the countries' resources and revenues were kept. Muslims house of money is the institution that supervises the money and what comes out of it in the various aspects of expenses; to be under the hands of the caliph or governor, where they put it with Allah's command to be placed in what serves the affairs of the nation in peace and war ⁽⁵⁷⁾.

The most important sources of money to Muslims house of money are Zakat, Kharaj, Jizyah, rewards and the pillage. In the present era, resources have developed in all countries of the world due to the cultural and economic progress, there are natural resources discovered in the countries such as oil, natural gas, metals, etc., Most countries have such resources as well as what the government takes in return for the agricultural, industrial or commercial projects or services provided, such as electricity, telephone and water. The achievement of development in these public resources is due to the strength of this society and not to fall prey to recession, unemployment and poverty. All these diseases raise the prevalence of corruption and extinguish the hope among youth, which results in frequent distractions and the emergence of despair and suicide. This is contrary to what the Islam came with of strength, dignity and immunity as Allah says: "But honor belongs to God and His Apostle, and to the Believers" ⁽⁵⁸⁾. Allah Almighty also says: "Against them make ready your strength to the utmost of your power" ⁽⁵⁹⁾.

Islam came with the integrated foundations to a strong country full of justice, mercy and brotherhood among its members. Islam worked to develop the society constantly to rejuvenate and spread the spirit of hope in its pillars, so that its sun does not fade and does not delude its youth. Integrated Development is defined as "a group of diverse and coordinated efforts that qualify the community to carry out the command of Allah Almighty" ⁽⁶⁰⁾. Starting from the individual, and the creation of an environmental and social environment for the Muslim community to fully perform the duties of fragmentation in the earth.

Economic development, as it is known, needs a framework that brings together all members of society so that they all move towards development,

The development success of any society depends on people's faith, interaction, participation and efforts and reap its benefits. Economic and social development, as known, needs a framework that brings together all members of society so that they all move towards development. Because the choice and commitment to development within the framework of a specific economic approach is committed by the government only without the members of society; this does not ensure the achievement of the required progress because of there is no interaction from all the society with it. In light of this, we need development methods that are appropriate to our Islamic beliefs and values in light of the Quran and Sunnah, the actual economic and social conditions of our Islamic societies, and the problems and constraints that confront us and are in line with the changes in different circumstances.

⁵⁷ Prof. Ragheb Al-Sarjani, "House of Money under the Prophet and the Caliphs"

⁵⁸ Munafiqun, (The Hypocrites): 8

⁵⁹ Anfal, (The Spoils of War): 60

⁶⁰ Dr. Abdul Karim Bakkar 1422 AH – 1999AD, Introduction to Integrated Development Islamic vision, 1st Ed., Damascus, Dar Al-Qalam, p. 10

That is, it is based on translating our goals and values into reality in the form of practical and practical and applicable methods ⁽⁶¹⁾.

Zakat and the funds resulting from it are the necessary funding to develop countries' resources if it is exploited appropriately and according to the Shari'a rules. The first thing that comes to mind is that the poor are always out of poverty by providing them with the means to protect them from poverty by giving them the means to protect them from the deterioration of poverty and to move them from subsistence to sufficiency, which don't include only satisfying the necessary needs of the poor only, but beyond that to provide luxuries. The interdependence means that the individuals support each other, and that all the human forces in society converge in the preservation of the interests of individuals and the preventing damages from them, and then maintain the social construction and the establishment of it on a sound fundamental. The Prophet Mohammed (PBUH) said, "A faithful believer to a faithful believer is like the bricks of a wall, enforcing each other" ⁽⁶²⁾. There are many points that show the role of Zakat in the development of countries' resources, including:

- a) Zakat funds can be a good supporter of the role of science and its dissemination, the scholars said: "For the sake of Allah, a man will devote himself to seeking the forensic knowledge, it is given zakat on what he needs from expenditure, clothing, food, drink, housing and science books needed, because the forensic science is a kind of Jihad in the way of Allah. Imam Ahmad (may Allah have mercy on him) said: "Knowledge does not change anything for those who correct their intention" ⁽⁶³⁾. Science is the origin of all Shari'ah, so there is no law except with knowledge, and Allah Almighty brought down the book so that people could do the best, learn the provisions of their law, and the necessary doctrine, say and do, which is undoubtedly a public development that has great benefits.
- b) Zakat is considered a permanent source of Muslim money, and a legitimate tool for insurance against various disasters and an effective means of reducing social pests, as in Zakat legislation, attention is paid to emergency needs of refugees and displaced persons who have been forced by the harshness of life and the vicissitudes of time to surrender to humiliation and misery. Such cases and the like have the right to benefit from Zakat funds.
- c) The payment of zakat money to the eight categories mentioned in the Quran represents a great burden on the state's burdens and expenses, and therefore the payment it from zakat funds gives the government the opportunity to exploit these funds in the modern fields that are working to achieve the development of society through spending on scientific experiments, and attempts to study outer space. Contribution to the experiences of the development of industrial and agricultural production as well as in the areas of the research for drugs and treatments for diseases of the era such as cancer, AIDS and others, Zakat funds can play an important role in providing the necessary funds and support to scientists, researchers and laboratories established for these purposes.
- d) The system of Zakat is an Islamic privilege that is unparalleled in the old and recent Western or Eastern systems, if well exploited and worked through which to reach the Islamic community to an advanced stage of development and progress, through a comprehensive development process that works on major issues and do not forget minor issues. The field of media studies is very important in the matter of considering them from the point of spending on Zakat funds, as the media is the battle of the future as confirmed by recent studies.

⁶¹ Dr. Afar Mohamed Abdel Moneim 1992, Development, Planning and Evaluation of Projects in the Islamic Economy, Egypt, Dar Al Wafaa, p. 12

⁶² Narrated by al-Bukhaari in his Sahih from the hadeeth of al-Zakat, Hadith 459, and Muslim in his Sahih, the chapter on righteousness and connection, Hadith 4684

⁶³ Ibn Hane' Al-Nisaburi, Ishaq Ibn Ibrahim 1400 AH, Issues of Imam Ahmad Ibn Hane' novel, 1st Ed., Dar al-Islami 2/168.

The Role of Zakat in Economic Development

Before talking about the important role that zakat provides in the economic development of the country, it is worth highlighting the concept of development. The term was not known to the Islamic thought in ancient times, but there are terms that reflect its content properly, such as architecture and empowerment and revival. The economic development in Islam is defined as "the realization of man increasing degrees of control over the resources available in the universe, which Allah Almighty exploit to serve human, to achieve sufficiency, which is commensurate with the average living in the Muslim community" ⁽⁶⁴⁾, or it is "Building the country, through achieving economic progress, and providing the justice of distribution which is represented with reaching the levels of production and distribution to achieve the level of sufficiency for everyone in the Islamic community without exception" ⁽⁶⁵⁾.

Moreover, the economic development in Islam is distinguished from other positivist systems as it depends on the human being who work hard and exploitation harnessing what in the universe to develop the earth which in turns benefit the individual and the community. The Islamic economy decides that development needs funding to achieve prosperity, justice and equality. So, it must be financed from the internal resources of the nation such as Zakat to avoid falling into dependence, which proves that Zakat has a vital role in reviving the economy and achieving development as a result of three basic and interrelated factors, (i) combating the compactness, (ii) encouraging investment and (iii) encouraging spending because the Islamic economic thought is that criticism is a means and not a commodity to achieve mutual benefits. Muslims are ordered to moderate spending and halal gains as Allah Almighty says: "Those who, when they spend, are not extravagant and not niggardly, but hold a just (balance) between those (extremes)" ⁽⁶⁶⁾. Since the imprisonment of money from trading is prohibited in Islam it is required for each Muslim to invest his money according to what Allah wanted, and the investment of these funds and the lack of compactness contributes to the reduction or elimination of some economic problems such as poverty and unemployment, which will increase the demand for labor and create new job opportunities, such as building factories and companies that will benefit the poor and the unemployed. Moreover, the role of Zakat is not limited to creating job opportunities but also to improving its quality, such as spending on science students or training and educating workers, which leads to raising the productivity of these workers. As well, Zakat has a role in increasing the amount of work through the shares of Garmin as one of the eight disbursements, as if the debtor cannot pay its debts then will declare bankruptcy and will become unemployed, giving him from this stock limits the fall in the trap of unemployment again.

It is known that Zakat is the basic tool for the redistribution of income and wealth, which is evident from the words of the Prophet Mohammed: "then instruct them that verily Allah has made Zakat obligatory for them which would be collected from the wealthy amongst them and distributed to their needy ones" ⁽⁶⁷⁾. Zakat does not provide a temporary solution to the problem of poverty, but works to end it from its roots as well as a revolving financial resource every year. When money is taken from the rich people and distributed to the beneficiaries, this will lead to higher national income and in turns increase Zakat funds and the distribution of wealth is realized more fully and comprehensively.

Zakat also plays a major role in reviving the various productive projects. After Zakat is collected and distributed to the beneficiaries and the surplus is retained, it is invested in projects that benefit the individuals from the work side and society in terms of development and achieving the required economic strength.

⁶⁴ Bataina, Ibrahim Mohamed et al. 2005, Introduction to Economic Theory from an Islamic Perspective, 1st Ed., Irbid, Dar Al-Amal, p. 213

⁶⁵ Dr. Ahmed Mahmoud Abu-Rab 1992, Challenges of Development in the Arab World, 3rd Ed., Irbid, p. 151

⁶⁶ Furqan, (The Criterion): 67

⁶⁷ Narrated by Al-Bukhaari in his Sahih Al-Zakat 1308, and Muslim in his Sahih book of Faith 27.

It is clear to us the important role of zakat in the process of developing the countries' economy through its contribution in reducing unemployment and providing job opportunities, and its contribution in the distribution of wealth and income so as not to remain in a small group of people ⁽⁶⁸⁾.

The Role of Zakat in Social Development

There is a strong relationship between zakat and social life, because the greatest rule for which zakat is initiated is the strengthening of social relations and the achievement of social solidarity by extinguishing the heat of the revolution of the poor; because the poor may be angered to find this man riding what he wanted, and reside in what he wants from the palaces, and eat what he desires from food, while he does not ride only his legs, and sleep only on the ground and the like, there is no doubt that he finds something in himself. If the rich are going to worry about the poor, they will break their revolution and calm their anger. Then they will get used to the rich and love them and it is "Part of the social solidarity system in Islam, that solidarity, which was known to the West only in a narrow circle, and defined by Islam in a deeper and wider circle".

Zakat is the first social security institution known to date, and Zakat funds play a major role in fostering social life patterns such as mosques, agricultural lands, building and developing the science centers and hospitals, libraries, poor care projects, wells for saplings and cattle. Also, it can contribute to the elimination of the dead liability as he is one of the Garmin, if his inheritance does not fulfill that, and his heirs cannot pay for it, this is safe for debt holders. Islam also urged the goodwill loan (qardon Hassan), which reassures the owner to repay it from the debtor. as well as the important ways in this time with regard to the problems of young people, especially singles

Also, one of the important ways in this time is related to the problems of young people, especially singles, so that Zakat can contribute to solving these problems and address the situation of these young people through participation in marriage projects and help young people and girls who are unable to pay for marriage and many other aspects of life and social.

Moreover, Zakat has a role in changing the behavior of individuals and reduce the problems between people; When a person wants to satisfy his basic needs and finds no money for that, he can carry out several negative practices that would meet his need, such as theft, assaulting someone or robbery, with the assurance that the end does not justify the need for the person to do those wrong things. As a result, Zakat comes to solve these social problems and reduce its occurrences, which in turns spreads peace in society, and as a result achieving social development because development is the firstborn of any civilized stability in society.

One of the basic tasks of development in a society is to support social relations such as brotherhood, kinship, neighborhood, fellowship and hospitality, and to develop concepts of appreciation, tolerance and mutual understanding, which the role of Zakat in achieving and reaching this social development ⁽⁶⁹⁾.

As well as giving civil society organizations such as unions, trade unions, foundations, charities, clubs, NGOs and chambers of commerce as they represent the infrastructure of any country as their success and progress means achieving the required social development.

⁶⁸ Hashr, (The Gathering): 7

⁶⁹ Yusuf al-Qaradawi, Zakat Jurisprudence, p. 880

Results and Conclusion

Results

The researcher reached a number of results that he wishes Allah Almighty to be right to refer to, and to be of general benefit to the Islamic community and others.

1. Zakat is a duty of the laws of Islam by consensus Muslim scholars is not limited to worship, but a resource of financial resources that is inexhaustible over the years, it has a dual role that combines worship and a tool for funding.
2. Zakat has played a major role in the development of the Muslim community in all stages of history, which requires consideration of using it for the benefits of the nation.
3. Zakat has contributed to the revitalization of the economy by employing its funds in legitimate trade, employing manpower and maintaining funds. Zakat has made great progress in the field of social solidarity and care for the poor and the needy.
4. Zakat funds served the scientific and intellectual movement of Muslims, supporting the role of science and providing students with the science of expenditure, clothing, food, drink, housing and science books needed, because the forensic science is a kind of Jihad in the way of Allah, and contributed to help science students.
5. Using Zakat funds for some expenditures of the countries provided a service for scientific research and medical experiments, and everything that serves the progress of the Muslim community in the fields of science, intellectual, economic, media and others; in all that benefits the community, and the development required.

Recommendations

1. Zakat should be organized away from government authority as a result of the failure of the government administration to manage it, as the governments' indulgence in the administration of zakat has led Muslims to hesitate to pay it.
2. The laws that impede the work and maintenance of Zakat funds must be reviewed, and organized in the light of the Shari'a provisions, and strict texts to preserve Zakat funds must be established.
3. The systems to measure and evaluate the performance of Zakat must be developed, as it is a guarantee for the continued success of Zakat, so that the outstanding performance and development can be maintained, the poor performance and knowledge of the causes and treatment is identified.
4. Successful standards should be applied in the Accounting systems, as financial accounting from Islamic perspective includes the assignment of rights and the disclosure of the financial situation and its results in a manner that takes into account the distinction between halal and Haram.

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THE COPING STRATEGIES OF SYRIAN ADOLESCENT REFUGEE IN MALAYSIA: A CASE STUDY

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Abstract: Syrian conflict has been documented as one of the most dramatic cases of displacement in human history. Going to eight years of conflict with no sight of end. Millions of Syrian adolescent refugees have exiled from their homes, schools and have to confront many challenges. A qualitative approach was utilized to interview 11 Syrian adolescent refugees, 9 parents and 2 teachers in Malaysia. In-depth interviews were conducted to explore the participants' coping strategies with war traumatic experiences and difficulties they face in adapting to the new society in Malaysia. The findings showed that number of coping strategies were employed by participants, including religious beliefs and spiritual coping, cognitive strategies such as developing positive attitudes, acceptance coping, use of hope. Social support, socialization and social media were among the most significant external resources for coping strategies for refugee adolescents. Activities and enhancement of self-skills are the most important factors for personal coping with disasters and war trauma. Community help and support are also considered as essential in helping refugees to cope and adjust to a new society. The findings are valuable for educators and mental health professionals as the study highlight the coping techniques they use to deal with the war traumas and adapt in the new society.

Keywords: Syrian Adolescent Refugees, Coping Strategies, Socialization, Religious Beliefs.

Introduction

Syrian predicament has been documented as one of the most dramatic cases of displacement in human history. The seven years of Syrian conflict have broken the record, with no end in sight; half of the country's population 13.5 million are in need of humanitarian assistance. More than 5.5 million have crossed the border searching for safe shelters for their families. Most of them (4.8 million), are refugees in neighboring countries, and the rest is finding their way to other countries such as European countries, Canada, USA, and Malaysia after long journeys habitually afflicted with additional suffering. Unfortunately, 8.6 million of affected Syrian are children and adolescents (UNICEF, 2015) and about and about 2.5 million are missing out on education (USA TODAY, 2018). Syrian refugees began arriving in Malaysia in 2012 (MSRI, 2013), but there is no exact statistic that reflects the actual number of Syrian in Malaysia, as many of Syrian families adjourned their registration in UNHCR. However, the estimated total number until 2017 is 5000 (Wikipedia, 2015). But only 2900 were registered with UNHCR (UNHCR, 2018). MSRI (2013) clarified that Syrian refugees in Malaysia rely solely on the support from charitable Non- Government Organizations (NGO) are like MSRI". Happily, in 2015, the Malaysian government provided shelter and education, access to a maximum of 3,000 Syrian refugees in Malaysia, which help those parents to work legally in Malaysia as they are considered as a permanent resident in Malaysia until the end of the war in Syria (BBC News, 2015). Nonetheless, many of them refused the to apply for the Malaysian permanent residential visa, because if the war is ended they must go back to Syria. As most of them believed that their places in Syria were completely destroyed and there is no life or future in Syria after the war, and their life will be butter and their children will have a good life and future in the resettlement countries.

However, the majority of Syrian refugees' parents in Malaysia have exhausted their savings and they are increasingly challenged to find a good job with a salary that can cover their needs (Aljazeera,

2014). As many of them are working in vocationally jobs with very low salary, besides, those who are registered under UNHCR in Malaysia are not allowed to work because they are not considered as residents. Therefore, many of them are living in poverty or confronting economic hardships. Consequently, refugee adolescents are affected by their parent's situation and economic problems, and facing many challenges, not only war trauma, but also poverty, limited education opportunities, insecurity and instability. Besides, they need to adjust to the new society with a different culture, norms and language (Aljazeera, 2014). Therefore, they need to employ various coping strategies or mechanisms to overcome their catastrophic experiences and deal with their stress and adjust to their new society.

Literature Review

War Impact on Syrian Adolescent

Thousands of Syrian children have lost one or both parents, their siblings, friends, in addition losing their homes, schools, and more importantly their sense of security and stability. Sadly, instead of playing and attending school, many Syrian children have been forced to become breadwinners of their families or taken up the role of caregivers of their younger siblings. Hundreds of girls are forced to early married. Additionally, most of them suffered from malnutrition, insufficiency of shelter, education, and healthcare (VASYSR, 2017; Care Jordan, 2016; Mercy Corps, 2014; UNICEF, 2014; Siriwardhana & Stewart, 2013).

The sudden changes in people lives as they exposed to war forced to leave their homes and being refugees considered as a harmful life experience. As a result of exposed to various painful and distressing events and experiences, they are experienced number of psychological disordered and traumas (Tempany, 2009; Conley, 2001). Each of those complications posed multiple traumatic problems of refugees, particularly to children and teenagers. Several studies have established that "war is one of the most potent traumatic experiences known to man" (Solomon, Helvitz, & Zerach (2009, p. 406). Moreover, a long-term crisis would cost adolescents more than grown adults in terms of health problems, psychological issues, and loss of learning opportunities, but it could lead them to crucial psychological problems (Silove, et al., 2014; Tempany, 2009; Al-Mashat, Amundson, Buchanan & Westwood, 2006; Conley, 2001; American Psychiatric Association, DSM-5, 2013; DSM-IV-TR, 2000).

According to DSM-5 (2013), it is a misfortune that the majority of refugees have been diagnosed with one or more serious symptoms of war, namely Post Traumatic Stress Disorder (PTSD). PTSD has also been associated with grief, sleep disturbance DSM-5 (2013), it is a misfortune that the majority of refugees have been diagnosed with one or more serious symptoms of war, namely Post Traumatic Stress Disorder (PTSD). PTSD has also been associated with grief, sleep disturbance, severe anxiety, depression, avoidance and fear (Hall et al., 2014; Tempany, 2009; Al-Mashat et al., 2006; DSM-5, 2013;). Furthermore, refugees may experience isolation, death wish, humiliation, loss of identity, hopelessness, loss of meaning in life and loss of faith. Besides, sensitivity to injustice, discrimination, guilt, helplessness, hyper- arousal symptoms, and learning problems such as difficulties in understanding, focusing, and memorizing, in addition to the behavioural.

Coping Strategies

Coping is defined as the processes of reducing the stress of adverse effects and overcoming the difficulties encountered. Coping is a cognitive and behavioural effort used by individuals to manage and reduce social or environmental sources of stressors (Pahud, Kirk, Gage, & Hornblow, 2009). In other words, coping process is considered as the "pathways to resilience". The notion of coping refers to self-regulatory responses that take place in stressor-induced situations such as war, losing of beloved one, etc. Additionally, Benson, et al (2011) asserted that the teenagers' flexibility to cope with a disaster is improved during the adolescent developmental period. Furthermore, culture possesses a great implication informing the children and adolescents' disaster stressors, acceptance and coping strategies (Benson et al., 2011; Pahud et al., 2009).

Refugees and immigrants utilize various coping strategies to cope to help them to adjust and to feel adequate in the new society. Therefore, much research has been done to conceptualize coping and to explore and define the types of coping strategies people created and demonstrated to deal with their problems and hardships. Several studies were conducted to explore the coping strategies for refugees from different nations such as Bosnia, Palestine, Afghanistan, Somalia, Ethiopia... etc. Those studies found that refugees employed commonalities coping strategies, which categorized to two main factors; personal and external coping processes. A person's coping process consists of a person's beliefs, thoughts, and spiritual concerns such as personal achievements resilience, self-efficacy, and aspirations. External coping process refers to the relationship and community, such as sense of belonging, safety and freedom, and family reunification (Prati & Pietrantonio, 2009; Adelowo, 2012; Pahud et al., 2009; Goodman, 2004; Ai, Peterson, and Huang, 2003; Worthington, 2001). Studies confirmed the importance of supportive relationships, socialization, spiritual concerns, and designing of an especial intervention program for exile refugees are among the most important factor that can help refugees to obtain positive coping process, especially among traumatized refugees (Prati & Pietrantonio, 2009; Adelowo, 2012; Ali et al, 2003; Worthington, 2001). Additionally, studies proved that child's education, financial assistance, and housing are considered as the most essential community support factors for refugees coping process. Referring to adolescents, close relationships with peers, avoiding problems, ventilating feelings and religiosity are the most assigned coping strategies (Thabet, El-Buhaisi & Vostanis, 2014; Goodman, 2004)

Moreover, Goodman (2004) and Worthington (2001) emphasized on the importance of the cultural context which needs to be understood and counted when we study traumatic population and explore the coping strategies.

On the other hand, Syrian refugee studies which conducted with those who are living outside the camps in Jordan, Lebanon and Egypt showed differ coping strategies. All of those studies concluded that Syrian refugees adapted negative coping strategies to overcome the income-expenditure gaps after they exhausted their savings (VASR, 2017; 3 RP progress report 2017; Care Jordan, 2016; Mercy Corps, 2014; UNHCR, 2013; UNICEF, 2014). Those negative strategies are; receiving support from the humanitarian organizations and the host community, borrowing money from relatives, buying on credit and incurring debt, delaying rental payments, limiting number of meals or portion sizes throughout the day, selling household goods and productive assets. Moreover, reducing of essential non-food expenditures

such as education and health needs. At the same time, many of those families are resorting to child labor in order to meet the family's basic needs, increase their income, or to cut the education costs (Care Jordan, 2016). Another negative coping strategy are the girls' early marriage to reduce the family cost, as affirmed by Care Jordan (2016) the Syrian youngest married almost increased four times in 2016 than in the previous year. As a result, large percentages of Syrian refugee children have dropped out of school. Additionally, Andres-Vinas, Gorevan, Hartberg, Phillips, & Saieh (2015) study clarified that the host countries with restrictions on earning a legal income was the reason behind the adapting of negative coping strategies. However, almost all the literature about Syrian refugees are concerned more about the negative coping mechanism than the positive ones (VASR, 2017; 3 RP progress report 2017; Care Jordan, 2016; Mercy Corps, 2014; UNHCR, 2013; UNICEF, 2014).

Therefore, from the coping studies we can conclude that coping strategies developed by refugees could be negative or positive strategies. All of the Syrian refugee studies that conducted with Syrian who are living in transit countries showed negative coping, while other studies that done with refugees whose living in resettlement countries reflected positive coping strategies. This difference could be referred to the type of life the refugees lived. Thus, refugees who have just arrived in resettlement countries may cope better emotionally and are more successful in adjusting to the new society than those still living in transit countries such as the Syrian refugees in Malaysia who are waiting for their chance to move to one of the resettlement countries.

The aim of this study is to reconnoitre the impact of the traumatic events on Syrian adolescent refugees in Malaysia as well as to explore their coping strategies. As the researcher found no published study conducted with Syrian adolescent to explore the kind of coping skills that they develop to cope with their war and trauma new life (Schweitzer, Vromans, Ranke, Griffin, & Miecet, 2014). Western concepts of PTSD, intervention programs, and coping strategies may not be in coherence with any other cultural idioms of distress. Therefore, there is a need to explore the influence of culture and religion from the adolescent refugees' viewpoint and beliefs.

Methodology

This study employed a qualitative case study approach in order to obtain a comprehensive set of data for analysis.

Participants

A purposive sampling technique that includes the snowball method was utilized throughout the process of data collection. The sample was made up of 11 participants among Syrian adolescent refugees aged between 14 and 19 years old who have experienced the war while living in Syria and faced expulsion and presently. They are living in Malaysia and have been registered at UNHCR in Malaysia. Religion, socio-economic status, race, and political affiliation are not considered in the sample characteristics. Moreover, nine of participants' parents and two teachers who are also refugees and they are studying in NGOs school were also interviewed.

Research Instrument

In-depth face-to-face interviews were utilized as a data collected tool. A set of 12 open-ended and semi-structured questions were designed from the protocol that permits the respondents to provide their perceptions, points of view, and offering insights into the topic of study. The interview questions were revised by three scholars and edited by a qualified editor to ensure their correctness and accuracy. The questions were then translated into Arabic and again revised by an expert.

Research Procedure and Data Analysis

The data were collected by the researcher herself within the period of 3 months. The researcher's interview and the respondent's responses were recorded using two recording sets; Sony IC and Samsung mobile. The recorded interviews were transcribed *verbatim* into narrative text manually by the researcher.

The narrative text data organized into concepts and themes. The concepts and themes were scrutinized and grouped into categories or super themes. The extracted main ideas and conceptual themes were assessed by inter-rater readability check. Later, the major extracted themes were used to generate the study findings.

For credibility and consistency, multiple data source was employed to validate the findings that arise from the study. Consistency was initiated through the use of inter-rater reliability, which is employed to confirm the proportion of agreement among the raters. Inter-rater reliability is calculated using the Reliability Index based on the raters' evaluation of the themes. Two inter-raters were chosen from in the Faculty of Education at the International Islamic University Malaysia proficient in this area of research who developed the themes from the main ideas. On average, the two ratings combined was producing 93.21%, which is to be considered as a good reliability encouraging the undertaking of a study.

In this study, the adolescents' interests were safeguarded by ensuring informed consent signed by their parents or caretakers, and all applicable research ethics were maintained.

Findings

Before exploring the various coping strategies that emerged in this study, it is important to highlight the major problems that negatively impacted the Syrian adolescent refugees living in Malaysia. In order to determine their suffering, the participants were questioned how they are adjusted and to which extent they felt adequate in the new society. They were asked about the distress they experienced and the challenges they faced in the new society. The first and the foremost common stressor was the fact that they were away from Syria, the sorrow they felt, separated from their relatives and close friends, the loss of their community, education problems, language barriers, immobility, instability, and the financial difficulties they faced. These findings are similar to studies that done with Syrian refugees in Lebanon and Jordan (3RP progress report 2017; Care Jordan, 2016). Other problems had a lesser effect on them, such as feelings of insecurity in Malaysia, difficulties in adjusting to the Malaysian society, ethical problems such as disrespect, discrimination, and humiliation. The family could exercise a negative effect if the parents were unemployed or engaged in conflict with each other.

With regard to coping, the major themes of coping mechanisms can be divided into two central parts which are: A) **Personal coping strategies** and B) **External resources for coping**. Each one of these central themes consists of many major themes. Further explanation of those themes will be explored below.

A) **Personal coping strategy**

Three major themes that emerged which are: i) *Development of positive attitudes*; ii) *Fostering talents and activities*; iii) *Use of hope for coping*, and iv) *Spiritual coping*.

i) **Developing of positive attitudes**

Personal coping refers to the individual resources which are traits, attitudes, and beliefs. According to the interview transcripts, the participants had developed many positive attitudes and attributes, such as, for example, patience, flexibility, control of fear and sadness, and independence. They stated: “*I am a cheerful person and I laugh a lot. I laugh to forget and to be able to raise my daughter*”, “*First, to be patient, control fear and sadness*”.

ii) **Fostering talents and activities**

The participants fostered their talents by practicing and learning and tried to get involved in many activities such as sport, or creating and maintaining their own YouTube channel. They believed that these activities were helping them to have fun and to forget their problems. They narrated: “*To cope with my new life, I keep myself busy with my studies or anything all the time*”, “*I like painting and also I like dancing and singing, I use them to forget about my problems*”. Parents believed that their youngest personalities grow to maturity early as they adapt to communicate easily with people from diverse cultures, “*They’ve become more mature, they know how to accept others and adapt to them*”. Participants’ teacher supported parents’ views, as she confirmed: “*To cope, some of them have registered in the Gym or sport center and they spend long time training*”.

iii) **Use of hope for coping**

Respondents stressed the importance of hope and dreams in the process of coping as they stated: “*To adapt, I plan for my future*”, “*I’ve realized that I must help myself. So I started to set goals, for example, I decided to study to improve my English because it’s important for my future*”. The two teachers agreed with the participants that they have hope as one of them confirmed that the Syrians were always optimistic and that it was a common characteristic among them. Irrespective of where they found themselves, they could live and find their way. Additionally, he asserted that they have the hope to accomplish their future goals and they translated this fact from the effort they invested in continuing their studies. They need jobs in order to pay their school fees and even if they are home schooling, they make sure to receive high marks and better results.

iv) Spiritual coping

Eight of them confirmed that their conscious spirituality and religiosity rose significantly and became stronger after the war. At the same time, they confirmed that their religiosity helped them to cope with their all obstacles they faced after the war. More female than male participants emphasized the importance of religious and spiritual coping with the life of refugees, as they were now more committed to their religion in terms of praying and reciting and memorizing of the Holy Qur'an.

On the contrary, one male participant admitted that not only war was behind his low level of faith and his lack of commitment to religion, also the death of his father after they had come to Malaysia. He narrated: *"My spirituality went like 50% down after my father passed away. I was thinking that God wasn't with me anymore. He didn't even look at me. Even it felt like kufr"*.

B) External resources for coping

The major themes for external resources 1) *Supportive relationship*, 2) *Social media* and 3) *Seeking society support*.

1) Supportive relationship

Close relationships with family, relatives, neighbors and friends can render significant support and help the adolescents to cope with challenges and war trauma, as many studies clarified.

Likewise, loss of significant ones such as parents can change an adolescent's life completely. Only two among the respondents in this study their father passed away one year after their arrival in Malaysia, probably due to excessive stress and exhaustion as he had worked a hard job to feed his family. After his death, both participants had started working to support the family. The eldest son suffered under strong negative emotions and felt not very little hope. At the same time, he felt burdened by the great responsibility of being the bread winner of the family. This great change made his life unstable and he had a hard time trying to cope. He narrated: *"When the negative thinking has come to me, I'm just feeling like I'm so weak I can do nothing, I'm just a refugee is a stupid, who cannot continue his life, who doesn't have money, who doesn't have someone to take care of him. Sometimes I don't sleep or eat, just thinking about my life a lot of times. Sometime I feel so lonely; I don't want to talk to people"*

Respondents clarified that parents could influence their children's coping negatively or positively. One of them explained that when parents discussed problems in front of their young children, they were affected by those problems. Another participant affirmed that family relationship is very important as narrated: *"The most important thing for the refugees of my age, honestly having good family ties, because when the relationships within the family are not good, there will be more emotional problems besides the alienation caused by the family"*

The participants' answers showed that relatives, neighbors, and friends also played a significant role in the coping process of the adolescents, especially their Arab neighborhood. This extended circle of caring adults greatly supported the adolescent refugees' ability of adjustment in the new society. They shared: *"There are also some good neighbors who help us to get adapted. I feel a little bit more accepted because we are living with Arabs. I feel like I'm back in Syria. I see older women as my aunts. They make me feel at home"*.

However, none of the male participant mentioned their neighbors and instead They focused on their friends whom they thought played a significant role in coping and adjusting. Similarly, the female participants had the same opinion about the importance of friends and relatives, as one stated: *"I socialize more to get adapted. It's important for refugees make friends to help him to stop feeling lonely"*. Parents and teachers as well affirmed that they and their children were coping in this society mainly because of their friends and their Arab neighbors and the other Arabs they got to know here. They shared: *"Thanks to Allah, He who grants us with good and kind neighbors around us, and that's the only thing that makes us feel comfortable and accepted in this country"*. Unfortunately, most of the parents believed that their ignorance of the Malay language was barring them from dealing with Malaysians.

2) Social media

Social media such as WhatsApp, Facebook, free chatting and free calls like IMO and WeChat has a significant positive impact on the Syrian adolescent refugee's life. They repeatedly mentioned that the most important thing was to be able to communicate with their relatives who were still in Syria or those who had moved to other countries *"I've expanded my social media communication widely, that's most important. I occupy my time completely by connecting with my friends through Facebook and WhatsApp"*. Both teachers agreed with the participants about their heavy reliance on social media to keep connected with their relative and making new friends. However, teachers believed that social media bear both positive and negative effects, because it has a negative impact on their study.

3) Seeking social support

Social support is divided into two main parts which are psychological or well-being support and material support. Refugees are facing many challenges such as poverty and unemployment.

Almost all of the participants kept repeating that they felt alienated or cut off from their homeland, sad, and lonely. They mentioned: *I'm in pain, isolated and separated from my homeland. Anyone who lives as a refugee like us, will have the same feeling.* Another participant felt suffering as she mentioned *"There are so, so many psychological effects that can't be treated easily" I'm suffering as a refugee.* Additionally, their teachers agreed with their Syrian students as they clarified that they are suffering from war trauma and are psychologically unstable. Thus, focusing on the psychological and mental treatment of the refugees was in the teacher's opinion more important than their education. She narrated: *"Mental and psychological stability is more important and essential than education"*.

Therefore, believed that they need support in many aspects to improve their well-being and life to adjust in the new society. They share their needs and give some suggestions for intervention to improve their lives. They asserted in the need for psychological intervention and social activities to help them to adjust to the new society. Besides, the material support which includes financial support and education as one of the participants summarized their needs: *"As a refugee, he's just starting his life from scratch. He needs a lot of help in many aspects, social, humanitarian, psychological, and financial. Anyone who can help should contribute. It is very necessary to help them. People should put themselves in the shoes of these refugees"*.

Commonly, all of the participants were seeking a sense of belonging, respect and acceptance. They confirmed: *"Emotional stability is another thing. So, feeling safe and feeling that society respects him. To feel that you have a value and you exist, and feeling that the society in which you live respects you are important"*, *"People should make refugee feel that he's not a refugee but give him the sense of belonging"*. In addition, another respondent supported the idea and suggested a solution by stating: *"School activities and some trips, to make them feel positive, we need something to change us. Like give us some happiness, or some positive thinking.* Teachers and parents confirmed that family and society possessed the moral responsibility towards those children and adolescent refugee. One of the teachers explained: *"to reduce the students' negative pressure, they need to engage positively in the community as much as possible"*

Substantially, they repeated that financial help, education and jobs for them or for their parents constituted their most indeed needs. They stated: *"First, is to live in peace and find a job, then education is very important. If the country offered job opportunities, that would be amazing. Also maybe financial aid"*. Another one said *"For me, and refugees in my age the first thing is education and entertainment in the first place, the third need is security"*. Some parents believed that if their children's future was secure here in Malaysia by providing them with schools and accepting them at the universities, in fact, that all what they need and they won't have to think of travelling to resettlement countries. One of them stated: *"For example, if they will give discounts of the college fees for refugee students, we'd stay here until our own country's situation has become stable and we won't think about travelling to resettlement countries"*. Teachers emphasized more in providing especial schools for Syrian refugees, as one stated:

“To establish a school for Syrian students are most important, to gather all Syrian students in one environment, this is a substantial factor to help them to achieve their future goals and to have hope”.

Discussions

Successful coping constitutes the ability of the individual to manage and reduce social or environmental sources of stressors (Adelowo, 2012). As the coping process is considered the ‘pathways to resilience’, the adolescents’ flexibility to cope with a disaster is improved during the adolescent developmental period (Benson et al., 2011). Almost all coping studies duplicated each other and have almost the same findings (Adelowo, 2015; 2012; Prati & Pietrantonio, 2013; Pahud et al., 2009; Goodman, 2004; Ai et al., 2003; Worthington, 2001). The findings of all these studies are found to be congruent with the present study’s findings involving Syrian adolescent refugee population. Therefore, it can be concluded that religiosity, socialization, community support constitutes highly significant adjustment and coping themes devised by refugees and immigrants in general, irrespective of the population’s age, gender, cultural and religious background (Thabet et al., 2014; Prati & Pietrantonio, 2013; Adelowo, 2015; 2012; Pahud et al., 2009; Haffey, 2006; Feder, 2005; Goodman, 2004; Parkins, 2004; Worthington, 2001). Similar to Adelowo (2012), Goodman (2004), and Worthington (2001) studies that investigated the coping mechanisms of Bosnians and Sudanese refugees who had been exposed to war and resettled in the USA, the two major factors of the coping process are found to be the personal coping process (positive attitudes such as hope and optimism as well as spiritual coping) and the external coping process (supportive relationships and community help). So the current study duplicated the coping strategies that emerged from those two studies.

Likewise, this study replicated the findings of Ai et al. (2003) as both asserting on the importance of parental and community support and encouragement which play a significant role in the coping process. It is important to clarify that Ai et al. (2003) study is considered as one of the earliest studies that investigated the coping strategies of Muslim refugees and the influence of religion on their attitudes. The current study considered as one of the first studies that investigated Muslim Syrian refugees coping strategies. Their findings can help explain the reasons behind the Syrian refugees’ negative adjustment in Malaysia, as the study revealed that lower education levels were negatively correlated with the religious coping.

On the other hand, the results of this study are contradicted with negative coping mechanisms that employed by Syrian refugees who are living outside camping in Lebanon, Jordan and Egypt at the present time (VASR, 2017; 3 RP progress report 2017; Care Jordan, 2016; Mercy Corps, 2014; UNHCR, 2013; UNICEF, 2014). Even though Syrian refugees who participated in this study are living an unstable life in transit country (Malaysia) similar to those who are living outside the camping in Lebanon, Jordan and Egypt. This finding could be referred to many reasons, for example, this study employed adolescent sample, while most of the studies with Syrian refugees were conducted with adult.

Another reason might be snapped back to the families’ economic situation, parents’ education, and the opportunities that offered to refugees in the shuttled country, for instance, Malaysian economic and job opportunities are far better than that found in Lebanon or Jordan. Another reason, the number of refugees and particularly the Syrian refugees in Malaysia are vastly small in comparison with those in Jordan or Lebanon. However, all studies about Syrian refugee population are commonly insisting on their need for communities’ assistances and support, offering education chances for their children, and financial support or jobs for the parents.

Socialization and supportive relationship considered as significant coping strategies for Syrian adolescent refugees, and their parents as well as their teacher. As known Syrian refugees come from a collectivist society in which children and adolescents are nurtured and grown in small and extended families which means that their life is connected and influenced greatly by the society’s culture and norms. This interaction influences their attitudes, perception, future plans and hope. Accordingly, using of ecological system as a framework in order to study this population could help create an applicable method for working with refugee and immigrant adolescents who have come from similar collectivist

societies. Additionally, this study discovered that family and community support can be supportive and protective to adolescent or can become a risk factor that lead to negative outcomes. Risk factor, that caused from an ongoing stressor for adolescence as a result of an inability of parents to meet their basic needs such as food, and school.

Social media such as Facebook, Twitter, and free video calls were playing a substantial role in the coping process utilized by Syrian adolescent refugees in Malaysia. These factors were not emerged in most of the previous studies, maybe because of their time social media was not familiar and available to all like the present time. In fact, all present studies that carried out using adolescent population clarified the significant role of media in all of their life aspects

such as education, entertainment, and socialization. Making friends and hung out with friend also considered a common feature for youth development span, and this fact was significantly appeared in the present study as the respondents believed that it as one of the most important.

Conclusion

In conclusion, the research question four concerned the *coping strategies* among Syrian adolescent refugees. The participants clarified that there were two main parts to develop coping strategies, the first part related to the individual personality, such as personality, belief, spirituality and religiosity, and the second part related to external coping including socialization, media socialization and social help. The participants saw more potential in the social life and the society. They were spending long hours socializing since they need to feel connected with their families and relatives as they had been while still living in Syria. Since the Syrians had grown up in a collective society, they entertained close ties with their extended family members. Moreover, they asserted that spirituality and socialization were a very important factor in coping and overcoming their war experiences and also important in accepting and adjusting to their new life. Parents and teachers supported the participants' views about their importance of socialization and media in the adolescents' life and also confirmed the role of the society in helping them to cope with their trauma.

Limitation and future researches

Part of any research work of the discussion of its limitations that deserve to be highlighted. To begin with, the sample for this study was limited to a group of Syrian adolescent refugees residing in Malaysia, and thus the findings cannot be generalized to include all Syrian adolescent refugees, neither those in Malaysia nor those living in refugee camps in other parts of the world. Secondly, the information gathered on the participants' based on their own personal perceptions and beliefs. It is possible that a mixed method would have better suited this type of inquiry. Furthermore, the conceptualization and certain generated themes about coping that have been revealed in this study may be transferable and applicable to other populations, particularly Arab populations. Since most Arabs share similar cultures, traditions and belief systems, the findings can be directly applied to other Syrian and Arab refugees and immigrants in different counties. Thus, it is recommended to Expand the research into other Syrian adolescent refugees in other countries such as Lebanon, Egypt and Jordan explored the similarities and differences in the coping strategies. Likewise, to conduct comparative research between other Syrian adolescent refugees who live in camps and those living in transit countries to survey the similarities and differences in their coping strategies. Additionally, there is a need for more studies to conceptualize instruments to assess the impact of coping and to create intervention and treatment therapy programs based on attitudes, morality and ethics of the sample.

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BEHAVIOR AND MARKETING MIX FACTORS INFLUENCE TO USE SHELL PETROL STATION SERVICES IN UDON THANI PROVINCE THAILAND

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Abstract: The purposes of this study were behavior and marketing mix factors influence to use shell petrol station services in Udon Thani province Thailand. A sample was selected from 400 people was used for data analysis data was analyzed using descriptive statistics such as the frequency, percentage, mean, and standard deviation and also inference statistics in an independent sample T-Test for comparing the different of two groups of sample and then One-way Anova or F-test for testing the difference more than two groups. The findings indicated that the majority of respondents were male, aged between 21-30 years, which the average income was 10,001-20,000 Thai Baht per month. The reasons of choosing was traveled, convenience and quality. They were using between 6- 10 am and 5 pm. Overall, respondents were satisfied with the marketing mix service at a high level. When considering the list as they found that the respondents were satisfied with most of the products, price, place, promotion, process, personnel, performance and quality of service including physical

Keywords: Behavior, Marketing Mix, Shell petrol station services

Introduction.

Oil or petroleum that got from fossils and plants was wastefully flue which pumped out the underground and passed the processed by used high-temperature and became the products such as gasoline. Diesel, jet fuel, gas, liquefied petroleum gas, kerosene, fuel oil,) Petroleum Authority of Thailand, 2560), the products would able more benefits direct and indirect and the quality will have been developing every time for improving technology in the automobile industrials that they achievements and always develops oil quality to highest volume . On behalf of the leader global fuel technology Shell Thailand had to research and development oil continually by co-operated with global partnerships. On the other hand PTT, PT, Bangchak, Esso and Caltex, they had a role in the petroleum and chemical industries in Thailand.

Oil was a really important resource because related to our daily life, such as traveled, transportations, productions, consumer goods, industrial, and services because the customers expect best services, so petrol station are important to provide what consumers needed. Shell Thailand the one of expert about oil and petrol station services in Thailand. In the situation that the oil market has many competitors which affected to petrol station ,so the entrepreneurs should focus on the expedite of creating strategies, especially high quality products including with the place enough to the consumers, create promotions, personnel and the quality of service. In order to be adapting quickly and gained the

advantages over other competitors. One of the most important factors that helped accomplishment in business was selecting the appropriated model of proceeds meant to extend business strategy and another thing was creating point of sale such as area creating promotion.

As everyone know, the petrol station services have more competitors, but we also keep the customers and adding new customers' data because it's been important to the business, so the researchers studied the behavior and marketing mix factors that influence they used of the Shell petrol station services. Shell Company of Thailand Co., Ltd. in Udon Thani) would be a guideline to developing quality and service to consumers. The most importantly, we could bring our strategies to handle with oil market and respond to the consumers needed.

Objectives.

1. Studies the personal factors used Shell petrol station services in Udon Thani
2. Studies the consumer behavior that they used Shell petrol station services in Udon Thani
3. Studies the marketing mix factors influence to use Shell petrol station services in Udon Thani

Scope of the Research.

A quantitative research tool was used to collect data from the Shell Oil Station in Udon Thani by surveying the sample. The questionnaire was used to examine the users of the Shell Oil Station at that time.

Literature Review.

Literature review the consumer's behavior survey means investigate the consumer) Searching (, Purchasing, Using, Evaluating and Expense in the term of products and what service that made the consumer get satisfied. (Schiffman & wisenblit, 2015)

Macdonald & Wilson (2016) Marketing mixed using the marketing tools in accordance with information processing for motivating consumers would attend.

Kapoor, Raul and Halder (2011) services is process that consumer used services. We always offer the best service to all consumers around the world by our professional provider and also offered benefits services not only keeping but we also improve the quality for made them felt convenience and really impress.

Schiffman & wisenblit (2015) the process would be have been element for consumer decided by himself and they consider physical such as learning, perception, personality and attitudes will affect to decision making for selecting and evaluation before decision.

Research Methodology.

1. The sample were people who came in to use the Shell petrol station services at that time the total is 384 people. For easier to evaluating and analyzing data the researcher applied sample totally 400 people which followed the regulation and conditions not less than 384 refers to Taro Yamane formula with reliability level 95 % and determined incorrect but could accepted .05.

2. The tools for researching were closed-ended questionnaire divided by 3 sections;
Section 1: Checklist items answered about personal information of each other included with age, salary, education and career.

Sections 2: The questions asked about the behavior of each person in a specific area they were using shell petrol satiation service in Udon Thani.

Sections 3: The data related with strategies and had influenced to choose services to consumers.

Research tool.

The researchers had been created the method how to cover the data for the following below.

1. Learning and finding the documents, research, text, content, website and supporting reference.
2. Created full specification information data sheet and consulted with professor for recheck and got some advised for amendment to suit with our objectives.
3. Submitted to professor for correcting greatly again before started to do.
4. Started to examine for finding the average of reliability of data by tryout with 30 samples and followed the method of Cronbach's Alpha Coefficient. We got the reliability result total .835
5. Bring all passed the questionnaire to reviewed and then applied to sample with 400 sampling.

Statistics used to analyze data.

After we collected all of completed information the researcher would put coding on SPSS programs and calculating the statistics of analysis for the following data.

5.1 Descriptive statistics we were applying for separating the frequency, percentage, means and standard deviation are used to describe the questionnaire and behaviors.

5.2 Inferential statistics use in test hypotheses in research to concluding citations for study populations and information in the questionnaire related with satisfaction level.

Normally the statistical test will be relation between factors and define statistically significant correlations or not. Independent Sample T-Test for comparing the diverge between two group average and also One-way analysis of variance (One – Way Anova) or F-test to test the difference between the mean of the sample groups with more than 2 groups. If there were significant differences at .05 significance level. LSD (Least Significant Difference)

Research result.

Test results hypothesis.

Assumption 1 Age factors different that affected to marketing mix and also selection of different Shell stations summarized below.

1.1 Users different ages that they had influenced to the marketing mix and choose Shell stations was really differ from promotions were statistically significant at .05 levels.

Assumption 2 Salary factors have different that influenced to the marketing mix for selection Shell stations summarized below.

2.1 User that they were different salary and had influenced to the marketing mix for selection Shell stations, in the part of sales promotions, personnel, and physical were statistically significant at .05 levels.

Assumption 3 Educational factors had different and also affected to the marketing mix for selection Shell stations summarized below.

3.1 Users that they had different educations levels and affected to the marketing mix for selection Shell was different in the part of products, place, sales promotion and physical were statistically significant at .05 levels.

Assumption 4 Occupation factors had different and also affected to the marketing mix for selection Shell stations resulted below.

4.1 Users that they were many different occupation and affected to the marketing mix for selection Shell stations was different in the part of products, sales promotion were statistically significant at .05 levels.

Discussion of results.

As observation in behavioral section that inductive to Shell petrol station services in Udon Thani. The users really satisfied with convenience. Later, it was found that the customers frequently refuel at the gas station. Likewise, those who influence the decision to option for the gas station it's was themselves. The customers also have the optional to pay for gas station services the cost between 501 - 1,000 Baht, users would be use the services station at 17.01 hours or more and the user had to use the services station from 1-5 times per month. Based on this data, Kotler (2012) had commented that it's was a study of consumers behavior, individuals and organizations. Use the products or service, or choose from the experience.

From our studied the marketing mix factors, the service had influenced with Shell petrol station services in Udon Thani. We found that genders not different to the marketing mix but ages were differential in the parts of sales promotion and the salary also different in the part of sales promotion, personnel, and physical. We also had the status were different amount sales promotion and efficient. Refer to previously according to Macdonald & Wilson (2016), marketing mix we could use the strategies in the right objectives and also agreeable to data proceed for motivation or encouragement the consumers to interested and more over A.StoneMarilyn& John Desmond (2007) said that the marketing mix it helped us decision that involved with the way of marketing mix element for setting up the cost of products, promotions, place and distribution channel such as when we needed to ensure about our champagnes to supporting promotion and also would apply technique for checking our efficient after we examined the market.

Based on the hypothesis testing, the researcher found about used petrol stations service. Chiratttha Moayadee)2013) told us about the most affected to the consumer would select used petrol stations and the issue of PTT, in Lampung province she found that the consumers often selected convenience fist means 3-4 time of each month and overall the consumers were impress with service level on the other hand we able created strengths points and also adopted weakness points reference to Eric Riedel (2017) Marketing Strategies to enhance profitability among international oil gas services said that the best services able to adding more benefits to organization according to Panupong Wongsas)2011) said that the marketing strategy and strategies management able to increase the retail market business performance of fuel service stations in case of Bangchak Petroleum Public Company Limited. Growth strategies by using the products she found, strategies business-level and duties of strategies was creating defensive point for added value of the products.

Suggestion

Suggested Research.

1. From our studied behavior had influenced to use Shell petrol station services in Udon Thani. Found that conscience, comfortable, overpass, owner, cash, 501- 1,000 bath, at 17.01, 1-5 or each month which of each role were impressed, the researcher had comment that we should have crating promotion in section of voucher like when consumer came to fuel the gas we would give café voucher to them and also free car wash. The period consumers not quite mush such as 10.01- 12.00 and 12.00-15.00 we might launch champagne or announced new released information example free car maintenance, food vouchers for motivate consumers wanted to use our service.

2. Marketing strategies factors into selection Shell petrol station services in UdonThaniThani. Products was highest level of satisfaction as the products had reliability, well-timed, products reputation, variety products the researcher commented that should keep standard also more developing.

Price was a high level of satisfaction in the second order. The service fee is clear, charge by credit card, faire price, the researcher commented that price also higher than the competitor which may be used by the customer to use the competitor's petrol station, so he or she may be able to give discounted fuel surcharge to buy a coffee or discount check car maintain for increasing the satisfaction of the consumers.

Physical was a high level of satisfaction in the third order because they had big label, fantastic interior and appropriate uniforms, unique, clean spacious and modern but the researcher commented told us that In the field of decoration, spacious and clean was minimum satisfaction because Shell petrol station services in Udon Thani should be keep clean of car wash and car maintenance room.

Process was a high level of satisfaction in the fourth order which had queue, appropriate service order, quickly to provide consumers but the researcher commented Shell petrol station services in Udon Thani would have training staff for make sure they ready to serve our consumers.

Place was a high level of satisfaction in the fourth order which had may channel to pay, cleaning areas, enough car parking, located easy to find and comfortable. The researcher commented might lift up more clean for consumes happy to see all clean.

Personnel was a high level of satisfaction in the sixth order as staff knowing about products, always took care consumers, staff always smiled but staff not enough because consumers they couldn't wait to long time.

The efficient and quality of services was a high level of satisfaction in the seventh order which Shell petrol station services in Udon Thani used high standard equipment, handle issue very well, but sometimes might set training about how to use equipment for recheck staff didn't forgot the way to use is.

Promotions was a high level of satisfaction in the eight order which the part of advertisements, Announcements via variety channel, activities that make relationship with consumers, give discount, but which Shell petrol station services in Udon Thani would expand public relations for getting connection to new comer consumers to know about activities or promotions.

Suggestions for the next study

1. Suggestions for the next study1.In this study, there was scope for studying of customers who came to Shell petrol station services in Udon Thani. The data is not wide enough. Therefore, in the next study, those who had similar subjects should study more samples. The questionnaire was collected in other provinces for further analysis

2. The behavior and marketing mix factors influence to used Shell petrol station services in UdonThani should be studies and comparing with other petrol station for collecting and correct the data of marketing plan, marketing strategies and developed in overall to get the efficiency and also improved as well as the most effective to users and visitors.

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USE OF BANKING IN ONLINE TRANSACTIONS A CASE STUDY OF ACEH PROVINCE

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Abstract: *The objective of this study is to analyze the use of banking in online transactions in Aceh Province. Three regencies were purposively selected in this study, Banda Aceh, Aceh Barat, and Lhokseumawe. The regencies were selected because they can be reached via a direct flight from Medan, a major city in Indonesia. 400 respondents were randomly selected from these districts. There were 161 respondents from Banda Aceh, 113 from Lhokseumawe, and 126 from Aceh Barat. A logistic model was utilized in the study. The results show that income and education were statistically and positively significant factors in determining banking usage, while other variables were not statistically significant.*

Type of Paper: Empirical Research

Keywords: *online transaction, digital economy, use of banking, Aceh, Indonesia.*

Introduction

Recently, online transactions have become very important in the digital economy. To support online transactions in the digital economy, a fast medium of payment is needed. Fast payments are possible if households in Aceh use a banking payment system. This means use of banking is an interesting topic in Aceh because Aceh implements a Sharia system, as stated in Act 11/2006, which concerns Aceh's Government.

In modern systems, banking plays a significant role in supporting both the economy as a whole and the digital economy. Transaction processes are easier and faster in modern banking payment systems. If a society uses banking in their transactions, this means that the society has adopted the use of banking to a greater degree. In developed countries, even synthetic money is used in the economy as a medium of payment. Selgin (2015) states that synthetic money use is significant in the modern world economy, including the digital economy (Junaidi and Sfenrianto. 2015). This modern payment system has the important role of promoting online transactions. Online transactions are very important to the economy of Indonesia. Online transactions contributed a total of USD 0.56 billion to the economy in 2011, a sum which increased by 6.39 percent to a total of USD 1.04 billion in 2012 (Hutagalung, 2015). Bayero (2015) revealed that awareness, user value, infrastructure are important factors in financial inclusion.

The work of Fadoju, et al., (2018) and Malaquiasa et al., (2018) show that information and communication technology have significant effect on digitalization of business processes including banking transactions. The banking transaction in the digital era such as Automated Teller Machines, Internet (Web) Transactions, Mobile Payments, Instant Payments, Electronic Fund Transfer, Point of Sales (POS), and Automated Cheque Clearing and e-Bills Pay.

Szopiński (2016) analyzes banking use in Poland nonparametric statistics and linear regression model shows that possession of other bank account, trust in commercial banks, age, education, use of internet exert, and income have effect on online banking in Poland. Meanwhile, the study of George (2018) that uses structural equation model in Kerala shows that perceived ease of use and perceived

usefulness have significant role in determining internet banking. Furthermore, Afshan and Sharif (2016) proves that task technology, initial trusts, and facilitating condition have significant role in mobile banking in Pakistan.

The increase in the use of synthetic money in the digital economy (including online transactions) was determined by consumers' income level. Consumers with high income levels are more likely to use banking payment systems, which reduces time consumed in digital transactions. Meanwhile, modern banking system provides modern digital transaction system to optimize time use in banking. This means that time is very important in a modern digital economy. Some people use synthetic money in their payment systems. The increase in synthetic money means that banking use is very high (Rousseau and D'Onofrio, 2013). Presthusa and O'Malley (2017) find two groups of existing user and non-user bitcoin as digital money where existing user motivated by technological curiosity and not by monetary incentives or external influences. This means that technological factor is important in digital money. However, as it is a developing country, synthetic money is not widely used in Indonesia. So, the use of banking in Indonesia, especially in Aceh, is an interesting topic for study because some people still use non-banking payments in their online transactions. Because of this, this study examines the use of banking in Aceh Province.

Literature Review

Several studies about internet banking have been done such as Daneshgadeha and Yıldırım (2014) analyzed factor affecting internet bankin usage in Turkey by using structural equation modeling (SEM). They found that costumers prefere to use internet banking in Turkey because it is usefull and easy to use. This means that usefullnes and easiness are important factors affecting internet banking. However, Takieddine and Sun (2015) showed in their study that internet access has huge disparity hence has difficulty in internet banking development.

Laukkanen (2016) explored why some consumers reject or accept the internet and mobile banking in Finland using binary logit model where five adoption barrier variable adopted in the study (usage, value, risk, tradition, and image) and demographic variables (gender, age, and income). He found that usage barrier is not an issue influencing consumer adoption/rejection decisions in internet and mobile banking. Furthermore, younger people are more likely to adopt internet banking than their older counterparts. In addition, the study of Sokołowska (2015) showed that customers see the need for more innovative payment solutions. Internet and online banking systems are the choice as innovative payment. However, Arango et al., (2015) found that consumers use cash because it is easy to use and widely accepted. However, the effects of credit card rewards plans induce substitution away from not only cash but debit cards. This result was supported by the finding of Stavins (2018), cash discount has effect on payment choices. The reward has also significant role in determining payment choices (Ching and Hayashi, 2010).

Advanced payment systems have effects of e-commerce mobile shopping in the recent years. This is supported by the work of Huang et al., (2016) that analyzed web and mobile shopping channels in China. The study showed that the adoption of the mobile channel, the purchases on the web channel, and at the same time the consumers' purchases increased overall, suggesting that the positive synergy effect of the new channel overrode the negative cannibalization effect. Meanwhile, Simon et al., (2010) found that participation in a loyalty program and access to an interest-free period tend to increase credit card use and substitution from cash and debit cards differs according to the price incentive.

The analysis of banking usage is more appropriate logic model. For example, Liébana-Cabanillasa and Lara-Rubio (2017) concluded that the most significant factors in the logistic regression model regarding the intention to use of mobile payment systems. This means that logit model is more suitable in analyzing payment choices. The same model was utilized by Ataya & Apak (2013) in analyzing the effect of income in internet banking usage. According to these studies, this paper uses the same model because logic model is the most appropriate model in choice modelling.

Research Methodology

Data

There are three regencies that were selected as sample sites because they are accessible by a direct flight from Medan, a major city on Sumatra. The respondents from the regencies were selected proportionately, based on the number of households in the respective regencies. The regencies selected also represent the capital of Aceh (Banda Aceh), the western region of Aceh (Aceh Barat) and the eastern region of Aceh (Lhokseumawe). The number of samples were calculated using the Slovin formula (Tejada and Punzalan, 2012):

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

The margin of error was set at a 5 percent level, with a confidence level of 95 percent. The number of samples from the regencies are presented in Table 1.

Table 1. Household and Samples

No.	Regencies	Households	Sample Size
1.	Banda Aceh	62,774	161
2.	Lhokseumawe	44,165	113
3.	Aceh Barat	49,050	126
Samples		155,989	400

Source: Badan Pusat Statistik (Statistic Board of Aceh), Aceh Dalam Angka (Aceh in Figures) 2017.

Households were randomly chosen from the regencies to be respondents in this study. This means that every household had the same chance to be chosen as a sample.

Model

As mentioned before, the study analyzes the use of banking in online transactions in Aceh. Based on this, the logistic model is most suitable for this study. There are four independent variables in the study: income, educational level, family size, and age. The dependent variable is the use of banking. The formula of the logistic model is:

$$B = \beta_1 + \beta_2 Y + \beta_3 E + F + \beta_5 A + \beta_6 A^2 + \varepsilon \quad (2)$$

The income examined in the study (**Y**) refers to monthly income in Indonesian rupiah (IDR). The educational level (**E**) refers to years of schooling. Age (**A**) represents respondents' age in years. Banking use (**B**) is a dichotomous variable, with a value of 1 when respondents utilized banking and 0 for otherwise. This means that if the respondents used another payment system, such as cashier, merchandise, or transfer, this value is represented by **0** in the model. The same model is also used by Serener (2016) where used several variables in his study such as age, income, gender, education, and marital status.

Results and Discussion

Statistics

The number of respondents who conducted online transactions varied among the regencies. Banda Aceh is more developed in online transactions. 92.55 percent of respondents in Banda Aceh reported engaging in online transactions, compared to 62.70 percent in Aceh Barat and 86.73 percent in Lhokseumawe. There were still respondents that did not engage in online transactions. The fewest respondents not engaged in online transactions were found in Banda Aceh. This is reasonable because this regency is more developed compared to other regencies. The least developed regency is Aceh Barat, where 37.30 percent of respondents reported not conducting online transactions (see Table 2 for more details).

Table 2 Respondents' Online Transactions

Online Transaction	Regencies (%)		
	Banda Aceh	Lhokseumawe	Aceh Barat
Yes	92.55	86.73	62.70
No	7.45	13.27	37.20

Source: Field research, 2018.

Meanwhile, 78.22 percent of respondents in Banda Aceh reported using banking payment systems in their online transaction payments, compared to 69.03 percent and 63.49 percent for Lhokseumawe and Aceh Barat, respectively. These figures explain that banking use is relatively low in Aceh Barat and Lhokseumawe. On average, 70.25 percent of payments in this area were done via banking systems, while nonbanking payment systems accounted for about 5.44 percent (See Table 3).

Table 3 Payment System of Online Transactions

Payment System	Regencies (%)			Average (%)
	Banda Aceh	Lhokseumawe	Aceh Barat	
Banking	78.22	69.03	63.49	70.25
Nonbanking	4.39	7.96	3.97	5.44
Non-online	17.39	23.01	32.54	24.31

Source: Field research, 2018.

Table 3 shows that banking system payments in Banda Aceh were more frequent than in other regencies, and therefore also above average. This means that adoption of banking systems is more developed in Banda Aceh than in other regencies. Meanwhile, non-online payments were more frequent in Aceh Barat than in other regencies, which is therefore above the regency average in non-online payments. Based on this data, there is a good opportunity to increase online transactions in Aceh Barat and Lhokseumawe.

Use of Banking

According to Table 4, which shows the estimated logistic model, there were two variables with a positive and significant effect: income and education. All other variables had no statistically significant effects. This means that, if income increases by 1 unit, then banking use increases by a factor of 1.099. Meanwhile, if education increases by 1 unit, then the use of banking increases by a factor of 1.134, *ceteris paribus*. This study almost similar to the study of Ataya and Apak (2013) where GDP as positive and significant effect on internet banking both in European and China. This study is inline with the study of Juwaheer et al., (2012) where income and education have significant effect on internet banking.

Table 4 Estimated Logistic Model

Variable	Coefficients	SE	Wlad	df	Sig.	Exp(coefficient)
Constant	-4.433	0.966	12.618	1	0.000	0.032
Income	0.095	0.033	8.245	1	0.004	1.099
Education	0.126	0.058	4.703	1	0.030	1.134
Family Size	0.057	0.059	0.931	1	0.335	1.059
Age	-0.075	0.154	0.238	1	0.626	0.928

Source: field research, 2018.

Based on the results of the study, education is the most important factor affecting the use of banking, followed by income. This means that education plays an important role in determining banking use. The government should promote education to increase the education level of society in order to allow people to use banking in their daily activities, including online transactions. This result is consistent to the work of Gaspareniene et al., (2015) and Boateng et al., (2016).

Conclusion

Banking payment systems were relatively under-utilized in the areas studied. Some respondents reported not using banking systems in their daily activities. Furthermore, some respondents reported not engaging in online transactions, even though online transactions have many potential advantages for respondents. This study identified two variables that significantly and positively affect the use of banking: income and education. Education had the biggest effect on banking use in this study, followed by income.

Based on these findings, Bank Indonesia, in its role as a central bank in Indonesia, should encourage people to use banking services to support daily transactions, including online transactions. Bank Indonesia should ask commercial banks to assist people in utilizing banking services for daily transactions.

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IMPROVING SCHOOL ENGAGEMENT STUDENT WITH AUTISM SPECTRUM DISORDER USING FLIP-THROUGH AND FOLLOW METHOD IN SOCIAL STORY AND VISUAL SCHEDULE

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Abstract: *The aim of this study is to investigate the effectiveness of Flip-through and Follow method for students with Autism Spectrum Disorder (ASD). The research is being conducted by applying Flip-through and Follow method for students with autism to improve school engagement. School engagement is an active participation of student in the academic and non-academic area which is being assessed through behavioral, emotional and cognitive engagement. Flip-through and Follow Method is an intervention that combines social story and visual schedule. Social Story is a short story which can support individual with autism to comprehend social situations. Visual Schedule is a visual representation of a day agenda or a sequence of task or activity to be followed. Visual schedule will be tucked in the story as the social story ads information about why they should behave appropriately during school activities.*

This research is conducted using a multiple baseline design across conditions. The participant in this research is an elementary school-aged child, diagnosed with mild autism, having difficulties engaging with school activities and able to communicate verbally. The data will be collected using an observation form written by the author adjusted for school engagement for student with autism. Data will be analyzed using a descriptive statistic and Wilcoxon T Test.

The result shows that Flip-through and follow method is not entirely effective in improving school engagement. Flip-through and follow is effective in improving engagement in classroom learning activities and scout activities, however flip-through and follow is less effective in improving physical education activity.

Keywords: *autism, social story, visual schedule, school engagement*

Introduction

Autism is a neurodevelopmental disorder that is commonly called Autism Spectrum Disorder. Autism usually emerges in the first three years of life and the cause of this disorder is still unknown but genetic factor seems to contribute to this disorder (Poliakova & Palkhiwala, 2008). The number of autism spectrum disorders increased for over the past two decades. According to the data in UNESCO, throughout the world, the prevalence of individual with autism in 2011 is 6 out of 1000. Whereas according to the data in U.S Centers for Disease and Control Prevention (CDC), 1 out of 88 American children are identified with autism. This is a ten-fold increase in prevalence over the past 40 years (Autism Speaks, 2012). In Indonesia, cases of autism have increased. In 2015 According to a pediatrician named Widodo Judarwanto, it is estimated around 12.800 children with autism and 134.000 children with autism spectrum disorder in Indonesia (Jumlah Penderita Autis di Indonesia, 2015).

Autism Spectrum Disorder is a neurodevelopmental disorder characterized by difficulties in social interaction and social communication across multiple contexts as well as restricted, repetitive patterns of behavior, interests or activities. Students with autism spectrum disorder show inflexibility and compliance with certain routines that can lead to difficult behavior when making a transition. The

tendency to bring up problematic behavior during transition can cause difficulties for students with autism and for their immediate environment, such as teachers and friends (Lequia et al., 2015). Problematic behavior that is usually shown by students with autism when making a transition is disobedient behaviors, being aggressive towards teacher or other students or even tantrum to avoid changing activities. Of course these problematic behaviors are a challenge for classroom teachers because they can reduce the time for giving instruction in the classroom (Sterling-Turner & Jordan, 2007).

The major difficulty for students with autism is being actively engaged with their environment (Simpson & Myles, 1998 in Leach & Duffy, 2009). Students with autism have difficulties in following, initiating and interacting with their environment which cause them to lose the opportunity to learned (Dunlap, 1999). The researcher has observed the inclusive school which accepts students with autism and the results of the observation shows that the school does not provide facilities which can support students with autism to actively engage in class and teaching them appropriate behavior during a school activity. The results of the observation data is not accordance with the General Guidelines for Implementing Inclusive Education in Indonesia (2007) which state that materials, teaching techniques or equipment and / or special facilities are needed. Therefore a strategy that is efficient and direct is needed to accommodate students with autism so they can be actively engaged and received positive outcome in learning (Salvia & Ysseldyke, 2003 in Hart & Whalon, 2008). Strategies that could be implemented to support students with autism in school are social story and visual schedule.

Social story is a short story that contains instructions and appropriate responses that must be done in a significant social situation (Gray, 2002 in Bozkurt & Vurant, 2014). Social stories are usually used for individuals with autism spectrum disorder and are created to provide new information that must be learned or to understand a different social situation so they can function better in their environment (Gray & Garand, 1993 in Bucholz, 2011). A social story are short stories that are individual in nature and consists two to five sentences that describe the conditions in which behavior occurs, individuals involved and the appropriate behavior that must be done. If applied in an educational environment, social stories can be used as a way to improve the skills needed in a general education. The skills needed are raising hands to ask or answer a question, contributing in a class discussion and accept changes in a routine (Hart & Whalon, 2008).

Visual schedule is an intervention used by individual with autism which helps them to follow a routine, making transition from one activity to another activity, to develop new skills and to reduce dependency to caregivers during daily activities. Visual schedule consists of a sequence of activities and is presented in photograph, video, line drawings, symbols, writing or any other visual forms to show a student what must be done. The pictures are organized into sequence according to the orders that must be done (Havlik, 2017). Visual schedule is a form of structured teaching to provide information about a sequence of activities. Schedules may also contain other essentials information such as who to work with, what changes occur in that particular day, etc. Moreover, schedules could also provide reminders and rules for individuals with autism about appropriate behaviors. It is suggested that reminders could decrease verbal prompts (Howley & Arnold, 2005).

The aim of this research is to investigate the application of social story and visual schedule to improve school engagement of student with autism spectrum disorder. School engagement is an active participation in academic and non-academic activities. The aspects of school engagement consist of behavioral engagement, emotional engagement and cognitive engagement. Behavioral engagement is an involvement in a form of participation such as being involved in academic and non-academic activities (extracurricular activities) and is considered to be crucial thus to produce positive academic results. Emotional engagement includes positive and negative reactions towards teachers, classmates, schools that are associated with the willingness to complete academic tasks. Cognitive engagement is a form of effort to understand an idea and master a difficult skill (Fredricks., et all, 2004).

The researcher intends to combine social story and visual schedule to improve school engagement on students with autism spectrum disorder. The combination of social story and visual schedule is called flip-through and follow method and this method is developed by the researcher. Flip-through is a synonym of the word read and follow is a synonym of the word understands. In combination it has a meaning when a child with autism read the social story and the visual schedule, the child is expected to read, understand and follow the given information. The intention to combine social story and visual schedule together relates to the characteristics of individuals with autism which experience difficulties in social interaction causing them to experience challenges in behaving appropriately. Furthermore individuals with autism have strength in memory and the ability to use information visually (Janzen, 2003 in Schneider & Goldstein, 2010). Instead of using auditory processes, individuals with autism are able to use information meaningfully when presented in a visual form. When learning a routine, if the steps are presented in a clear order, individuals with autism could follow a routine (Schneider & Goldstein, 2010).

Social story serves as a source of information for student with autism on how to behave appropriately during school activities. Another characteristic of individual with autism is inflexibility to routines and difficulty in making transitions during activities. Visual schedule serves as a complementary strategy which contains the daily agenda so as to help them in making transition in activities. It also serves as a reminder which is expected to decrease verbal prompts. Visual schedule will be attached at the front page of the social story as a school agenda and will also be tucked inside the social story.

Method

The effect of flip-through and follow method was evaluated using multiple baseline design across conditions. Intervention was initiated under three different conditions. The conditions referred to in this design can be in the form of time dimensions, activities, teaching models, places, etc. (Koenig & Ross, 1991 in Sunanto, et al., 2005). This design only measures one target behavior in one participant to at least three different conditions. The three different conditions in this research are classroom learning activities, scout activities and physical education activities.

The participant in this research is an eight year old elementary child, diagnosed with mild autism, is not yet able to engage in school activities and is able to communicate verbally. The participant was assessed using Childhood Autism Rating Scale and DSM V Checklist by the researcher. Based on the assessment results, he has limited vocabulary, able to communicate verbally by saying one to two words but still has remnants of echolalia. He is able to comprehend simple instructions being given to him, but the instructions must be given once at a time. During lessons in class, he needs pretty much verbal prompts to do his work, to stay on his seat and to take out his books. In physical education lesson, he often does not want to join with the ongoing activities and likes to walk around the field or buy food in the school cafeteria. In scout activities, he often needs to be reminded to follow the instruction and to join the ongoing activity.

A partial interval time sampling observation form was designed by the researcher to assess the school engagement on student with autism spectrum disorder. There were six to seven target behaviors being measured in the observation form. The three activities (classroom learning activity, physical education and scout activity) have different but similar target behaviors. During data retrieval, the researcher was assisted by college colleagues. Reliability was collected during baseline and intervention phase and was calculated by dividing number of agreements by the number of agreements plus number of disagreements. According to Sattler (2002) consider a percentage agreement of 80% or above as satisfactory.

Table 1. Interobserver Agreement Classroom Learning Activities

Baseline1	Baseline 2	Baseline 3	Intervention 1	Intervention 2	Intervention 3
93.33%	86.67%	80%	93.33%	86.67%	80%

Table 2. Interobserver Agreement Scout Activities

Baseline1	Baseline 2	Baseline 3	Intervention 1	Intervention 2	Intervention 3
80%	93%	80%	86.67%	86.67%	86.67%

Table 3. Interobserver Agreement Physical Education Activities

Baseline1	Baseline 2	Baseline 3	Intervention 1	Intervention 2	Intervention 3
86.67%	86.67%	86.67%	100%	93.33%	100%

During baseline, the participant engages in the regular school activities. During intervention, an educational psychologist helped with the process of applying the flip-through and follow method. The visual schedule in the flip-through and follow method was read to the participant and continued by reciting the social story. The participant was then asked questions relevant to the stories being read. Afterwards, the participant was asked to do a role-play based on the social story being read. There were three different social stories being read to the child each week. Social story was read prior to the three activities (classroom learning activity, physical education and scout activity). After reading the story, data was collected to see the effect of the intervention on the participant.

Results

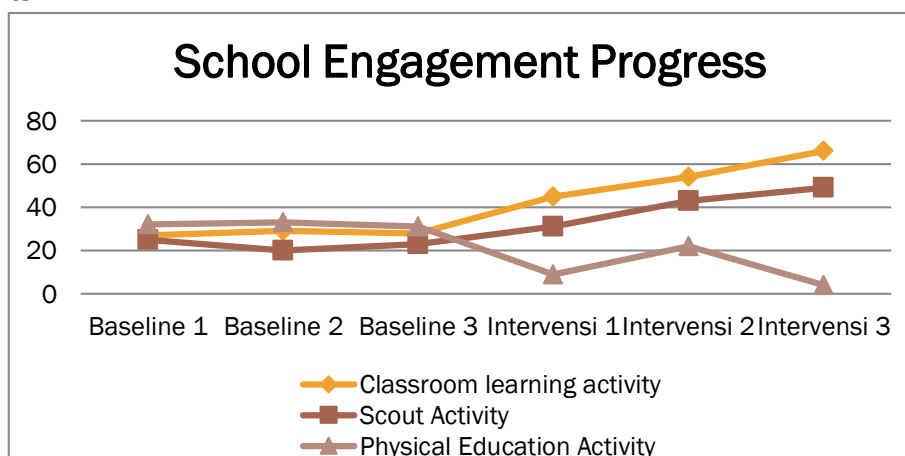


Figure 1: School Engagement Progress

Data collection was conducted from baseline stage to the intervention stage. In classroom learning activities the graph shows a tendency to increase gradually. In addition, there is also a tendency to increase gradually in scout activities. But for physical education activities, the direction of the graph shows a stable line in the baseline phase, but there is no improvement such as in classroom learning activities and scout activities. After being given an intervention in physical education activities, it showed lower results compared to the baseline phase. Based upon the three activities mentioned above (classroom learning activities, scout activities and physical education activities) it can be seen that the classroom learning activities showed considerable increase.

The descriptive statistic results showed an improvement in two school activities which are classroom learning activities and scout activities. In classroom learning activities, in the baseline phase, the score range from 27-29. After intervention the score increases. In the first session of intervention the score is 45, the second session of intervention the score is 54 and the third session of intervention the score is 66. In scout activities, in the baseline phase the score range from 20-25. After intervention the score increases. In the first session of intervention the score is 31, the second session of intervention the score is 43 and the third session of intervention the score is 49. The score of intervention results only occur in two activities only. In physical education activities, in baseline phase the score range from 31-33. After intervention, the score is unstable and decreases. In the first session of intervention, the score is 9, the second session of intervention the score is 22 and the third session of intervention the score is 4.

The researcher also analyzed the data by conducting a different test using The Wilcoxon T Test. The results showed there is a significant difference before and after intervention in classroom learning activities $p = 0.001$ ($p < 0.05$). There is also a significant difference before and after intervention in scout activities $p = 0.001$ ($p < 0.05$). Whereas in physical education activities also showed significant difference before and after intervention $p = 0.001$ ($p < 0.05$) but the significant difference is caused by the intervention score is lower than the baseline score.

Discussion

Based on the statistical analysis, flip-through and follow method is not entirely effective in improving the three activities in school engagement. Flip-through and follow is only effective in improving classroom learning activities and scout activities but less effective in improving physical education activities.

So far there has not yet been a research that examines school engagement on students with autism spectrum disorder. However there are previous researches that explore engagement on students with autism spectrum disorder through a social story intervention. The significance difference in classroom learning activities and scout activities is correspondence with the research conducted by Cihak., et all (2012) which stated social story could improve task engagement on student with autism spectrum disorder. Furthermore a research conducted by Ozdemir, et al (2008) also stated social story could also improve social engagement on students with autism spectrum disorder.

A supportive teacher is one of the supporting factors which cause improvement in engagement. The quality of relationship with teacher is an essential factor. Teachers can build a strong relationship by showing a caring and considerate attitude (Fredricks, 2011). In classroom learning activities, the homeroom teacher and the special needs teacher showed a caring attitude towards the child by giving guidance during learning in class. In scout activities, the coach also gives attention to the child.

The second supporting factor is positive relationship with peers. Each morning before the class begins, the homeroom teacher always reminds the students in the class to establish a positive attitude towards other students such as apologizing when a student did something that upset other student. The homeroom teacher also asked the other students in class to give attention to the child (the participant) by giving him constant reminders when he has not done something that is expected by teachers. For example during scout activities, his classmate helped him when he experienced difficulty when the coach asked him to fix his shirt collar. Peers can provide reinforcement and encourage a positive attitude towards school (Fredricks, 2011).

The third supportive factor is adequate management and structured classroom. There is a seating arrangement in the classroom and the child is seated in the front groups. The special need students which require extra guidance are seated together in the front group of the class. This seating arrangement helps the homeroom teacher gives attention to the special need students. The homeroom teacher and the special needs teacher always give consistent attention, guidance and reminders to the child. Moreover, the homeroom teacher also consistently applies written regulations and applies

consequences to students who violate these regulations. Teachers who have clear expectations and provide consistent responses leads the students to understand what are expected (Fredricks, 2011).

In physical education activities, the teacher did not show supportive attitudes towards the child which leads to no improvement in engagement even though intervention had been given. Besides that physical education is an outdoor activity which has many distractions that interferes with the child's concentration in following the activity such as the noise of other students who are also doing activities outside the classroom. During outdoor activities, the child can move unimpeded which cause him refusing in participating physical education activities. Students with ASD have deficits in emotional regulation, which is the ability to regulate emotion to meet the learning demands (Sparapani., et al, 2016). Deficits in emotional regulation cause the students with ASD to experience challenges in regulating their internal states for optimal levels of learning in class (Laurerent & Rubin, 2004; National Research Council, 2001 & Prizant., et al, 2006 in Sparapani., et al, 2016). It also causes difficulties tuning out irrelevant information and focusing on classroom content (Conor., et al, 2010; Ponitz., et al, 2009 & Sektnan., et al, 2010 in Sparapani., et al, 2016). All of this refers to executive function deficit which is one of the information processing theories in individuals with ASD. Children with ASD have deficits in planning and managing their behavior (Russell, 1997 in Mash & Wolfe, 2016).

Another factor underlying the cause of absence improvement in engagement in physical education activities besides unsupportive teacher is an abnormal brain development in children with ASD. Based on previous research, it has been identified there is an abnormal brain structure in the cerebellum area and in the medial temporal lobe area as well as the structure of the limbic system (Bauman & Kemper, 2005; Courchesne, et al., 2007 in Mash & Wolfe, 2016). The cerebellum, which is a part of the brain that is quite large and located near the brain stem, is often associated with motor movements. In addition, the cerebellum also plays a role in regulating emotions, language, executive functions, and the process of learning, thinking and attention (Hodge et al., 2010 in Mash & Wolfe, 2016). It was argued that abnormalities in the cerebellum area were the underlying factor that children with ASD had problems in shifting attention quickly from one stimulus to another (Courchesne, et al., 2007 in Mash & Wolfe, 2016).

Another brain abnormality also occurs in the medial temporal lobe area and the connected limbic structure system area such as the amygdala and the hippocampus (Groen, et al., 2010; Johnson, et al., 2013; Schumann & Amaral, 2009 in Mash & Wolfem 2016). The brain area is associated with functions that interfere with children with ASD, such as learning, memory and emotional regulation (Mazefsky et al., 2013 in Mash & Wolfe, 2016). Amygdala has an important role in recognizing emotions that are significant to a stimulus, oriented to social stimulus, perceptions on the direction of eye gaze along with the hippocampus which serves to store long-term memory (Schulkin, 2007 in Mash & Wolfe, 2016).

Participation and engagement in performing school activities is a form of social situation that requires social interaction ability and there are several transitions in school activities thus social story and visual schedule are implemented and is called flip-through and follow methods. Social story helps to give comprehension on how to behave appropriately in a social situation due to a deficit in social interaction in individual with ASD. Visual schedule gives information about the day agenda and helps in making transition for individual with ASD. Flip-through and follow method is implemented as a strategy of learning support to improve engagement in school. However, this intervention will not be effective without the role of a supportive teacher. Moreover, students with ASD also require directive instruction from adults. This aims to overcome the difficulties of attention and interactions found in children with ASD (Watson, 1998).

Conclusion

Based on the results, it can be concluded that flip-through and follow method is not entirely effective in improving school engagement in the three activities. Flip-through and follow is only effective improving the engagement of classroom learning and scout activities but less effective in physical education activities.

Limitations of Research

There were several difficulties found during data retrieval in this research which becomes the research limitations. Firstly, the researcher had difficulties obtaining a stable data. The baseline data for the third and second condition preferably should be more than three. Secondly, the participant had quiet difficulties in understanding the sentences used in the social story and the questions being given thus needs to be repeated in a much simpler words. Thirdly, the data could only record the target behaviors during observation session but not the participant's entire behavior form the start to the end of the activities. Fourthly, not all intervention session could be conducted in the laboratory room at Faculty of Psychology in Airlangga University due to the refusal of the participant in this study. Therefore intervention session was sometimes conducted in the school area in a less conducive condition. Fifthly, the time lag between the intervention process and the observation process after the intervention had been implemented. In physical education and scout activities, the intervention process was conducted one day before the activities. Those two activities were in the first period of the school lesson, whereas for scout activities, in the first period the participant had a pull-out session from the class by the special needs teacher.

Future Directions

For those who are willing to do a similar research about school engagement in children with ASD, there are several suggestions needs to be addressed. Firstly, a strict control for the baseline and intervention conditions by minimizing distractions. This aims to obtain a stable data in the baseline and intervention phase. Secondly, the sentences and the questions given in the social story should be suited accordance to the language ability of the participant in the study. Thirdly, the social story preferably implemented approximately an hour before the child engages in an activity. This aims to get optimum results of the intervention. Fourthly, a variety of school activities can be observed other than classroom learning, scout and physical education activities. This aims to obtain a wide range of data on the research. Fifthly, an expansion could be made in implementing the flip-through and follow methods in order to obtain more effective results in improving school engagement for children with ASD.

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ANALYSIS OF VILLAGE PROBLEMS AND CAPABILITIES BASED ON COMMUNITY DEVELOPMENT USING ANALYTICAL HIERARCHY PROCESS

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Abstract: *Economic growth is expected to be the cure for poverty and low productivity occurred in the developing countries. However there are more problems in the region that needs some interventions, beside economic problem, such as health, education and social structure. This type of research is descriptive qualitative by conducting observations to solve problems. This study tries to identify and model the empowerment of nagari communities in order to improve welfare and increase the happiness index of the nagari community through the method of Community organization / Community development using the Analytical Hierarchy Process (AHP). This research was carried out in rural / nagari areas in Nagari Panampung district IV Angkek, Kab. Agam, West Sumatra. The results of the study indicate that the fields that are the top priority for Panampuang Nagari are religion and social affairs, then the fields of health, education and economics. In addition, it is known that priority targets are increasing social awareness, improving healthy lifestyles, improving community skills and creating jobs.*

Keywords: *Community Organization, Community Development, empowerment, analytical hierarchy process.*

Introduction

Poverty and low productivity are two common problems occurred in developing countries. As a result, economic development in developing countries often focuses on these problems. Some efforts were try to attempt the productivity of a region by optimize the resources on hand. Growth is expected to open employment opportunities to improve the quality of people's lives. Subsequently, the decline in unemployment is a positive indicator because it means there will be an increase in the quality of consumption and also education.

In developing countries, there are usually unending and endless cycles caused by the limitations of small communities in meeting their life needs caused by low levels of the economy, resources, health, skills, education, facilities, and productivity. When in a new area natural resources are found, then with limited knowledge and facilities, the community will exploit these resources on a large scale and not properly managed then it will cause severe environmental and social damage. Conditions like this should not be allowed to drag on because it will increase social problems and community diseases so that it can disrupt the peace, comfort and safety of the community itself.

In order to be able to get out of this circle of poverty, assistance and cooperation from various parties is needed so that the village or Nagari communities can improve their welfare and fulfill all living needs such as the economy, health, education, entertainment and other necessities of life. Some interventions are required in almost all aspects to make them recognize their potential so they can develop their abilities, change people's behavior and organize the community well. Focusing on just one aspect,

the economy for example, will be a patchy program and not long-term. Fairbairn et al. (1991) in Zeuli and Radel (2005) explain that close cooperation of all parties is a major factor in community development because it can manage the resources that the community has well and use it for the welfare of the community itself.

One of a region that experienced all the problems discussed earlier is Nagari Panampuang, West Sumatera. The social structure of this region as seen in the Nagari Panampuang Profile in 2012 showed that the nagari's human resources were quite low, namely ± 46 , 92% of the workforce in Nagari Panampuang had the highest education in elementary schools. Likewise with community institutions that have been formed, 50% are not active. If we look at the fuel used for daily cooking activities, only $\pm 18.85\%$ use gas, while the rest use kerosene and fuel wood. However, this nagari has enormous potential to be developed. They have considerable achievements at the sub-district, district and provincial levels.

The community in Nagari must be empowered independently so that they can manage all the resources they have for mutual welfare. For this community empowerment, one method that can be done is by using community organizations / community development (COCD), also known as community organizing and development. Bracht et al in Derounian (2014) explained that a community organization is a planned process to mobilize the community to utilize its social structure and all available resources to achieve the goals of people who have a high level of welfare in accordance with their culture and values. Mendes in Tan (2009) explained that community development is directing all communities to achieve their social needs by involving all elements of the community consisting of governments, non-government organizations (NGOs), Non-Governmental Organizations (NGOs), private companies and government, institutions donors, and other institutions. With this COCD, it is expected that the community can manage the activities or programs that they develop by planning, implementing, monitoring and evaluating each of the programs they run under the supervision and guidance of the existing institutions.

This article develops the Community Empowerment model of the Community Organization / Community Development Method using analytical hierarchy processes.

Literature Review

Independent Community Empowerment

One problem that often arises in development is the imbalance in economic equality so that the income distribution is perceived by small groups of resource owners, causing and widening gaps in the community. Therefore, Moeljarto in Muslim (2007) explained that the right development strategy to be enjoyed by all people is not one that is oriented to economic growth or oriented to meeting basic needs, but a strategy that is centered on people (people centered). A human-centered strategy is a strategy that not only emphasizes economic growth and national income as well as fulfilling basic needs, but the most important is to improve the quality of human beings to make them able to significantly increase participation in various life activities so as to achieve high productivity.

Aziz et al in Defri et al. (2014) explained that community empowerment is a process in which communities, especially those who lack access to development resources, are encouraged to increase their independence in developing their lives. Community empowerment is also a continuous cycle process, a participatory process where community members work together in formal and informal groups to share knowledge and experience and try to achieve common goals. This independence results in the ability of the community to think, decide and do something that is deemed appropriate in order to reach a solution to the problems faced by using the power of the capabilities they have. Thus this empowerment will produce people who have bargaining value because they jointly manage the resources they have to achieve common goals as well. Furthermore Perkins and Zimmerman stated that empowerment-oriented interventions enhance wellness while they also aim to ameliorate problems,

provide opportunities for participants to develop knowledge and skills, and engage professionals as collaborators instead of authoritative experts (Perkins & Zimmerman, 1995).

Eko (2014) explained that there are several perspectives that can be used in understanding community empowerment, namely:

1. Empowerment seeks to place the community as the subject (agent or participant acting) who acts independently, not the object of the beneficiaries (dependents) who depend on gifts from outside parties such as the government. Furthermore, the state has the duty to provide public facilities such as health, education, housing, transportation and so on.
2. Empowerment is principally dealing with efforts to meet the needs of the community that are very scarce (scarcity) and limited (constrain). Meeting these needs is not only in the form of exploitation, but also participates in policy processes and resource management.
3. Empowerment extends from process to ideal vision. In terms of process, the community as the subject of carrying out actions or movements collectively develops potentials, strengthens the bargaining position, and gains sovereignty. Relationships between communities and outside parties are of an equal nature, mutual trust, mutual respect, openness, and mutual learning to grow together.
4. Empowerment extends from the psychological-personal level (community members) to the structural level of society collectively. Psychological-personal empowerment means developing knowledge, insight, self-esteem, ability, competence, motivation, creation, and individual self-control. Empowerment of personal structures means arousing critical awareness of individuals towards unequal socio-political structures and the capacity of individuals to analyze the environment that influences them.
5. The government and the state basically want to bring the country closer to the village community, with a framework of decentralization (autonomy) of the village, democratization of the village, village good governance and capacity building of village government.

Sulistiyani in Supatmo (2015) stated that the learning process in the context of community empowerment will take place gradually. The steps that must be passed include:

1. The stage of awareness and formation of behavior towards conscious and caring behavior so that it feels the need to increase self-capacity.
2. The capability transformation phase takes the form of knowledge insights, skills to be open to insight and the provision of basic skills so that they can take a role in development.
3. The stage of increasing intellectual ability, skill skills so that initiative and ability are formed to deliver on independence.

Community Organizing and Development

Dreie (1996) explains that currently social problems and improving economic conditions of the community are often hampered because it requires great attention and careful planning from the parties involved in community empowerment so that the results of empowerment can be enjoyed by all levels of society. This careful planning is needed so that each party knows and carries out their respective roles so that they do not lose momentum and the allocation of resources can be right on target. Community organization or community organization is an effort to mobilize the community to solve problems together so that they have a role and can determine policies related to their survival.

Bracht et al in Derounian (2014) explains that a community organization is a process that is planned to enable the community to use its own social structure and available resources to achieve their goals which are generally consistent with local attitudes and values in their midst. Minckler and Wallerstein in Derounian (2014) define a community organization as a planned process to help groups

in the community to identify their problems and goals together, mobilize resources and develop strategies to achieve these goals.

Community development (PM) or community development is often regarded as another word of community organization or community organization and is often used as a term in interchangeable community empowerment (Suharto, 2009). Furthermore, he wrote that experts such as Netting, Kettner and McMurtry; DuBois and Milley; and Suharto defined community development as a process of strengthening the community that was carried out actively and sustainably based on the principles of social justice, equal participation and cooperation. The main aim of PM is to empower individuals and groups of people through capacity building (including awareness, knowledge and skills) needed to change the quality of life in their communities. This capacity is often related to strengthening economic and political aspects through the formation of large social groups that work on a shared agenda (Suharto, 2009).

Dreie (1996) explains that community organizing encompasses various aspects of people's lives and has a broad scope, depending on the objectives of the activity which consists of issues of public safety, crime, and drugs, housing, discrimination, environmental problems and public health, economic development, work and youth training, education, urban planning, recreation and so on. An organization can focus on one problem or on several problems.

Based on Usman's opinion in Supatmo (2015), there are several strategies that can be considered to be selected and then applied in community empowerment. The first strategy is to create a climate that enables the potential of the developing community. The second strategy strengthens the power or potential (empowering) so that there is an increase in the level of education, health status, and access to sources of economic progress such as capital, employment, and markets. The third strategy is to protect weak people from becoming weaker.

Sulistiyani in Supatmo (2015) stated that the learning process in the context of community empowerment will take place gradually. The steps that must be passed include:

1. The stage of awareness and formation of behavior towards conscious and caring behavior so that it feels the need to increase self-capacity.
2. The capability transformation phase takes the form of knowledge insights, skills skills to be open to insight and the provision of basic skills so that they can take a role in development.
3. The stage of increasing intellectual ability, skill skills so that initiative and ability are formed to deliver on independence.

To make community empowerment optimal, there are several processes that must be passed. According to Adi in Mustari (2011), community participation or citizen involvement in development can be seen in 4 (four) stages, namely:

1. Assessment stage, carried out by identifying problems and resources owned. For this, the community is actively involved in seeing the problems that are happening, so that this is their own view.
2. Alternative Program or Activity Phase, carried out by involving citizens to think about the problems they face and how to overcome them by thinking of several alternative programs.
3. The Implementation Phase The implementation of the program or activity is carried out by implementing a well-planned program so that it does not deviate from its implementation in the field.

The Evaluation Phase (including evaluation of inputs, processes, and results), is carried out with the supervision of the community and officers on the ongoing program.

Analysis Hierarchy Process (AHP)

In making a decision we need to know the problem, the need and purpose of the decision, the criteria of the decision, their sub criteria, stakeholders and groups affected and the alternative actions to take (Saaty, 2008). The AHP is a theory that make comparisons among the criteria and sub criteria, relies on the judgments of experts to obtain priority scales.

More details, Saaty explains the steps in making decisions with AHP. First, define the problem and determine the kind of knowledge sought. After that, structure the decision hierarchy from the top with the goal of decision, then the objective from a broad perspective, through the intermediate levels. Then, construct a setoff pairwise comparison matrices. Each element in an upper level is used to compare the elements in the level immediately below with respect to it. Finally, use the priorities obtained from the comparisons to weigh the priorities in the level immediately below.

The Nagari Panampuang community has several problems that are explored from experts in the area. In determining the right solution to these problems, we need to first make an assessment of the priority of each problem. One method that can be used is analytic hierarchy process (AHP).

Methods

This article includes descriptive qualitative research by conducting observations to solve problems (problem solving). This study will conduct observations and surveys of community leaders in the village of Panampung to reveal the potential and resources as well as the social problems that nagari communities have and how to manage these potentials and overcome each problem by directly involving community participation in achieving common goals in accordance with their values and culture hold it together.

Data on community perceptions of the problems faced and the potential possessed are processed using analytical hierarchy processes (AHP) so as to produce priority issues that must be resolved.

The research model can be seen in Figure 1 below:

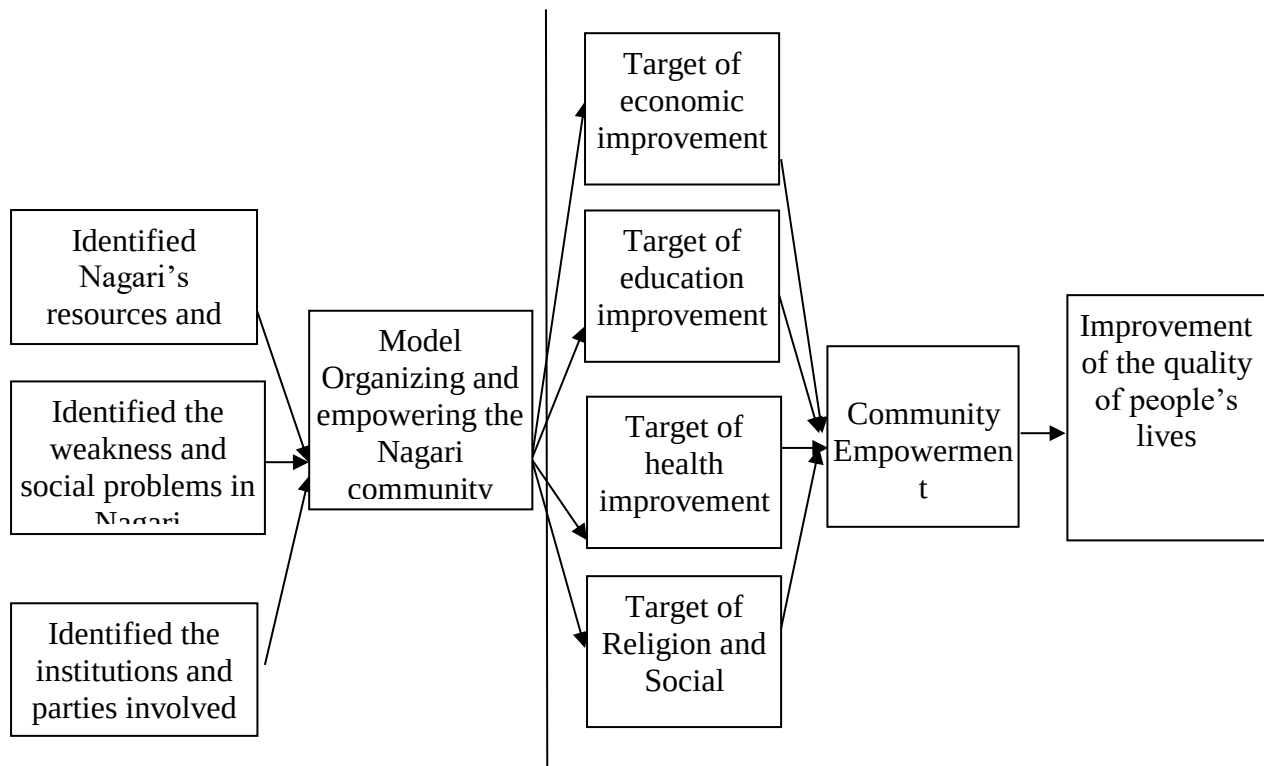


Figure 1: Research Model

Results and Discussion

In this study focused group discussions (FGDs) were conducted with a number of community representatives Nagari Panampuang in identifying social and economic problems in Nagari as well as finding solutions and future plans to solve each problem by using the potential and resources that are actively owned by the Nagari community. In conducting the FGD, in addition to an explanation by the Research Team about the aims and objectives of the activities and methodology, one of the main stages in this study was to obtain an assessment from the participants in the form of interest scores for each field, as well as analytical hierarchy process).

When the FGD was distributed questionnaires to all discussion participants totaling 13 people to determine the priority weights of the fields that were the focus of empowering Nagari Mandiri in Nagari Panampuang and the priority weights of the objectives of each field. The sample of this study was FGD participants invited by the researchers as many as 13 people. age range of FGD participants as representatives of the community where the most dominant age range is age > 30 years up to ≤40 years at 46.15 percent. This shows that most community representatives are in the age range that is psychologically mature. Furthermore, in terms of position or occupation of the community representatives, it is known that there are 4 people who are representatives of the jorong-jorong in Nagari, 3 people are Nagari devices, 2 people from the Nagari Deliberation Body (Bamus), 1 person from the element ulama Nagari (MUI) and 2 people from youth organization. Meanwhile, when viewed from the gender of the participants, it was known that the majority of participants were men with 9 people or around 70 percent and women as many as 4 or around 30 percent.

Analytical Hierarchy Process (AHP)

In concept, analytical hierarchy process (AHP) is a method of decision making in a systematic and complex manner. The purpose of AHP is to get priority in decision making. AHP analysis in research has a decision hierarchy that is focus, field and target. The focus of this research is community organization / community development, while there are 4 fields of discussion, namely the fields of economics, education, health and religion and social. Meanwhile, the objectives of each field have been formulated so that the hierarchy between focus, field and target can be described as follows:

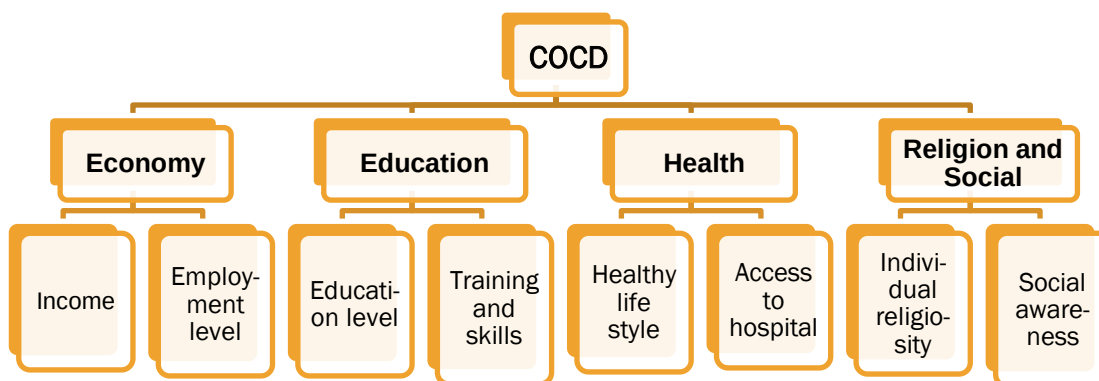


Figure 2: Hierarchy of Problems

a) Priority weight each weight

At this stage priority weights are calculated from the study fields or problems in Nagari Panampuang that need attention if they are going to build a civilized village. Based on the results of the analysis using AHP, scores were obtained for each field as shown in Table 1 below.

Table 1. Priority Weight Each Field

Criteria	Weight
Economy	0.119
Education	0.243
Health	0.218
Health and Social	0.420

Based on Table 1, it can be explained that the religious and social fields have the highest weight values. This shows that according to the Nagari community the fields of highest concern are the religious and social fields in the framework of empowering civil society. Religion and social are the main priorities with a weight of 0.420, followed by education with a weight of 0.243, health with a weight of 0.218 and an economy of 0.119.

b) Weight of objectives priority for each Field

The targets in the economic field consist of (1) increasing income, (2) increasing employment, targets in the education sector: (1) improving education and (2) increasing training and skills, targets in the health sector are: (1) improvement in life healthy and (2) increasing access to hospitals, and targets in the religious and social fields are: (1) increasing individual religiosity and (2) increasing social awareness.

Analysis of data using AHP for the objectives of each field is presented in Table 2 below:

Table 2. Priority Objectives Weight Each Field

Field	Target	Priority Weight
Economy	Improvement in income	0.4613
	Improvement in employment level	0.5387
Education	Improvement in education	0.3961
	Improvement in skills	0.6039
Health	Improvement in healthy life style	0.8047
	Access to the hospital	0.1953
Religion and Social	Individual religiosity	0.3425
	Social Awareness	0.6575

In Table 2 above, it can be seen that according to the Nagari community for the economic sector, it is more important to increase the number of jobs than to increase income with the weights of 0.5387 and 0.4613, respectively. Meanwhile, for the target education sector, the increase in skills is more important than the increase in the level of education of the people with the weights of 0.6039 and 0.3961, respectively. The target in the health sector, according to the community, is more important to improve healthy life than access to hospital because it has a much greater weight, which is 0.8047 compared to 0.1953. Finally, for targets in the religious and social fields, social care is considered more important than the increase in individual religiosity with a weight ratio of 0.6575 with 0.3425.

Based on the results of the research through questionnaires and FGDs it was shown that the Nagari Panampuang community had formulated that there were 4 important fields of concern when

preparing civilized Nagari. Through community empowerment based on community organization / community development (COCD), the community is asked to determine which of the four fields are the more important priority areas. The results of the discussion stated that for the Nagari Panampuang community, religion and social fields were the most important fields to prioritize. Next is the field of education, health and economics. This is interesting, because so far programs designed by the government, campuses and other institutions in developing Nagari or villages focus more on activities in the economic field because all parties generally see the economic condition as a benchmark for a village or nagari as a village advanced or developing. Especially for Panampuang Nagari this condition is also possible because the community in general already has income to fulfill their needs, even though it is not yet large.

Conclusions and Suggestions

Based on the results of the study it can be concluded that the priority of the main areas that need to be considered in the development of Nagari Panampuang are the religious and social fields, then continued with the fields of health, education and finally the field of economics.

Furthermore, looking at the objectives of each field, the highest priority weight is given to the goal of increasing social awareness of the community in the religious and social fields. while for the health sector, the greatest weight is given to the goal of improving people's healthy lifestyles. Then, for the education sector, the main target is the improvement of community skills or skills related to their work. and finally, for the economic sector, the priority target is how to increase the number of jobs to be able to accommodate the existing workforce in the Panampuang Nagari.

Based on the above conclusions, it is obtained because the most important fields and targets are the religious and social fields with the main goal of increasing social awareness, it is necessary for the government, campuses and related institutions to help design programs related to achieving these goals. In addition, because the next important area is health with the main goal being to increase a healthy lifestyle, programs need to be formulated to achieve these goals. Therefore, for the next study it is hoped that more comprehensive and complete discussions can be carried out in designing program programs to achieve these key objectives.

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CULTURAL COMPETENCIES IN EMPLOYMENT AND PROMOTION OF FACULTY MEMBERS (CASE OF IRANIAN HIGHER EDUCATION)

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Abstract: *Today, the role of universities in economic, cultural, social and political development of countries is an undeniable reality. So, the growth and development is considered as one of major tasks of universities. Universities required knowledgeable and experienced faculty member who is familiar with the country's culture and environment in different fields, to fulfil the tasks and meet the expectations of the community. In this regard, cultural competencies is also important. In this research, with the use of library research method, effective cultural competencies for employment and promotion of faculty members in Iran has been studied. To examine the issue, roles and regulations, such as regulations of faculty member promotion was studied. The results indicated that cultural items were important requirements for the promotion of faculty members in Iran. So, if the faculty member cannot attain the minimum qualifications and cultural points, they cannot promote higher ranks. The results indicated that some of the issues mentioned in the promotion regulations were: holding an exhibition of art works with the cultural and Iranian approaches; acquisition of cultural awards in the field of promoting the culture of self-sacrifice; publication of books and articles in the cultural, social and educational fields; cultural consultation to student and organizations; Adherence to religious, cultural and trustee values and etc. Finally, suggestions were made for improvement of cultural indicators in the regulations of faculty member promotion.*

Keywords: *Cultural competencies, faculty members, promotion, employment, Higher education, Iran*

Introduction

Today's society needs workforces with specific competencies and professional qualifications. One of the varieties of workforce competencies is cultural competence. Researchers such as Rothwell (2005), Armstrong (2006) and Boyatzis (2008) stated that the philosophical foundations and cultural values governing societies and organizations have a great influence on defining and identifying the merits. Armstrong (2006) argues that competency patterns should be accordance to the culture of governing the organization and communities. Boyatzis (2008) also believes that one of the effective factors in determining competencies, especially in the field of individual competencies, is the philosophical foundations, values and views of societies (Rezayat, 2011). Looking at researches in the field of merit and competencies, it can be seen that experts and researchers categorize competencies in different ways. For example, competencies can be categorized into individual, organizational, and job-related competencies (Boyatzis, 2008; Beyham and Moire, 2005; Rezayat, 2011). One of the most important criteria in the field of competencies is individual competencies. In fact, individual competencies include attitudes, insights, personality traits, ethical characteristics, values, and perspectives. In Iran, like many other countries, in order to employ human resources, a special competence model is applied. Also, in Iran, there are competencies to attract and employ human resources, considering the religion of Islam and Iranian culture. In other words, in the administrative system of Iran, it is believed that human resources is the most important competitive advantage and organizational capital, and this

organizational capital must have unique and special merits and competencies in line with the official religion of the country, which is Islam and the culture of Iran.

Nowadays, the role of universities in economic, cultural, social and political development of countries is an undeniable reality. So, the growth and development is considered as one of major tasks of universities. Universities required knowledgeable and experienced faculty member who is familiar with the country's culture and environment in different fields, to fulfil the tasks and meet the expectations of the community. Like many other countries, the Iranian higher education system needs to have faculty members with appropriate competencies in order to educate the human resources required by society in accordance with the religious, moral, social and cultural characteristics of Iran. In fact, higher education institutions have basic components without which the components do not have the ability to work and achieve goals.

Totally, in higher education system of Iran to attract the faculty members, competencies and qualifications for faculty members were described. Some researchers conducted research in this area, such as (Table 1):

Table 1: Some researches in the field of faculty member competences

Researcher	year	The result of the research
Rezayat	2011	Designing the competency model of heads of state universities of Iran, including: knowledge, validity, insight, attitude, ethical characteristics, emotional-personality traits, skills and abilities
Mahmudi et al.	2012	Identifying and explaining the competencies of university administrators to three categories including: social competencies, managerial competencies, and individual competencies
Nourshahi	2008	Studying the merits of the university directors including creativity, behavioral coherence, adherence to ethics
sangari	2017	Developing a comprehensive model for the competencies of the faculty members at Islamic university in six categories of technical skill, cognitive skill, Leadership, interpersonal skills, and personality traits
Chitsaz et al.	2012	Designing a competency model of socio-cultural executives of universities in Iran in seven categories including selfawareness and leadership and Islamic values around the civilization-making university
derakhshan and zandi	2017	presentation of 69 strategies for improving the competencies of educational managers

As it can be seen, despite the fact that there are various studies on the competences of faculty members in Iranian universities, no comprehensive research done to examine cultural competencies in the employment and promotion of faculty members in Iran. In this research, effective cultural competencies for employment and promotion of faculty members in Iran has been studied. To examine the issue, roles and regulations, such as regulations of faculty member promotion was studied.

Research method

This is an applied research with the use of library research method, effective cultural competencies for employment and promotion of faculty members in Iran has been studied. The statistical population of the study were documents and laws and regulations related to employment and promotion of faculty members in Iran.

Findings

The findings indicate that the promotion of faculty members in Iran is of special interest in scientific, educational and research merits. In addition, cultural competencies are considered as a pillar of the promotion of a faculty member. The cultural competencies approved in the "Promotion of the faculty members of higher education institutions" And known as cultural, educational or social activities. It includes: "A set of activities of the faculty member who confirms the combination of Islamic science and ethics and based on the promotion of religious and national beliefs, and in accordance with the fundamental principles and values of the Islamic revolution"(Taheri and Shamsabakh, 2016). The activities described in Table 2.

Table 2: Cultural, Educational and Social Activities of Faculty Members

Clause	Issue	
1	(Writing a book) (article) and (production of original and valuable art work) with Islamic approach in cultural-educational-social areas	
2	Preparation and writing a cultural attachment	
3	Providing cultural advice or effective cooperation with Legitimate organizations	
4	Cultural Advisor professor with the writ of Student-Cultural Deputy of the Institute	
5	Responsibility for correcting and conducting favorable cultural attitudes and participating or performing cultural-educational-social activities	1-5-1 - Planning and Designing Cultural-Educational-Social activities
		1-5-2- Participation in the implementation of cultural-educational-social activities
		1-5-3- Other related activities
6	Continuing to adhere to religious, cultural, national, revolutionary and honesty and trustworthiness	
7	Gaining cultural prizes	
8	Designing and active participation in holding criticisms and theorizing sessions	
9	Participation in faculty knowledge-building and empowerment of faculty members	
10	Organizing artworks exhibition and art workshop Islamic Cultural Approach	

Also, the findings indicated that in the regulations of employment as faculty members of Iran, applicants should have general and specific competencies. General conditions are usually the same cultural and Islamic qualities that are described as:

- The citizenship of the Islamic Republic of Iran and do not change or gain a dual nationality during the period of service;
- Practical Obligation to the Constitution law of the Islamic Republic of Iran;
- Belief and practical obligation to the religion of Islam or one of the religions accepted in the constitution law of the Islamic Republic of Iran;
- No history of membership or political affiliation with the political groups opposing the system of the Islamic republic of the Iran;
- Avoiding bad behavior and morals, and actions and behaviors contrary to dignity and professional status;
- Not having an criminal record;
- Non-addiction and do not sale and purchase of narcotics, alcoholic drinks and so on.
-

The findings of this study indicated that there are some other general and cultural components except the items stated above for employment of faculty members at special universities.

Conclusion

This research has been carried out to investigate the cultural competencies in employment and promotion of faculty members in Iran. The results indicated that, given the significant role of faculty members in Iranian society, and the need for the efficiency of well-educated and efficient professors, in addition to competencies of employment and promotion of faculty members in the higher education system, some cultural competencies are determined.

Cultural and Islamic items are one of the main prerequisites for the recruitment and promotion of faculty members in Iran. So, if the faculty member is unable to obtain the minimum cultural and Islamic qualifications, he/she can not employ or promote at the university. Some competencies are more important and a prerequisite for recruitment, such as religious competency and commitment to the constitution of Iran. On the other hand, if a person with a cultural and Islamic qualification can be employ as faculty member, he must maintain those qualifications and, if he can not maintain them, he/she will be dismissed from higher education.

Considering that these components are essential for the employment and promotion of faculty members in the higher education system of Iran, and sometimes cultural components may not be related to faculty members' expertise and they are more relevant to their individual characteristics of members, it is recommended that cultural and educational programs be planned on the basis of the faculty members' specialties and fields of study, and with the participation of faculty members in the formulation of cultural programs and activities. So, faculty members' participation will be increased. Also, it is recommended that cultural and educational activities be various based on the fields of study faculty members.

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THE EFFECTS OF POWTOON ON FORM 2 PUPILS' UNDERSTANDING OF POEMS

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Abstract: - Policy makers' effort in highlighting the significance of literature is evidenced when literature in action skill is included in every cycle of lesson in English Scheme of Work for Form 1 and Form 2. However, pupils are having problems in appreciating and understanding literature component especially poems due to the style of language used in the poem. This study was conducted to identify the effects of PowToon on Form 2 pupils' understanding of poems and to identify pupils' perceptions on the use of PowToon in improving their comprehension of poems. This case study involved six Form 2 pupils from a government secondary school in Bintangor, Sarawak. Six literature lessons with the integration of PowToon videos as the main teaching tool were carried out. The research instruments were document analysis, focus-group interview, reflective journals, questionnaire and field note. Findings of the study reveal that PowToon is able to enhance Form 2 pupils' understanding of poems, ease the process of understanding poems and have better engagement throughout the lessons. Besides, participants of the study perceive PowToon as a learning tool which is attractive and easy to be used. This study also discusses on the cons of using PowToon videos in teaching. It is hoped that these findings could provide insights to secondary school teachers in developing more effective literature lessons which are able to enhance pupils' understanding of poems.

Keywords: (PowToon, Lower Secondary School Pupils, Poems, Literature, English Language)

Introduction

Policy makers' effort in highlighting the significance of literature can be seen when literature in action skill is included in every cycle of lesson in English Scheme of Work for Form 1 and Form 2. The significance role of literature component is evidenced when the Malaysia Education Blueprint 2013-2025 (Ministry of Education, 2012) has made English literature component a compulsory element in both primary and secondary school education. It is expected that English literature component is able to assist pupils in having a greater exposure to English language and thus enhance the English proficiency level. However, pupils are having difficulty in appreciating and understanding literary texts (Melor et al. 2013). A research done by Othman et al. (2015) in Hulu Langat, Selangor showed that 58.3% of the Form 5 respondents agreed with the statement that it was difficult to understand the language used in the poems. As stated by Chandler (2015), PowToon is an eye-catching tool which can be used to facilitate learning. Thus, it is hoped that, through the use of PowToon in poetry lesson, pupils' are able to generate more interest in learning poem and thus improve their comprehension of the poem. This purpose of the study is to identify the effects of PowToon on Form 2 pupils' understanding of poems and to identify pupils' perception towards the use of PowToon in improving their comprehension of poems.

Literature Review

The content standard and learning standard for literature in action are clearly stated in Form 2 Scheme of Work for English. Literature lesson is included in both textbook-based lessons and non-text-book based lessons. For textbook-based lessons, Form 2 pupils are provided with three literature books which are “Poetry for Pleasure”, “One Thousand Dollars and Other Plays” and “Short Story Arena”. Literature is not the main focus in English syllabus for Malaysian secondary school pupils however it is undeniable that it helps to improve the learning of English. English is learned as a second language in Malaysia and pupils might not have enough exposure to the language. Through literature, pupils have more chances to read different genre of texts. McKay (1982) as cited from Brumfit and Carter (1986) mentioned that literature promotes language awareness and thus facilitates reading proficiency. Collie and Slater (1987) support the idea that implementation of literature in the language classroom provides valuable authentic material, develops personal involvement and help contribute to readers’ cultural knowledge as well as language enrichment.

Some pupils are reluctant in learning literature due to several reasons. One of the reasons is lack of interest to read particularly literary text. In Dato Sri Michael Manyin’s speech during the International Conference on Borneo Book Publication, he stated that the literacy statistics in 2016 showed that out of 85 per cent of Malaysians who read regularly, only 3 per cent read books (The Borneo Post, 2017). Besides, Talif (1995) stated that pupils have the fear to study literature because of their belief - they will read difficult texts. When pupils skim and scan through the text, they will soon find out that the language used in literature works is not simple or unfamiliar to them. Hence, pupils will have a mindset that literature is a difficult subject and they feel reluctant to learn it. Pupils are lacking of clarity about the literature and hence it can affect their interest toward learning literature. On the other hand, in Ezeokoli and Igubor’s (2013) study, non-facilitative methods and strategies adopted by teachers has been identified as one of the factors that influence pupils’ learning of literature. Ezeokoli and Igubor (2013) found out that literature lessons were taught as an ordinary comprehension lesson and the “take-out-your-book-and-read” approach had influenced the pupils’ interest in learning literature negatively. Therefore, a new approach in the teaching of literature is important in order to enhance the students’ reading comprehension. Thus, the researchers introduced PowToon in this study due to its interesting features. The researchers uploaded videos, pictures, video clips and animations onto PowToon. Therefore, this study was embarked to identify the effects on the integration of PowToon towards Form 2 pupils’ understanding of poems.

Underpinning Theories and Models

There are three theories underpinning this study which are Cognitive Evaluation Theory, Krashen’s Theory of Second Language Acquisition and Technology Acceptance Model (Venkatesh and Davis, 1996). Cognitive Evaluation Theory proposed by Deci and Ryan (1985) explains how classroom conditions could enhance and support pupils’ intrinsic motivation in learning (Reeve, 2012). In this study, it is hoped that PowToon is able to create a fun learning environment which then enhance pupils’ motivation in learning poems. By generating motivation among pupils, it is believed that pupils’ learning process could be accelerated and pupils’ understanding of poems could be improved. The Affective Filter Hypothesis of Krashen’s Theory of Second Language Acquisition could be applied in this study. Krashen (1988) stated that the affective variables are able to facilitate pupils’ learning and motivation. In this study, it is hoped that PowToon can create a lesson in which the pupils could study with low affective filter thus allowing the input to be more comprehensible. The animated PowToon video could create a fun learning classroom which minimises the pupils’ affective filter and thus facilitate their comprehension of poems. Technology Acceptance Model (TAM) explains the influence of technology on behaviour intention. In this study, PowToon as an ICT teaching tool is hoped to bring positive influence to pupils in understanding poetry.

Related Past Studies

There are several past studies related to this study but none of them use PowToon as the intervention. Most of the past studies focused on the use of visual aids in teaching literature component. Shabiralyani et al. (2015) had conducted a study on the impacts of visual aids in enhancing learning process and they found that pupils were able to comprehend a lesson easier with the help of visual aids such as pictures, models, charts, maps and videos. Another study was carried out by Melor et al. (2013). The objective of their study is to identify the effects of visual aids as motivational tools in improving pupils' interest in reading. Their findings indicate that through watching the video clips, they were able to assist the learners to understand poems better. In addition, the usage of visual aids was able to arouse pupils' interest in learning. Another research done by Nath et al. (2017) stated that movies were able to lower learners' affective filter level. On the other hand, Adkison (2014) carried out a research on the implementation of new strategies to engage learners. In the study, the researcher introduced a few video creating tools as the intervention tools which include Plotagon, PowToon and GoAnimate. The study shows that PowToon is a more ideal video creating tool in comparison to other video creating platforms. As there are a few past studies which pointed out the positive effects of visual aids, PowToon, a video creating platform which is rich in visual elements is chosen as the intervention for this study.

By using PowToon, teachers can customise the videos by inserting charts, pictures, video clips and animations. Such features of PowToon make PowToon an ideal visual aid which is able to facilitate the teaching and learning process. Ashford and Guth (2016) stated that it is fun to use PowToon as characters and scenes can be created to reflect real people and situations. In PowToon, there is a wide variety of characters, background and animations to choose from. Ashford and Guth (2016) further added that most of the video creating websites only allow non-animated strips. In addition, Chandler (2015) described PowToon as an eye-catching tool and it can be used as an assessment tool to evaluate the learning process.

Methodology

In this research, case study is chosen as the research design. Wood and Calazanro (1980) defines case study as an organised investigation of targeted unit in which the researcher examines in-depth data relating to several variables. Zainal (2007) claims that case study is suitable for research which needs a holistic and in-depth investigation. Through a case study, the researcher is able to seek pupils' perception on the effectiveness of PowToon on teaching poems in a more in-depth insight.

The research instruments employed in this study are focus group interview (FGI), field note from classroom observation (CO), document analysis (DA) and reflective journal (RJ). The interview questions for focus group interview are derived from Technology Acceptance Model which aims to seek participants' perceptions on the use of PowToon in poetry lesson. Field notes are used to record the behaviour and pupils' participation during the poetry lesson with PowToon. Document analysis is used to compare the pupils' performance of pre-test and post-test while reflective journal is used to complement the answers given by the participants during the focus group interview.

Purposive sampling is used in this study. Purposive sampling method is a type of non-probability sampling and it can be used in both qualitative research and quantitative research (Tongco, 2007). Purposive sampling enables the researcher to select the respondents who are willing and able to provide information based on the needs of study (Bernard 2002, Lewis & Sheppard 2006). The participants are chosen based on their achievement for English test. The researcher takes note of pupils' performance in their topical test and examination. Pupils with dissatisfactory performance for literature components are chosen. Table 1 shows profile of the six participants.

Table 1: Participants' Demographic Profile

Participant/ Pseudonyms Given	Gender	Race	Language Proficiency	Age	Language Spoken at Home
1/P1	Female	Chinese	Intermediate	14	Dialect (FooChow), Mandarin
2/P2	Female	Chinese	Intermediate	14	Mandarin
3/P3	Female	Iban	Intermediate	14	Iban, Bahasa Melayu
4/P4	Female	Iban	Intermediate	14	Iban
5/P5	Male	Chinese	Intermediate	14	Mandarin
6/P6	Male	Chinese	Intermediate	15	Mandarin

Findings and Discussion

The findings and discussion are explained based on the two research questions (RQ) of the study which are:

1. What are the effects of the use of PowToon in understanding the poems?
2. What are Form 2 pupils' perceptions towards the use of PowToon in understanding poems?

Research Question 1

In order to answer RQ1, data from document analysis, the focus group interview (FGI), classroom observations (CO) and reflective journals were analysed. Document analysis involves the data obtained from Pre-Test and Post-Test. The focus group interview responses were recorded and transcribed. The observations were carried out for four times during the literature lessons with PowToon videos and field notes were prepared. Six participants were interviewed and their learning condition during the study was observed. To triangulate the data, the participants were asked to prepare reflective journals. Based on the data obtained, a thematic analysis is done. The effects of the use of PowToon in understanding the poems are divided into three themes which are (a) improve pupils' understanding of the poems (b) to ease the process of understanding the poems and (c) better engagement of pupils throughout the literature lesson.

Improve Pupils' Understanding of the Poems

Pre-Test and Post-Test were carried out to seek the changes in pupils' understanding of poems before and after the use PowToon in learning poems. Both pre-test and post-test are prepared based on the poem "My Hero" and "What is Red?" All participants show improvement in the post-test and the differences of marks are shown in the table below.

Table 2: Marks Obtained by Participant in Pre-Test and Post- Test

Participant	Pre-Test (40%)	Post- Test (40%)	Difference in Marks
Participant 1	21	24	+3
Participant 2	18	20	+2
Participant 3	24	27	+3
Participant 4	20	26	+6
Participant 5	13	15	+2
Participant 6	15	18	+3

The improvement in marks shows that participants are able to have a better understanding of poems after the use of PowToon in learning poems. Most of the participants showed improvement in short essay questions as they were able to explain the meaning in a more detailed way. Participant 4 showed the best improvement in answering the short essay questions. Before the use of PowToon in teaching poems, Participant 4 was able to write meaning for each line but she was unable to make further explanation. After the intervention by using PowToon, Participant 4 was able to make accurate explanation and elaboration for the meaning for each line. In the data collected from the reflective journals (RJ), 3 participants mentioned in their reflective journals that they had a better understanding of poems after watching PowToon videos and thus they were able to perform better in the post-test.

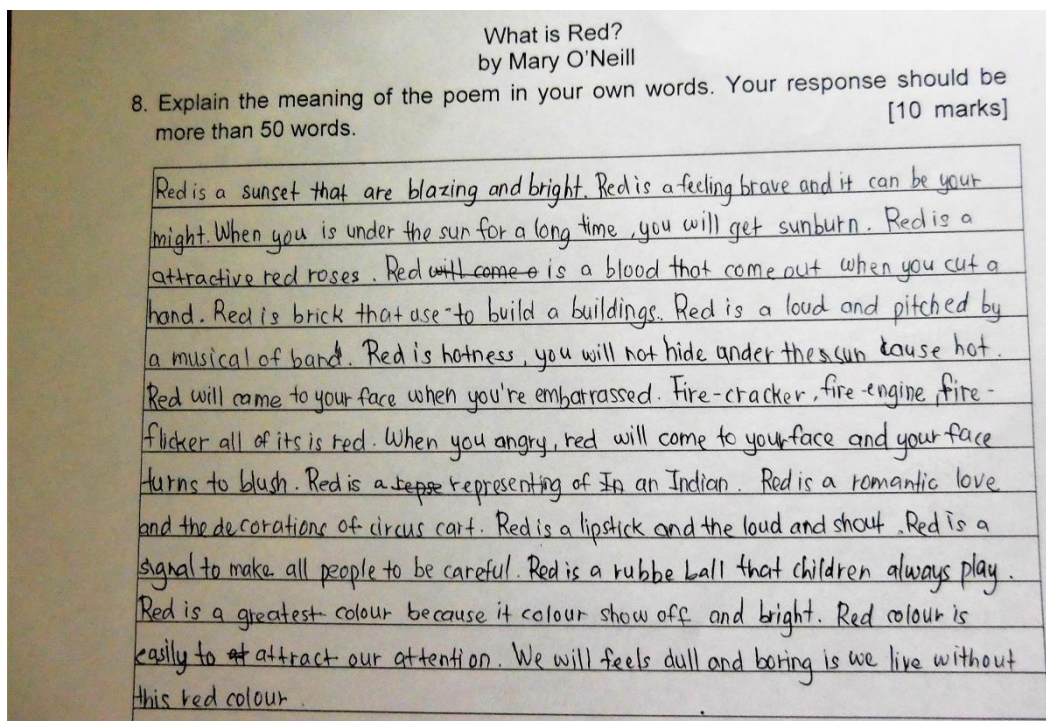
Figure 1: Response Given by Participant 4 in the Pre-Test

What is Red?
by Mary O'Neill

8. Explain the meaning of the poem in your own words. Your response should be more than 50 words. [10 marks]

Red is a sunset that are blazing and bright. Red is feeling brave with the all we might. Red is a sunburn that spot on the nose. Red is a red rose and red squiggles out when cut the hand. Red is a brick and the sound of band. Red is hotness and when we embarrassed the red will get inside. Red is fire ~~engr~~^{cracker}, fire engine, fire-flicker red and the red runs through the head when we are angry. A Valentine are trimmings on, a circus cart. There is a lipstick, signal and the red signal mean we must careful and watch out. Red is a giant big and rubber ball. Red is the greatest colour of all and the colour also show off.

Figure 2: Response Given by Participant 4 in the Post-Test



*"I write **more good answer** after video, I remember meaning from video."* (P3, RJ)

*"Cartoons from PowToon make movement, so I **remember the meaning of poem**".* (P6, RJ)

To triangulate the data, the researcher posted two questions to participants during the focus group interview (FGI) which are (a) Does PowToon improve your learning of poems? and (b) Does PowToon enhance your understanding of poems? All six participants agreed with the statement that PowToon improves their understanding of poems. This finding is in line with Cognitive Evaluation Theory by Deci and Ryan (1985) which explains the role of classroom conditions in supporting pupils' learning. In this study, PowToon has created a fun learning environment for the pupils and pupils learning are enhanced and thus improve pupils' understanding of poems.

*"Yes, **is improve**, because I think lah, use PowToon, the video made of PowToon is very, err, is **very easily to understanding**."* (P1, FGI)

*"Some stanza that in the poems we may not understand very much, so teacher can put the explanation in the video, **so we can understand**".* (P2, FGI)

To Ease the Process of Understanding the Poems

Besides, the findings show that PowToon is able to ease the process of learning poems. All participants found learning poems through PowToon is easy. With the use of PowToon, teacher inserts related pictures, animations and sound effect in the video which are able to enhance the process of learning poems. Words are translated into motion, animation and sound. Besides, the researcher also inserts meaning of lines in the PowToon videos. While learners were watching the video, they read the meaning of the poem at the same time and thus generated understanding towards the poems. In the focus group interview session, three questions were posted to the participants to seek their perceived ease of use and perceived usefulness of PowToon. The three questions are (a) Do you find learning through PowToon

easy? (b) Is it easy to use PowToon in learning poems? Four participants gave clear response that they thought PowToon eases the learning of poems.

“I think **it is more easy for me** to understand the lesson.” (P2, FGI)

“I think **is also easy** when teacher show the PowToon.” (P4, FGI)

“I think the PowToon is, is for me **is easy** to understand the poem”. (P5, FGI)

Better Engagement of Pupils throughout the Literature Lesson

PowToon promotes a better engagement of pupils throughout the literature lesson. Based on the data obtained from the field note, it was observed that all learners were attracted to the PowToon video during literature lesson. All pupils paid attention to the PowToon videos and some pupils even jotted down the notes from the video. Besides, it was observed that some pupils laughed when they saw the funny action acted by the cartoon characters in the PowToon videos. Two pupils even imitated the movement of the cartoon characters. For example, for the poem, “My Hero”, the researcher inserted an animation of character defeating enemies, the pupils imitated the action and this helped them to remember the meaning of the vocabulary, “defeat”. In addition, it was observed that 2 pupils made slight movement following the rhythm of the background music. Pupils also gave comments such as “*The vampire is cute*” and “*The sunset is beautiful*” while they were watching the videos. After the video, the teacher asked, “*Do you enjoy watching the PowToon video?*” All pupils answered “Yes”. The data of field note also showed that pupils gave responses actively on the PowToon video shown to them. Apart from that, the data can be supported when participants wrote in their reflective journal (RJ) that they paid full attention to the PowToon video.

“*I attract to cartoons*”. (P3, RJ)

“*I pay attention to video*”. (P4, RJ)

During the Focus Group Interview session, participants also responded that they found lessons with PowToon interesting and they enjoyed the lessons with PowToon videos. When the researcher asked the participants whether they would like to have more lessons with PowToon videos, all of the participants agree with the suggestion. This is parallel to the Affective Filter Hypothesis of Krashen (1988) which explains the affective variables in facilitating pupils’ learning. The animated PowToon video creates a fun learning classroom which minimises the affective filter and thus facilitate their comprehension of poems.

“*Very agree*.” (P5, FGI)

“*Yes, I agree, of course*”. (P3, FGI)

Research Question 2

In order to answer RQ2, participants were asked to give their perception towards the use of PowToon. Data gained from focus group interview (FGI), field note (F.N.) of classroom observation and reflective journal (RJ) of participants are analysed. The analysis is divided into three themes which are (a) attractive features of PowToon (b) ease of use as a learning tool and (c) disadvantages of using PowToon in learning.

Attractive Features of PowToon

All participants viewed PowToon as an interesting and attractive teaching tool. When the participants were asked whether they thought learning poems through PowToon is easy, all of them agreed and they gave the reasons that there were attractive pictures and animations in the videos. The visual aids in PowToon videos have made PowToon an eye-catching learning tool which is able to grab pupils’ attention in learning poems.

“Interesting and funny pictures inside” (P1, FGI)
“Interesting characteristic inside, nice music” (P3, FGI)
“Many pictures, and the funny.” (P4, FGI)
“It has the pictures” (P5, FGI)

During the observation, the researchers noted that the animations managed to attract pupils. All pupils paid full attention when watching the videos. Some pupils also imitated the movement of the characters and this proved that pupils are fascinated by attractive features of animations. As to validate the data gained from focus group interview and classroom observation, participants were asked to write reflective journal. In the reflective journal prepared by the participants, they claimed that PowToon videos have attractive features which made the lessons more enjoyable and fun. The findings are parallel with Ashford and Guth’s (2016) statement that it is fun to use PowToon as characters and scenes can be created to reflect real people and situations

“PowToon has nice music and pictures, moving characters make action”. (P4, RJ)
“The music of PowToon is good, pictures are very nice”. (P3, RJ)
“The hero move, very cute, can learn the word”. (P5, RJ)

Ease of Use as a Learning Tool

Pupils also perceive PowToon as a learning tool which is easier to be used compared to other traditional teaching method such as doing exercise. All of the participants agreed that learning poems through PowToon was a good idea and this showed that pupils had positive behaviour towards the use of PowToon in learning poems. In the Focus Group Interview session, when the researcher asked, “Does PowToon ease the process of learning poems?”, all participants agreed with the statement. When pupils find that using PowToon in learning is easy, their acceptance towards the learning tool will be increased and thus facilitate the learning process. This fits the explanation by Wu (2009) for Technology Acceptance Model which states that perceived usefulness (PU) and perceived ease of use (PEU) determines users’ perception and acceptance towards technology.

“I think PowToon is easy....also has meaning that we can know what is the meaning of the poem, better than the teacher give gave the exercise for meaning” (P4, FGI)
“I think the PowToon for me is easily, the very different way to teach, because is very easy let us to understand.” (P5, FGI)

Based on the field notes, the researchers noticed that the entire learning process during the poetry lesson with PowToon went on smoothly. Pupils did not have to prepare for the lesson. They just needed to pay attention to the video. Also, pupils did not need to be drilled on the meaning of the poems as it was easier for pupils to learn through the attractive features of the poem. Some participants also wrote in their reflective journals that PowToon is a learning tool which is easy to be used.

“PowToon very easy for me to learn poems, not need write many words, not need keep on reading, I can remember the meaning.” (P1, RJ)

Disadvantages of Using PowToon in Learning

During the focus group interview session, the participants were asked to state the disadvantages of PowToon. Based on the response given by the participants, the main problem of PowToon is that it does not meet the needs of different learners at the same time. There are pupils with mixed ability and proficiency levels in a class. PowToon videos are played once for all pupils, but pupils have different pace of learning. Some participants found that the slides shown in PowToon video were too fast and thus they were unable to catch all the words presented in the video.

“We cannot finish reading the last picture that we haven’t finish”. (P2, FGI)

“Slides is very fast. We do not get the word.” (P3, FGI)

“Although we know the meaning of the poem, but we also don’t know other student know or don’t know the meaning of the word.” (P4, FGI)

Based on the data obtained from the field note, some pupils tend to copy down the notes from the video but some were unable to finish jotting down the notes. In the second lesson with PowToon, the teacher played the PowToon videos twice. During the second time of video playing, most of the pupils still paid full attention, but there was a pupil playing with his pens. After the lesson, one of the researchers asked him for the reason, the pupil answered, “I can remember the meaning already, not need to watch again.” This shows that the PowToon videos should be played twice or thrice for the pupils with low English proficiency level. In contrast, pupils with higher English Proficiency level could feel bored.

Conclusion and Implications

As discussed in the introduction, literature components in Malaysia English Syllabus aims to enhance pupils’ language learning but pupils find it difficult to understand literary texts, specifically, poems. Therefore, this study attempts to seek the effects of PowToon on Form 2 pupils’ understanding of poems. Findings of the study reveal that PowToon is able to enhance Form 2 pupils’ understanding of poems, ease the process of understanding poems and pupils are able to have a better engagement to lessons. Besides, participants of the study perceive PowToon as a learning tool which is attractive and easy to be used.

It is hoped that these findings could provide insights to secondary school teachers in developing literature lessons which are able to enhance pupils’ understanding of poems. Teacher may also expose the pupils to the benefits of PowToon. A number of PowToon videos on different topics are available on YouTube, thus, if pupils are aware of the advantages of PowToon, pupils may watch the video online by themselves and thus independent self-learning could take place.

For future research, researchers may try out the involvement of pupils in creating PowToon videos. In this research, the PowToon videos are created by one of the researchers with the assistance of the class English teacher. For future studies, pupils should be involved in creating videos. However, the problems that the researchers might face include the lack of facilities such as computers and the instability of internet connection in rural areas.

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THE EFFECTIVENESS OF USING THE RULAIN METHOD TO IMPROVE YEAR FOUR PUPILS' CORRECT USAGE OF ARTICLE

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Abstract: *The primary school pupils' grammatical ability has been declining recently. The purpose of this action research was to determine the extent to which the use of Rulain method can enhance the Year Four pupils' ability to choose the correct article to indicate that they can learn better by using their multi-sensory skills; visual and kinesthetic. The research participant comprised of fifteen Year 4 pupils from a primary school located in Puchong, Selangor. The study involved the use of two different teaching methods, which were the Traditional method and Rulain method. The instruments for the study were Test 1 and Test 2, a questionnaire and interviews. The result of the study showed that the Rulain method was effective in helping Year 4 pupils to choose the correct articles. Hence, teachers that encounter similar types of pupils can use this package as an effective learning aid to assist teaching and learning process.*

Keywords: *grammar articles, Malaysian primary school, teaching innovation*

Introduction

Teaching and learning of languages involves many different aspects including teaching and learning of grammar, vocabulary, receptive skills and productive skills (Marianne, Donna & Marguerite 2014). Nunan, 1998 (as cited in Celce-Murcia & Olshtain 2000) believes that for learners to be able to master them thoroughly, they need to have enough experience, full understanding and they must be able to use these features when deem necessary.

Teresa, Xavier and Oriol (2015) stated that of all the various aspects listed above, grammar can be said to be the central of teaching and learning of languages as it can be one of the most challenging aspects. Basically, grammar is the analysis of language elements that convey meaning. These elements include phonetic and phonology, the lexicon, morphology, syntax, prosody, and pragmatics (Teschner & Evans 2007).

Determiner comes under the syntax element. Determiner includes the articles *a*, *an* and *the*, as well as demonstratives, possessive pronouns, possessive nouns and some quantifiers. Therefore, determiner is an umbrella term for all of these (Annette & Douglas 2012). This research mainly focuses on the articles. The article 'a/an' is called the indefinite article. The article 'the' is called the definite article. Articles is used to indicate whether we are talking about a particular people or things in general (Collins Cobuild English Grammar 2012). The problem with English articles for second language learners is that despite having a clear and definite rules on how to choose the articles correctly, they still fail to use them properly. Hence, this paper will elaborate on a technique of teaching articles using the Rulain method.

Literature Review – Factors That Interplay In the Second Language Acquisition

The acquisition of English grammatical articles has been of considerable concern since the early 1970s (Ganzhao, 2016). For native speakers, the appropriate use of English articles is acquired subconsciously and at an early age. However, the second language (L2) learners tend to have difficulty acquiring English articles especially those whose first languages (L1) do not have the equivalent article systems.

There has been a significant amount of research demonstrating that the acquisition of the English articles system is indeed difficult for the second language learners (Tatiana and Joanne, 2008). Second language learners often have constant struggles in the use of articles until the very late stages of acquisition. Some may not even reach native-like levels of capability. Studies that include comparisons of second language (L2) learners from first-language (L1) backgrounds with and without article systems suggest that L1 transfer most likely plays a role in L2 learners' acquisition of English articles. This means to say that, for L2 learners, their first language does have a hand in interfering the acquisition of the second language article system.

Across the world, there are actually more than 200 languages that do not have articles system. There are also other languages that have articles system but use them differently than how English does. For example, in the multicultural country Malaysia, different languages are practiced throughout the country. The three main languages used in Malaysia are the Malay language, Mandarin/Cantonese and Hindi/Punjabi.

According to Khazriyanti, Marlyna and Tan (2006), the article system in Malay language is coined as *kata penentu* which can be said to be equivalent to the English article in term of forming part of a noun phrase. However, the article is only limited to the words “itu” and “ini” which differs from the articles “a”, “an” and “the” in English article system (Khazriyati, Marlyna & Tan, 2006). For instance, in English we use ‘the ball’ but in Malay language we use ‘bola itu’. Based on the example, the use of articles is different for Malay language and English language and this may have resulted in confusion and misunderstanding to the pupils.

On the other hand, Mandarin and Cantonese do not have an article system which is equivalent to the English articles but still, they do have a quantifier ‘one’ that can be used to mark indefiniteness that sort of similar to English. According to Ganzhao (2016), the grammatical feature (definiteness) does not yet exist in the language. Thus, different from English, languages like Mandarin do not have an article system, particularly a set of morphemes that have developed highly specialized uses to indicate definiteness and indefiniteness.

Subsequently, the Hindi and Punjabi languages were grouped together as they are closely related to one another. The only differences between Hindi and Punjabi lie in the area of morphophonology. There are no crucial differences between these languages in term of expression of definiteness. Hindi and Punjabi do not have a category of article. For instance, Punjabi can use determiners such as the numeral *ikk* ‘one’ or pronouns *koi:/kujj* ‘some, any’ and demonstrative adjectives *e* ‘this/these’ and *o* ‘that/those’ to express similar semantic contrasts in combination with the features of proximity or remoteness. Generally, the marking of the contrast definiteness or indefiniteness is not grammaticalized in Hindi and Punjabi (Tatiana and Joanne, 2008). Thus, it can be assumed that these languages are similar to the Chinese language in that they have not grammaticalized the category of definiteness.

Consequently, it is clear from the comparisons above that first language does effects the second language learners' acquisition of English articles. animation, and graphic are present in this package. This has strengthened the idea that this particular method is an absolute help for teaching article in the classroom.

Mayer's Theory of Cognitive Theory in Multimedia Learning talks about the processes of processing pictures, printed words and spoken words. As the learning strategy only implemented two of the processes which are processing pictures and printed word, the processes will be discussed in details.

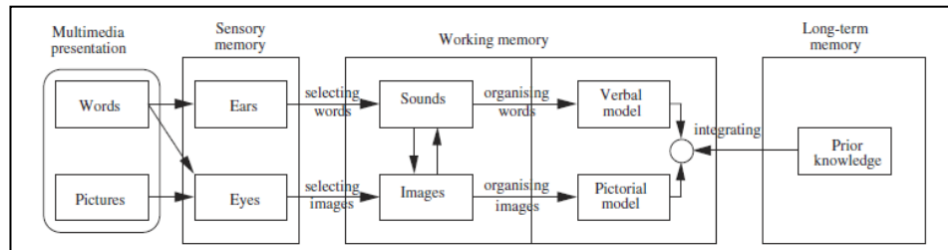


Figure 1: The processing of pictures or images

When pupils pay attention to images presented especially from the Rule Card and the Article Train model, part of the images will be represented in working memory. Those images that are chosen represent the cognitive process of ‘selecting images’. When the memory is filled with pieces of images, the working memory will organize the images to make coherent structure thus demonstrating the cognitive processes of ‘organizing image’. The pupils will then have an organized visual of the input called pictorial model. In the end, the new knowledge will be connected to the prior knowledge and therefore the cognitive process of ‘integrating’ takes place (Mayer, 2005).

As for the printed words from the Rule Card, the arrow moves from the words to the ears and eyes indicating that the words read can form sounds inside the sensory memory. In this process, the learner used two channels that are the auditory and visual channel. When pupils utter the words in their minds, it will move to their auditory channel and what they see will be registered into the visual channel. The memory will need to choose significant words that can make meaning. After that, they need to organize the selected words to make sense and finally connect their new knowledge to the existing knowledge.

The Rulain method has been constructed after taking measures of each and every assumptions based on the theory.

Rulain Learning Method

Eventually, the intervention used for this research is a package and combination of ‘Rule Card’ and ‘Article Train’ model (Rulain method). This method which comprises of two activities combined together can be used to teach articles effectively.

The main reasons of using this method is first, the rule card can be used to guide pupils to choose the correct article. The layout of the rule card is shown in Figure 2. The ‘Rule Card’ contained pictures so will be easier for the pupils to associate the rules with the pictures which suits the visual learners the best. Using pictures is a good way to enhance memory retention (Robert, Elizabeth & Johnna, 2010). When pupils learn through pictures, they will be able to remember things better. Apart from that, the pictures can effectively grab the pupils’ interest and they will surely enjoy their lesson more and feel motivated to learn.

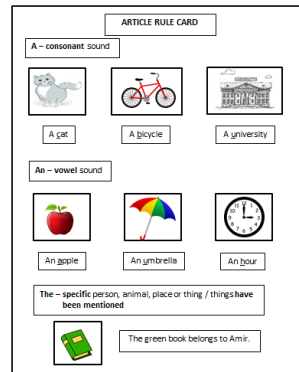


Figure 2: The ‘Article Rule Card’

Apart from that, the Article Train Model will make the pupils excited to learn especially the kinaesthetic learners. The basic concept on how to teach articles using the Article Train Model is presented in Figure 3. For young children, their attention span is very short, so, instead of just using chalk and talk to teach English in the classroom, the lesson can be made to be more interesting by introducing this train model to the pupils. The model will be able to stimulate the pupil’s mind and encourage the pupils to use their creativity by involving their senses, for example, their sense of visual and touch.

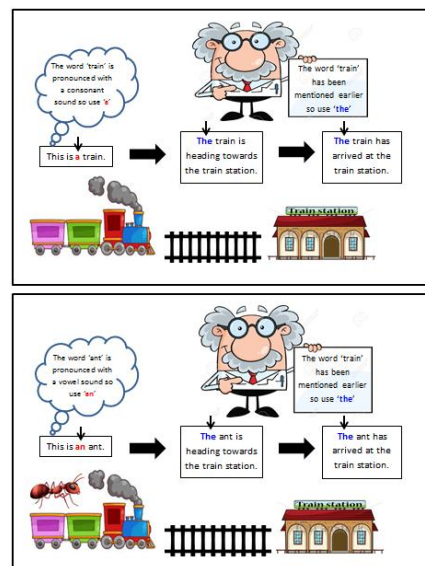


Figure 3: The basic concept of the ‘Article Train’ model

Apart from that, the package is also practical. Using the package to teach article in the classroom can save time because pupils can recognize the articles immediately when the teacher showed the package to them and teachers do not have to give lengthy explanations or waste time to draw pictures on the board. This package is cost effective too as the model can be used in the long term because fine materials were used to produce it.

Procedure

For this research, two lessons using similar topics, but with different approaches (traditional method and Rulain method) were introduced to the pupils. The lessons were done in two different days over a period of one week.

Population and Sample of the Study

The research participants were a group of pupils from one of the Year 4 classes, which was 4X class. There were 15 pupils in this class and it was a mixed ability class. The pupils in this class were just average user of English language.

Table 1 and Table 2 below show the pupils' achievement for their English paper and analysis of their achievement in recent test, which shows the pupils' level of proficiency in English language. The grading follows the Ministry of Education standard. Pupils with Grade A, Grade B and Grade C are considered to have passed the tests and pupils with Grade D and Grade E are considered to have failed the tests (Ministry of Education, n.d.).

Table 1: Pupils' achievement in the English paper in recent test.

No.	Pupils	Gender	Marks		Total Marks	Grades
			Paper 1	Paper 2		
1	A	Female	25	41	66	B
2	B	Male	20	16	36	D
3	C	Female	5	24	29	D
4	D	Female	20	31	51	C
5	E	Female	16	13	29	D
6	F	Male	11	11	22	D
7	G	Female	20	17	37	D
8	H	Male	22	37	59	C
9	I	Female	42	44	86	A
10	J	Female	27	58	85	A
11	K	Female	30	22	52	C
12	L	Male	20	16	36	D
13	M	Male	14	10	24	D
14	N	Male	18	43	61	B
15	O	Male	18	34	52	C

Table 2: Analysis of pupils' achievement in the English paper in recent test

Grades	Male	Female	Total
Grade A (80% - 100%)	0	2	2
Grade B (60% - 79%)	1	1	2
Grade C (40% - 59%)	2	2	4
Grade D (20% - 39%)	3	4	7
Grade E (0% - 19%)	0	0	0
Total	6	9	15

Research Design of the Study

The research design chosen for this study is action research. Action research can be defined as research initiated to solve an immediate problem. Compared to other research designs, the action research is more preferable as this study seeks for a solution to address a problem.

Research Instrument (Validity and Reliability)

Data collection is the process of gathering and measuring information from a variety of sources to get a complete and accurate picture of an area of interest (Yuan & Lee, 2015).

Three different methods of data collection were used in this study that are (1) test, (2) questionnaire and (3) interview. Three methods of data collection were used so that data triangulation can be done. Triangulation is a method used to establish validity in a research by analysing a research question from multiple perspectives to check whether there is consistency across data sources (Edwards & Burns, 2016).

Test

Test is important for measuring learning evaluations. Pre and post learning comparisons using tests are common. An improvement in test scores shows the change in skills, knowledge, or attitude attributed towards the learning (Stawarski & Philip, 2008).

The tests that have been conducted to validate the degree of success for this intervention were Test 1 and Test 2. The tests consisted of fill in the blanks questions regarding the usage of articles. Test 1 was given during the lesson using the traditional method and Test 2 was given during the lesson using my intervention that is the Rulain method. The level of difficulty for Test 1 and Test 2 were the same so that it can be seen whether the pupils understand more about articles after using the method that had implemented or not.

Questionnaire

Alreck and Settle, 1995 (as cited in Stawarski and Philip, 2008) mentioned that the most common data collection method is the questionnaire. Questionnaires can be used both to obtain subjective information about participants and to document objective, measurable impact results for an analysis. Because of this versatility, questionnaire is the preferred method for data collection.

Before letting the pupils answer the questionnaire, they were briefed about this research beforehand and they were told that they are part of a carefully selected sample and that their responses will be analysed. This knowledge often appeals to participants' sense of responsibility, motivating them to provide usable, accurate data on the questionnaire (Lingard, Albert & Levinson, 2008).

Interview

Kvale, 1996 (as cited in Stawarski and Philip, 2008) stated that although interviews are not used as frequently as questionnaires but it is a useful data collection method. Interviews can secure data that are not available in performance records or data that are difficult to obtain through written responses or observations.

Unstructured interview was used on the pupils. Before interviewing the pupils, specific questions that were brief, precise and designed for easy response were developed. Then, around four to six pupils were picked to be interviewed and they were interviewed until the point of saturation was reached.

Findings and Discussion - Result from the Tests

Tests data were collected by comparing the results of the two tests that have been administered to the pupils. The two tests were Test 1 and Test 2. Based on the data that were collected, the pupils' test scores have been tabulated as below. Table 3 shows the comparison of the pupils' test scores for Test 1 and Test 2.

Table 3: Comparison of Test 1 and Test 2 scores

Pupils	Test 1 (Traditional)	Test 2 (Rulain)	Difference
A	17	22	5
B	18	18	0
C	23	24	1
D	16	24	8
E	24	24	0
F	9	19	10
G	19	23	4
H	11	19	8
I	7	14	7
J	12	21	9
K	20	22	2
L	24	24	0
M	18	24	6
N	21	23	2
O	13	16	3
Total Score	252	317	65
Mean	16.8	21.1	4.3

Based on Table 3 above, the scores for Test 1 and Test 2 for pupil A were 17 and 22 respectively. The results show that pupil A had a higher score in Test 2 compared to Test 1, suggesting that Pupil A performed better in Test 2. The table also shows that twelve pupils achieved better results in Test 2 as compared to Test 1 and three pupils maintained their results. Table 3 also shows that the total score for Test 1 was 252 and the mean was 16.8 whereas for Test 2, the total score was 317 and the mean was 31.1. This shows that there is a rise of about 25.6% in the total scores and mean for Test 2 compared to Test 1. This indicates that the pupils had performed better in Test 2 compared to Test 1.

Apart from the analysis above, the pupils' scores were also compared through the grading system provided by the Ministry of Education (refer to Table 4 and Figure 4).

Table 4: Analysis of achievement levels for Test 1 and Test 2

Level of Achievement	Grade	Test 1		Test 2	
		f	%	f	%
Distinction (80% - 100%)	A	6	40	11	73.3
Good (60% - 79%)	B	4	26.7	4	26.7
Satisfactory (40% - 59%)	C	4	26.7	0	0
Weak (20% - 39%)	D	1	6.6	0	0
Very Weak (0% - 19%)	E	0	0	0	0
Total		15	100%	15	100%

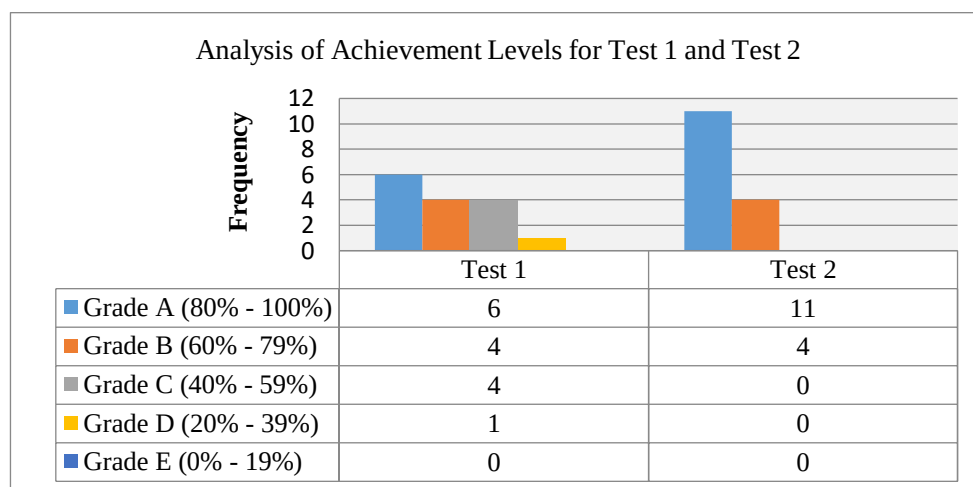


Figure 4: Pupils' achievement in Test 1 and Test 2 based on grading system

As shown in Table 4 and Figure 4 above, the number of pupils that scored Grade A for their Test 1 was 6 and the number of pupils that scored Grade A for their Test 2 was 11. This has clearly shows that a much greater number of pupils has scored Grade A for their Test 2 compared to Test 1. It can also be seen from the table and figure above that no pupils have achieved a grade lower than grade B for their Test 2. The results show that the Rulain method was indeed effective to help the Year 4 pupils in choosing the correct article.

Result from the Questionnaire

For this action research, questionnaire data were also collected to support the findings. The responses for the questionnaire items were compared for both the Traditional method and Rulain method. Table 5 below shows the comparison of the items' scores between the Traditional method and Rulain method.

Table 5: Comparison of the items' scores between the Traditional method and Rulain method

No.	Items	Traditional			Rulain		
		Yes	No	Diff	Yes	No	Diff
1	The teaching method used today helped me to answer the questions on articles.	7	3	4	10	0	10
2	I can answer the questions on articles with confidence after today's lesson.	0	10	-10	7	3	4
3	I can differentiate between articles for vowel sound and consonant sound after today's lesson.	3	7	-4	8	2	6
4	I find it difficult to understand the articles in today's lesson.	9	1	8	2	8	-6
5	I am confused on how to use the articles in today's lesson.	7	3	4	1	9	-8

Diff = Difference

Based on the comparison from Table 5 above, it can be seen that the difference for the Traditional method for item 1 is four and the difference for Rulain method for item 1 is ten. This data shows that the Traditional method only helped four pupils to answer the questions on articles whereas the Rulain method had helped all the respondents to answer the questions on articles.

Apart from that, seven pupils had voted yes for having confidence to answer the questions on articles after the Rulain method lesson and all the respondents answered no for having confidence to answer the questions on articles after the Traditional method lesson. In addition, eight pupils managed to differentiate between articles for vowel sound and consonant sound after the Rulain method compared

to only three pupils managed to differentiate between articles for vowel sound and consonant sound after the Traditional method lesson.

Item 4 and item 5 from the questionnaire are negative items, thus, although the differences for item 4 and item 5 are negative but, it actually shows positive result. For item 4, nine pupils answered yes for finding it difficult to understand articles after the Traditional method lesson and only two pupils answered yes for finding it difficult to understand articles after the Rulain method lesson. Lastly for item 5, seven pupils were confused on how to use the articles after the Traditional method lesson compared to only one pupil who was confused on how to use the articles after the Rulain method lesson. All the data mentioned above had pointed out that the Rulain method is indeed a better method of teaching and learning articles for the pupils compared to the Traditional method lesson.

Results from the Interview

Interview Questions after Test 1:

Question 1: How do you feel about today's lesson? Why?

Pupil	Responses
A	It was boring because there was no fun game.
B	It was just a normal lesson. At first, I could concentrate on the lesson but I talked with my friends afterwards.

Question 2: Do you think you can understand the rules of articles after this lesson? Why?

Pupil	Responses
A	No. The rules are very complicated and difficult.
B	Just a bit. I am still confused on how to choose the correct articles.

Question 3: Do you think you will be able to use articles correctly? Why?

Pupil	Responses
A	No. Learning articles is very hard.
B	Maybe, but, I am not very confident as the rules are very complicated.

Based on the interviews above, the pupils find it hard to understand the rules of using articles after the lesson using traditional method. They also hinted that they were bored and they ended up talking with their friends during class.

Interview Questions after Test 2:

Question 1: Are you confident to complete any exercise on articles after today's lesson?

Pupil	Responses
A	Yes. I feel more confident to complete any exercise on articles because I can refer to the Rule Card.
B	I think so as long as I follow the steps that I have learnt today.

Question 2: Are you confident to use articles correctly after today's lesson?

Pupil	Responses
A	Yes. I feel confident because learning articles is not that hard.
B	Yes. I think I can use articles correctly after today's lesson.

Question 3: Is the Rule Card effective to help you to overcome the wrong usage of article?

Pupil	Responses
A	Yes. There are many pictures on the 'Rule Card' and it is easy to understand the rules.
B	Quite effective. The rules can be understood easily and they can guide me in choosing the correct articles.

Question 4: Is the 'Article Train' effective to help you to overcome the wrong usage of article?

Pupil	Responses
A	Yes. The 'Article Train' activity is so much fun. I can learn articles easily.
B	Very effective because teacher incorporates the idea of playing games with learning articles.

Question 5: Which teaching method do you prefer? Why?

Pupil	Responses
A	The second lesson because I can understand articles more easily.
B	Second. The lesson was so much fun and I like learning with the 'Article Train' very much.

Based on the interviews above, the pupils mentioned that the Rule Card and Article Train had made it easier for them to understand articles. They also enjoyed learning articles using the Rulain method compared to the Traditional lesson.

Data from the interview were transcribed, coded and categorised to determine the factors on why pupils performed better under the Rulain method. From the analysis from Table 6, five factors were determined. The category with the highest frequency is 'The Article Train is interesting'. This signifies that most of the pupils really enjoyed learning articles using the Article Train. The Article train has become the major contributor to the pupils' excellent performance when learning under the Rulain method.

Table 6: Emerging themes from the interview data

No.	Categories of factors	Frequency	%
1	The 'Article Train' is interesting	7	46.7%
2	Learning is fun	3	20%
3	Easy to understand rules using the 'Rule Card'	2	13.3%
4	The lesson is easy to understand.	2	13.3%
5	Less confusion	1	6.7%
Total		15	100.0%

Conclusion

The main purpose of doing action research is to improve practice or to implement change for the purpose of professional development (Valsa Koshy, 2005). In line with the statement above, throughout conducting this study, many new things have been learned to improve practice.

First of all, from this study it can be learned that a teacher should always be flexible and must be aware of the pupils' needs. For example, in a mixed ability classroom, the pupils have different learning styles. Thus, the teacher needs to be able to cater to all the pupils' different learning styles so that they will eventually enjoy learning English. The Rulain method is actually a great way to cater to all the pupils' different needs as it is ideal for visual and kinaesthetic learners.

Apart from that, it can also be learned that it is important for a teacher to create lessons that pupils will find interesting and motivating. This is important to create positive learning environment. For this action research, two different kinds of lessons were conducted with the pupils, which is the

lesson using traditional method and the lesson using Rulain method. During the lesson using the Rulain method, the teacher introduced many interesting activities throughout the lesson. During the lesson, based on the observations, it can be seen that the pupils were really excited and they enjoyed the lesson very much. They were more confident in answering questions and they understood the lesson well. In comparison to the class using the traditional method, the pupils were mostly passive and less participative during the lesson. They seemed to be bored and lose interest in the lesson that day. During the test, some of the pupils were even caught discussing with their friends as they could not understand the lesson earlier.

It is best to say that it is not the pupils' fault that they could not understand the lesson but using the traditional method really does not suit them. The pupils prefer lessons with songs, games or activities that are fun for them. Teaching them using 'chalk and talk' will just make them bored.

As evident to the statement above, the pupils' Test 2 results have shown tremendous increase of marks compared to their Test 1. From the observations and tests done, it can be said that the pupils can understand the articles better when using the Rulain method compared to the traditional method.

Of all the good things that have been mentioned above about the method, there is still a weakness in the flow of the lesson that comes from poor judgement of time management. While conducting this intervention in class, it can be noticed that the transition from one activity to another activity in the intervention package was not smooth. The initial idea of cramming the method in a one hour lesson was not such a good idea. The lesson became rushed. Luckily, the pupils in the class can still keep up with the fast lesson and perform well in their Test 2 although it was a bit chaotic.

In conclusion, even though the result indicates that this intervention is indeed very good for teaching articles, but, it still needs to be improved in order to make it an even effective teaching aid.

Implications of Findings

While the results for the Rulain method were most encouraging, the method was by no means perfect. It had its own weaknesses. One of the drawbacks of this method was the whole package (rule card and article train model), was crammed into the one hour lesson. It will be better the teacher can teach the pupils slowly and introduces the activities separately one by one to them so that it will not seem rushed and the pupils will be able to comprehend and understand the lesson better. As the saying goes, more is actually less. Introducing too many activities in one lesson may result in confusion to the pupils.

In the next cycle, most probably the lesson can be implemented in a longer time frame. By this way, all the activities will be exploited better and the pupils will be given enough time to accustom to one particular activity before moving on to the next activity.

Apart from that, it will be good to give exercises to the pupils to test their understanding of the method used. For example after exposing the pupils to the rule card activity, teacher needs to give exercises to the pupils to be able to know whether they understand the lesson using the rule card or not. It will be a waste if the teacher just move on to the next activity when the pupils clearly still do not understand the lesson. Teacher needs to fully utilise the activity until the pupils understand the lesson.

In conclusion, with little adjustments, the method will be great to be implemented to the pupils.

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USING “JAS-TO-BLOOM” TO IMPROVE YEAR 3 PUPILS’ ABILITY IN WRITING SIMPLE SENTENCES

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Abstract: *Despite the advance of world and technology, writing is still one of the essential language skills. It is one of the productive skills in the English language. The ability to write would retain the pupils at a significant advantage right up to tertiary level and more. In Malaysia, English writing instruction in Level One at primary school focuses on three domains, including learning to write, communicating meaning and using appropriate mechanical features of writing. Writing sentences is one of the teaching and learning activities in Level One. It is also one of the elements in the English language assessment. However, English as a Second Language (ESL) pupils always find it a difficult task. This study aims to explore the use of ‘Jas-To-Bloom’ as a strategy in improving writing ability, especially in writing simple sentences among Year 3 pupils in a semi-urban school, Sekolah Jenis Kebangsaan Cina Ayer Keroh, Melaka. A case study was carried out to investigate the use of ‘Jas-To-Bloom’ in improving Year 3 pupils’ ability in writing simple sentences. Data was collected via a series of pre-test and post-test, semi-structured interview with five participants, field notes written by the researcher and document analysis of lesson plans. The data collected from the tests was analysed and later triangulated with the interview responses, field notes and document analysis. The findings reveal that the use of ‘Jas-To-Bloom’ helps to improve pupils’ ability in writing simple sentences. The result also shows that the pupils could develop more ideas in writing and able to write their ideas in simple sentences after using ‘Jas-To-Bloom’. It is hoped that ‘Jas-To-Bloom’ will be used as one of the teaching aids that could assist educators to teach ESL pupils more effectively.*

Keywords: *Jas-To-Bloom, Writing Skills, Simple Sentence, Lower Primary School Pupils, English As A Second Language*

Introduction

English language has increasingly become the international language for business and commerce, science and technology, as well as international relations and diplomacy. (Larsen-Freeman & Long, 2014) Hence, it is the most frequently taught second or foreign language around the world. (Thirusanku & Yunus, 2012). Among all the four English language skills, writing is one of the crucial productive skills. Titis Dewi (2012) justifies that writing is a productive practice attained through a number of steps, involving the exploration and transmission of ideas into written form, and repeated revision to create a grammatically and orderly texts. The ability to write well would place the pupils at a great advantage. However, writing has always been a struggle among the ESL learners. It is often perceived as the more difficult skill compared to listening and reading skill. (Berman & Cheng, 2010)

In Malaysia, the English language has been taught as a second language. It is a compulsory subject in curriculum for all the Malaysian national schools. According to Ministry of Education Malaysia (2013), every child must be competent in English language, as stated in Shift 2 in Malaysia Education Blueprint 2013 – 2025 (MEB). The educational system of Malaysia aims to ensure every pupil achieve 100% basic literacy in English language after three years of schooling. With the aim of achieving the basic literacy, the pupils have to master four language skills, including listening, speaking,

reading and writing. Among the four skills, the pupils often encounter difficulties in writing. (Fareed et al., 2016) Therefore, the teaching and learning of writing should be given more focus in order to achieve the blueprint.

There are a number of writing skills that should be acquired by the lower primary school pupils such as penmanship, formation of letters, as well as writing words, phrases and sentences legibly. It is believed that a strong basis in the basic writing skills will help the pupils attain good writing ability when they grow older. Fazdilah (2013) justifies that writing is a dreary practice due to its complexity in mastering the skills as second language learning. Writing is never a relaxed tasks especially for the ESL pupils as they have to write in their second or even third language. It is always challenging and demotivating. There are many causes that lead to writing difficulties among the ESL pupils. Apart from issues like a lack of vocabulary, grammar and the mechanics of writing, ESL pupils also face the obstacles to deliver their creativity and ideas into words, and arrange the words in the correct order. So, the ESL pupils are always feeling threatened and demotivated to write.

This paper will report the findings of a case study that explored the use of “Jas-To-Bloom” in improving Year 3 pupils’ ability in writing simple sentences in a national type primary school in Malaysia. Data was collected through tests, interviews, field notes and document analysis with the research participants regarding: (a) the implementation of social constructivist in “Jas-To-Bloom”; and (b) the use of “Jas-To-Bloom” to improve pupils’ ability in writing simple sentences.

Literature Review

Writing skills are vital part of communication. This is because good writing skills allow the pupils to deliver their message clearly and ease to a far larger audience than through face-to-face conversations. (Writing Skills, 2011) The ability to write simple sentences is absolutely important. It is one of the writing skills that should be mastered by Level One pupils in Malaysia. It is highlighted in the learning standards 4.3.3 where the pupils will be able to “plan, draft and write an increased range of simple sentences”. (Kementerian Pendidikan Malaysia, 2018, p. 35). Writing simple sentences is the basic of all kinds of writing. After mastering the penmanship, a child learns to write simple sentences before he or she can proceed to descriptive, narrative and format writing. To sum up, the pupils should become proficient in writing simple sentences in order for them to progress to Level Two which focuses on more complex and varied paragraph writing.

To improve writing ability among the pupils, a combination of social constructivist theory and 5W1H approach is one of the alternatives. They are the underpinning theories and approaches related to “Jas-To-Bloom” in this study. Wilson and Stacey (2004) explains that the social constructivist paradigm focuses on learner-centred learning in which the learners can share their knowledge, skills, experiences, and perspectives with each other. Students are encouraged to participate in active dialogue and collaborate with others in order to construct knowledge and discover principles for themselves. Some of the approaches that apply the social constructivist theory comprise of task-based learning, collaborative learning and Zone of Proximal Development. In this research, the social constructivist theory is implemented through the application of 5W1H approach in the “Jas-To-Bloom”. The 5W1H approach is a writing strategy that helps in narrative writing. It uses a systematic questioning technique consisting 5Ws and 1H (who, what when, where, why and how) to monitor closely the narrative genre. According to Shimazu et al. (2006), the 5W1H approach is highly applicable to collect information. It will also be helpful in making a summary (Nakazawa & Oka, 2001). The approach always helps the writers to avoid missing important details in reports and academic papers (Regoniel, 2016)

There are a number of past research related to this study. Most of the studies focus on collaborative learning, task-based learning and scaffolding. Shih (2011) had done a mixed method research on peer assessment process among the first year English majors from a technological university in Taiwan. The study disclosed that students can reflect and learn from each other, and construct meaningful knowledge and skills through collaborative learning and interaction. In addition, Gholami

Pasand & Tahriri (2017) experiment study investigated the impact of peer scaffolding on writing accuracy among the university students in Guilan and revealed that EFL students who practiced peer scaffolding produce more accurate argumentative essays. Throughout the study, the students showed some supportive and scaffolding behaviours. Furthermore, Zhaochun (2015) conducted an experiment study to examine the effects of task-based learning on the improvement of EFL learners' writing competence among the university students and found that task-based learning is effective to improve EFL learners' writing competence. It also changes the EFL learners' role to an active participant and the teachers' image to an amiable director. Narjess & Sayyed (2013) also applied the task-based learning approach to writing classes for Iranian EFL learners. They concluded that the pre-task planning is an effective writing strategy and it helps to boost EFL learners' general writing ability when completing personal and decision-making tasks. Apart from that, there are also some researches highlight the 5W1H approach in writing. According to Mas et al. (2017) action research in a local national school, most of the participants could write more words in their writing after using the 5W1H approach. Besides, Shabir (2016) quasi-experiment study also stated that 5W1H concept helps the students to develop their ideas in narrative writing. It increases the number of sentences in the participants' writing. The concept is helpful to find various concepts and organise the information. Generally, the past researches pay more attention to university students and essay writing. Therefore, there is a need to conduct a research on writing simple sentences among the lower primary school pupils.

Methodology

In this research, a case study was chosen as the research design. According to Yin (2017), a case study refers to an empirical investigation that explores a current situation within its real-life context, especially when the limitations are not clearly identified. Having to said, a case study is applied when the contextual conditions are believed to be highly connected to the phenomenon of study. In this research, the case study was implemented to get an in-depth analysis on the use of "Jas-To-Bloom" in improving pupils' ability in writing simple sentences.

A purposive sampling was utilised in this study. Tongco (2007) explains that the purposive sampling is the deliberate choice of participants due to the qualities they possess. The population of the study was the Year 3 pupils in a national type primary school in Malaysia. Five research participants were selected based on several criteria. Firstly, the participants have an average command of English. They also face difficulty in writing orderly simple sentences although they have the vocabularies. Lastly, the participants always use direct translation from their mother tongue. These common characteristics were spottable through pupils' writing works and the result of the pre-test. The five pupils who fulfilled these requirements were chosen as the research participants to provide answer to the research questions of the study.

There were four research instrument applied in this study, namely tests, interview, field notes and document analysis. In this research, there were two tests conducted, including the pre-test before using "Jas-To-Bloom" and the post-test after using "Jas-To-Bloom". The results of the pre-test and post-test were compared and analysed. The interview was carried out to collect information from the research participants so as to triangulate the data collected from the tests. Likewise, the field notes were written in three stages, comprising before, while and after using "Jas-To-Bloom". The field notes were used to record the flow of the lessons and some behaviours observed throughout the process. Finally, the document analysis was the collection of lesson plans. The analysis complemented the data collected from the field notes.

Findings and Discussion

The findings and discussion are justified based on the two research questions (RQ) of the study.

RQ1: How does the Social Constructivist Theory Implemented in the “Jas-To-Bloom”?

To answer RQ1, data from field notes (FN), interview (I) and document analysis (DA) were analysed. The data was collected from multiple sources for triangulation. The analysis was grouped into three aspects, including (a) activities, (b) materials, and (c) teacher’s and learners’ roles.

Activities

Based on the data collected, the activities conducted with “Jas-To-Bloom” in the research enable the participants to explore and learn actively. All of the activities are learner-centred. Figure 1 is a print screen of the while writing stage. It was planned in one of the lesson plans in the document analysis.

While-writing 35 minutes	1. Based on the pictures and words given, the participants <i>explore and practise using the “Jas-To-Bloom” with their peers.</i> 2. The participants <i>ask and answer the questions based on the pictures using the “Jas-To-Bloom” with their peers.</i> 3. Then, the participants <i>discuss the simple sentences with their peers and write down the sentences individually.</i>

Figure 1: While-writing Stage of A Lesson Plan (Day 3) in the Document Analysis

By referring to Figure 1, the participants discover the materials with their peers actively. Then, they ask and answer the questions with their peers to seek for knowledge in order to improve their writings. After that, they create their own meaning of the knowledge gained by writing down the sentences by themselves. These findings are also detected in the field notes and interview.

- “They discussed and corrected their peers, then they wrote down the sentences individually...” (FN, during the intervention)
- “*We discuss together.*” (I, Participant 2)
- “With friends. We share ideas.” (I, Participant 5)

The activities allow the participants to take responsibility of their own learning. They also encourage interaction and collaboration among the participants. With a little guidance from the teacher when necessary, the participants explore and develop their writing ability actively through the activities. This is complemented by Gholami Pasand & Tahriri (2017) research. The more competent writers scaffold the less competent ones while the less competent writers can contribute at some occasions during the activities. These findings also agree with the social constructivist theory, supported by Shih (2011) whereby learners can reflect and learn from each other. They construct meaningful knowledge and skills through collaboration and interaction.

Materials

There are only two materials used in the lessons throughout the study. They are pictures and “Jas-To-Bloom”. The findings show that the materials used in the study give guidance and scaffolding which help the participants to go through the Zone of Proximal Development. From the interview responses and the analysis of the field notes, it is found that the materials help the participants to complete the task which they can hardly attain without the assistance of the materials.

- “It will teach me how to do long sentences.” (I, Participant 2)
- “I don’t know write and I think the flower.” (I, Participant 5)
- “Participant 2 referred to the ‘Jas-To-Bloom’ all the time.” (FN, during the intervention)
- “Participant 3, 4 and 5 did not fully depend on the ‘Jas-To-Bloom’, they used it only when they could not write...” (FN, during the intervention)

The data demonstrates that the participants are relying on the materials when they are unable to complete the task. In other words, the materials assist the participants to develop from the level of what they can do without help to the level of what they are potential to perform with some guidance.

Teacher’s and Learners’ Roles

In this research, the teacher’s and learners’ roles are very much different from the ordinary classic classroom. This finding is in accordance to Zhaochun (2015) study whereby the task-based learning approach has converted the teachers’ role from being rigid to amiable while the learners’ role from a passive receiver to an active participant. The information collected in this research discloses that the teacher acts as the facilitator of the classroom activities while the participants become more responsible and active in their own learning.

- *“The participants consulted the researcher when they were not sure of the spelling. The researcher did not give the answer directly. Instead, she spelled the words using phonics.”* (FN, during the interview)
- *“...I can remember. I know the questions.”* (I, Participant 1)
- *“Yes, I want. I can write sentences myself very easy. Not scary.”* (I, Participant 5)

The data collected from the interview and the field notes shows that the teacher is always ready to help the participants. She guides and leads the participants to find out the solution instead of revealing the answer at once. On the other hand, the participants are actively constructing their own knowledge socially from their learning experience. They become more responsible and fully participate in their own learning.

RQ2: How does the Use of “Jas-To-Bloom” Improve Year 3 Pupils Ability in Writing Simple Sentences?

As for RQ2, the findings were mainly interpreted from the data collected in the tests (T), field notes (FN) and interview (I). Different sources and instruments were used to triangulate the data gathered. There were three themes investigated from the analysis: (a) improve pupils’ writing ability, (b) develop pupils’ motivation in writing, and (c) promote fun and meaningful learning.

“Jas-To-Bloom” Improves Pupils’ Writing Ability

Firstly, the use of “Jas-To-Bloom” improves participants’ writing ability. This is evident in the pre-test and the post-test where the changes in pupils’ writing ability before and after the use of “Jas-To-Bloom” were noted. The results of the pre-test and the post-test are presented in Figure 2. All the participants show a significant improvement in the post-test.

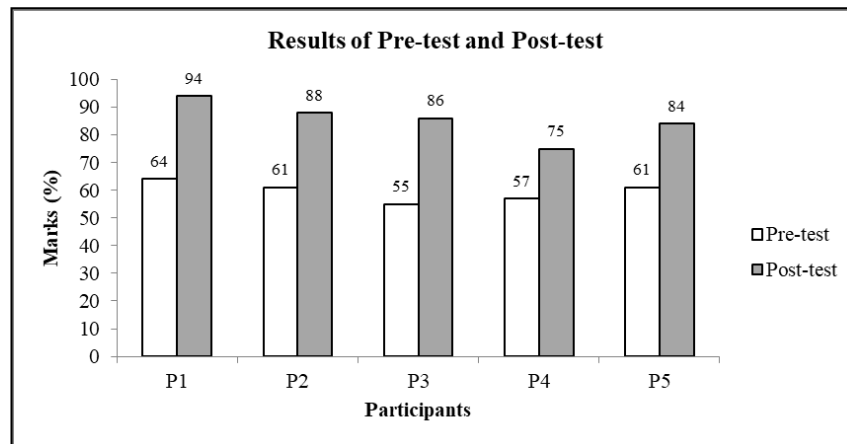


Figure 2: Results of the Pre-Test and Post-Test

The improvement in marks shows that the participants are able to write better simple sentences after using “Jas-To-Bloom”. By looking at each and every writing component, it is found that the pupils improve the most in the writing content. After the use of “Jas-To-Bloom”, the pupils can write more details in their sentences. Furthermore, the average score of the sentence structure also shows a meaningful increment. In other words, the participants have developed their ability to arrange their ideas into words correctly. These findings are triangulated with the evidences found from the field notes.

- “...the participants wrote more words and longer simple sentences...” (FN, after the intervention)

The data shows that the participants have more ideas on what to write after using “Jas-To-Bloom”. It is parallel to Mas et al. (2017) research whereby the increment of word count in writing results in longer and more detailed sentences. It makes the sentences consist of more ideas.

“Jas-To-Bloom” Develops Pupils’ Motivation in Writing

Besides, the findings also justify that the use of “Jas-To-Bloom” helps to develop pupils’ motivation in writing. From the interview, participants’ responses can be grouped into three themes as shown in Table 1.

Table 1: Interview Response

Response	Theme
<i>"...it can help me to do revision before examination."</i> (Participant 4)	Initiate revision
<i>"It will teach me how to do long sentences."</i> (Participant 2)	Give guidance
<i>"...I can write perfect English sentences."</i> (Participant 5)	Promote self confidence

Firstly, "Jas-To-Bloom" arouses participants' intention to do revision for examination. The participant mentioned that the use of "Jas-To-Bloom" encourages her to do revision on writing sentences. Secondly, "Jas-To-Bloom" provides guidance to the participants to write correct simple sentences with more details. The participants articulated that "Jas-To-Bloom" has everything in it and through the questions, they are motivated to write longer sentences. Thirdly, "Jas-To-Bloom" develops self confidence among the participants in writing simple sentences. The participants said that they can write perfect sentences after using "Jas-To-Bloom". In short, "Jas-To-Bloom" motivates the participants to write simple sentences. These findings are in line with the data collected from the field notes as following.

- *"...kept asking if they could bring back the "Jas-To-Bloom" (FN, during the intervention)*
- *"...the participants knew what to do for the task." (FN, during the intervention)*
- *"...the participants looked happy and confident when they answer the questions" (FN, after the intervention)*

The data demonstrates that the participants are motivated to write using "Jas-To-Bloom". The findings are supported by Shabir (2016) whereby the 5W1H concept ensures the learners be capable of finding ideas from the same question words and does not require them a long time to think of the content for their writings. Thus, the participants are in joy and motivated to complete the tasks without much trouble.

"Jas-To-Bloom" Promotes Fun and Meaningful Learning

Lastly, the use of "Jas-To-Bloom" helps to promote fun and meaningful learning. Through the interview, it is found that the participants like to use the "Jas-To-Bloom" due to its interactivity, production of meaningful outcome, and attractive features. Table 2 shows the analysis of participants' feedback from the interview.

Table 2: Analysis of Participants' feedback

Response	Theme
• “We discuss together.” (Participant 2)	Interactive
• “Can do many many sentences.” (Participant 3) • “...it has many questions. Very fun.” (Participant 5)	Meaningful outcome
• “I can open up the petal one by one.” (Participant 2) • “It is beautiful. It is easy to make.” (Participant 3)	Attractive features

The themes analysed from the participants' interview responses contribute to the features of a fun and meaningful learning experience. It maximises participants learning experience. The use of “Jas-To-Bloom” ensures the participants to discuss and share ideas with one another. As stated in Narjess & Sayyed (2013) study, peer discussions help to explore ideas freely. It makes the participants' learning more interactive and provides more fun. Likewise, the discussions are consequential to produce meaningful outcome. The participants write out their ideas into simple sentences after discussions. It makes the participants engage in a purposeful task using the appealing and feasible instrument, namely “Jas-To-Bloom”. The findings are further supported by the data collected from the field notes.

- *“The participants creatively made the petals of the “Jas-To-Bloom” colourful.”* (FN, during the intervention)
- *“They were very excited and enjoyed the task very much.”* (FN, during the intervention)
- *“...they liked to mark their peers' work...it was fun.”* (FN, during the intervention)

The data shows that the participants like to use “Jas-To-Bloom” and enjoy making it. They also like to correct their friends' mistakes using “Jas-To-Bloom”. It makes the participants feeling confident and successful when they are able to identify the error. The participants are fully engaged in the teaching and learning process while using the “Jas-To-Bloom” joyously.

Conclusion and Implication

Based on the findings, it is concluded that the social constructivist theory is implemented in the “Jas-To-Bloom”. The application of Zone of Proximal Development and task-based learning are prominent in the use of “Jas-To-Bloom”. Besides, it is also found that “Jas-To-Bloom” is a useful strategy to assist the Year 3 pupils in improving their ability to write simple sentences. The pupils have shown a significant improvement in their writing ability through the tests. Furthermore, it also helps to develop the pupils' motivation in writing. Lastly, it helps to promote fun and meaningful learning among the pupils.

In summary, “Jas-To-Bloom” is helpful to improve pupils' ability in writing simple sentences. The findings of this research are valuable to the ESL pupils, ESL teachers and curricular developers. Through this study, the ESL pupils can learn and improve on their writing skill. As for the ESL teachers, they get the opportunities to see the application of social constructivist theory in the “Jas-To-Bloom”. The teachers can explore and learn to integrate this theory in their teaching practices. Also, the research highlights the issues on writing simple sentences. Thus, the curricular developers get the awareness to put more emphasis on simple sentence level in primary level one syllabus so as to build a strong writing foundation among the ESL pupils.

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THE EFFECTIVENESS OF USING THE JIGSAW CLASSROOM TECHNIQUE TO ENCOURAGE PUPILS' PARTICIPATION IN READING LESSON

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Abstract: *Reading is one of the most significant thing in education. Without reading, someone will not gain new knowledge. The purpose of the action research was to determine the effectiveness of using the Jigsaw Classroom technique to encourage pupils' participation in reading. The sample for the study consisted of Year 5X pupils in a school in Kuala Lumpur. The instrument used for the study were questionnaire, observations, and interviews. The study was carried out over a period of two weeks. Two lessons were conducted; one employing the traditional mode and the other using the Jigsaw Classroom technique. The results of the study showed that the pupils participate more in class when the Jigsaw Classroom technique was used. One suggestion to improve the Jigsaw Classroom method is to create an independent group learning. Although the pupils were participate in the Jigsaw Classroom technique, it was felt that the idea of an independent group learning may involve them more in the lesson.*

Keywords: *The Jigsaw Classroom Technique, Participation, Reading, Independent Group Learning*

Introduction – Reading Is Fundamental

Without doubt, it is difficult to attract pupils to participate in an English lesson. However, to attract pupils' to participate in an English reading lesson is harder. It is important for pupils to aware the importance reading in order for them to actively participate in reading lesson. Reading is one of the most significant thing in education. Without reading, someone will not gain new knowledge. It is through reading that a person is going to be able to discover and understand new ideas, concepts, places and people. According to Gold (2002) reading is a life support system as we need it for all kinds of purposes. For example, we need to read the expired date labelled on fast food before eating it. Other than that, reading is a fundamental way to all knowledge. Naturally, everywhere we go, everywhere we are there are signs that we need to read and interpret. However, pupils nowadays seems in lacking of participation in reading lesson. Thus, this study was conducted to determine the effectiveness of using the Jigsaw Classroom Technique to encourage pupils' participation in reading lesson.

Literature Review

Pupils' Participation

Pupils' participation has been discussed by researchers for a long time. Participation has become an important aspect in education. Dancer and Kamvounias (2005) as cited by Rocca (2010) stated that participation can be viewed as part of an overall student's engagement process. The acts of asking questions, give opinions or simply answering questions posed by the instructor or fellow students are examples of active type of classroom participation (Mohd. Yusof Abdullah et.al 2012). If only a few students participate by volunteering answers, asking questions, or contributing to discussions, class sessions become to some extent a lost opportunity to assess and promote learning (McKeachie et. Al). There are two types of participation in class which are passive participation and active participation (Mohd.Yusof Abdullah et.al 2012). The active participation has been mentioned above where pupils reacted more open up in the classroom . They know what they want to say and what they should no say. Contrary to the passive participant in the classroom, they rarely involve in the classroom discussion but

they usually acts as active listener and oftenly take down notes (Mohd Yusof Abdullah et.al 2012). Based on the differences in style of participation of pupils in class, teacher needs to be observant in order to evaluate pupils' participation in the classroom. One of the ways that a teacher can do to evaluate whether pupils participate or not in a lesson is by looking at their behaviour. One of the sign that the pupil do no participate in class is when the pupil putting their head on a table. Next, pupils' participation in class can be measured by looking at the task given to them during the lesson. If they are completing the task, it means that they are participating in the classroom.

Based on the research conducted by Mohd Yusof Abdullah et.al, one of the factors that influence pupils' participation in reading is the personality factor. Generally, students who have the characteristics of responsibility, like to read, high curiosity, always be prepared, and like to ask questions will form an active personality (Mohd Yusof Abdullah et.al 2012). It also stated that personality traits of passive students were found to be opposite to the active students and it distinguishes the degree of participation in classroom. These findings are consistent with Rocca when she said that students traits is one of the factors that affect participation levels in class. As individuals, Kelly said that we differ in personalities and not everybody is the same. Confidence is a key trait that students struggle with and has a direct effect on participation. Pupils with fears of making mistake in class will choose to be quite instead of participate in class. Naturally, most pupils only engage in class and felt more comfortable to participate only when they became familiar with their peers and therefore felt more comfortable in expressing themselves.

Importances Of Reading Lesson

English literacy becomes the core element in the new language curriculum because the best time to address literacy problems in national primary school is at the foundation level of learning, which is Years 1 to 3 (Curriculum Development Division, 2014). In fact, language acquisition experts suggest that the best time to start learning a second language is as early as possible before they reach puberty (Lightbown & Spada 2013). As stated before, it is importance for pupils to participate in reading lesson as reading is the window to all knowledge. Pupils who read a lot will gain more knowledge than those who do not.

It was very disappointing when pupils do not participate in reading lesson as reading is important. Reading is one of the basic skills that students should master for their long-life learning purposes (Jacinta Ann Xavier Melor Md Yunus Jamaludin Badushah 2016). Christopher Teh, a lecturer from University Serdang Selangor was invited to appear on TV show Bella to give a talk about Reading Habit in Children. He said that people can tell the difference between a person who reads and one who does not. Understanding the written word is one way the mind can grow in its ability (Christopher Teh, 2013). A person who reads a lot will talk, speak, think, and behave differently than one who does not read. Reading not only increases our knowledge, but it also builds maturity and character, sharpens our thinking, and widens our awareness in social, economic, political, and environmental issues. (Christopher Teh, 2013).

Factors Contributing To The Lack Of Participation In A Reading Lesson.

There have been a variety of reasons identified in prior studies as having influences in encouraging or discouraging students' participation (Siti Maziha Mustaphaa, Nik Suryani Nik Abd Rahman, & Melor Md.Yunus 2010). A study conducted by Siti Maziha Mustaphaa et. Al (2010) which is to investigate the factors influencing classroom participation among Malaysian undergraduate students discovered that lecturer traits were the most influential factor in encouraging participation among students. Teaching styles had contributed to lack of interest to learn the language among the pupils. A teacher's teaching has a huge impact and is the most important factor in determining students' learning atmosphere (Zamri Mahamod, Mohamed Amin Embi , Melor Md. Yunus , Maimun Aqsha Lubis & Ong Sze Chong 2010). My teachings were mostly teacher-centered.

The second factor is that Malaysian student did not like to read. A lot of research has been done regarding reading and student in Malaysia. One research conducted by Zurina (2013) found that Malaysian students did not like to read. A research conducted by Zurina also shows that only one out of 86 students read 3-7 English materials in a month. Surprisingly, 36 out of 86 students did not read any English materials in a month. The findings above shows students did not like to read regardless what the genre or material is. That is why they did not participate in reading class.

Learning Theories and Approaches In Applying The Jigsaw Classroom Technique

The theoretical framework that was implemented in this study consists of the collaborative method. I used the collaborative method as a proposed solution for the issue of pupils' lack of participation in reading lesson. Collaboration has become a 21st century trend. Learning through collaboration is one of the most effective forms of learning as pupils have to work together in order to achieve a goal of the group. Learning in groups helps to develop critical thinking.

Through this collaboration process, the students will gain motivation to learn. Many students in the primary school often fail to reach their full potential as English language learners due to low motivational factors (Melor Md Yunus, Nur Rashidah Khairunnisa Ranjeeta Bt. Abdullah 2011). The learners' motivation was also affected by external factors such as teachers, parents and peers (Melor Md Yunus, Nur Rashidah Khairunnisa Ranjeeta Bt. Abdullah 2011). Pupils who are lacking in participating in class often said to be a passive learner. Sometimes, the teacher needs to come out with a strategy to motivate the pupils to participate in class. The jigsaw classroom technique may provide those motivation to pupils. For example, the jigsaw classroom technique promotes social learning style where pupils working collaboratively in a group. Some pupils may not participate because they are shy instead of lacking interest towards the lesson. Naturally, shy people will open up more when they are working with their friends. Another important point in teaching and learning language, including Arabic is to provide students with the proactive communication environment with the other students in teaching and learning process. (Maimun Aqsha Lubis, Melor Md. Yunus, Mohamed Amin Embi 2010)

The Jigsaw technique is beneficial in teaching and learning because learning revolves around interaction with peers in which students are active participants in the learning process and thereby help to build inter-personal and interactive skills among students. Besides, pupils will become more themselves and less shy when they work with their friends.

The Jigsaw Classroom Technique

In the Jigsaw Classroom technique, each student is simultaneously a member of two groups: in a *home group*, whose chief goal is to learn the content and complete tasks, and in an *expert group*, which consists of one representative member from each home group.

Jigsaw classroom technique consists of three main steps. In the first step, pupils meet in their home group to discuss about the goals and divide the tasks that each one of them needs to master.

1	2
3	4

1	2
3	4

1	2
3	4

1	2
3	4

Figure 1: Home Group

In the second step, they then meet their expert group members to focus on one specific aspect of the content. They will discuss among themselves about the task that they got until they mastered it.

1	1
1	1

2	2
2	2

3	3
3	3

4	4
4	4

Figure 2: Expert Group

After mastering the expert content, each member returns to his or her home group to teach the aspect (task) to the rest of the group.

1	2
3	4

1	2
3	4

1	2
3	4

1	2
3	4

Figure 3: Home Group

With this strategy, each student in the home group serves as a piece of the topic's puzzle and when they work together as a whole, they create the complete jigsaw puzzle. Thus, every member in each group needs to put an effort to complete the jigsaw puzzle.

The jigsaw classroom technique as one of the 21st century collaborative learning style

The jigsaw technique was invented and named in 1971 in Austin, Texas by a graduate Professor named Elliot Aronson. This technique has long been introduced but it resurfaced accordance to the 21st teaching technique. Educators already use cooperative learning throughout Europe, North America and many other parts of the world due to its high success rate (Scott 20015). Collaboration is essential in our classrooms because it is inherent in the nature of how work is accomplished in our civic and workforce lives. Fifty years ago, much work was accomplished by individuals working alone, but not today. Much of all significant work is accomplished in teams, and in many cases, global teams (Anon t.th.). The framework of the 21st century learning style included collaboration as one of the elements of 4C's. 4C's is the key elements for 21st century learning refer to the following skill which are critical thinking and problem-solving, communication, collaboration, and creativity and innovation. Realizing the importance creating a global student, one of the aims of the Malaysian Education Blueprint 2013-1015 is to aims towards 21st century learning and to put Malaysia on par with developed nations.

Methods

Research design that was employed in this study is one of the qualitative research design which is action research. Action research is a disciplined process of inquiry conducted *by* and *for* those taking the action (Richard Sagor 2000). The purposes of action research include professional understanding, personal growth, and the political empowerment (Noffke 1977; Richard 2000). Considering the purpose of action research as stated by Richard, this design suit the study well in order to have a better understanding about the lacking pupils' participation in reading lesson. The instrument used for the study were questionnaire, observations, and interviews.

Research participants

The research was carried out at Sekolah Kebangsaan Taman Melawati 2. The class involved in this research was 5X class. The class involved has mixed-ability pupils since the school did not practise streaming system. There were 28 pupils in the class. The research was carried out on the whole class but only three boys and two girls were selected to participate in the research.

They pupils were all Malays. They came from average social economic background. When I asked them about their parents' job, most of them worked as a gardener or a teacher. Their mother tongue is Malay and they never speak English at home. These five pupils were chosen as the participants based on their behaviour during reading lesson. These five participants rarely participate in reading lesson and always doing their own work during the lesson.

Procedures

Two lessons were conducted; one employing the traditional mode and the other using the Jigsaw Classroom technique. The topic chosen for the lesson was 'Moving Forward'. In the lesson, for the first step, pupils have been introduced to the type of gadgets.

During the presentation stage, pupils were asked to be in group of four. A text was distributed and pupils were asked to read the text in their respective group. The next stage was the practice stage. Pupils read and identified important points in the text. While reading, pupils were stopped and underline the important points.

The next stage was the practice stage. In this stage, a task sheet was distributed to each of the pupils. Pupils read the text and discussed with their friends to complete the task. Lastly, the lesson was ended by summarizing on what they had learnt during that one hour lesson.

After the lesson ended, five participants were picked to help filling the questionnaire. Each item was explained carefully to the research participants so that they understood how to fill in the questionnaire. After that, the same participants were selected to be interviewed. All the interviews session were recorded and transcribed later as proof.

One week later, the jigsaw classroom technique lesson was implemented. The lesson was conducted similar as the traditional lesson but the jigsaw classroom technique came into play during the practice stage. The set induction and presentation stage took part similar as the traditional lesson. Pupils went to their expert group after they have dividing their task in the home group. Next, pupils completed the task (sub-category) in their expert group where they discussed and understood the text. They were given 10 minutes to be in their expert group. In the expert group, the pupils went through the text together. They read, comprehend and discussed about the text. After each pupils had understood and completed their part, they went back to their home group. In the group, each one of them talked about their sub-category. Pupils shared about their sub-category in their expert group. The other pupils listened and tried to complete the task sheet given to them.

Then, the production stage was conducted similar as the traditional lesson where pupils drew an i-THINK map based on the task sheet they had completed together. Lastly, the participants were picked again to help filling in the questionnaire on the jigsaw classroom technique. Later, the research participants were being interviewed on the jigsaw classroom technique

Results and discussion

Results focusing on to determine the effectiveness of using the jigsaw classroom to encourage pupils' participation in a reading lesson are presented here in three subsections. The first sections presents the result of the questionnaires. The second sections present the result from the interviews meanwhile the last section present the result from the observations.

Questionnaire

The means for each item in the questionnaire was calculated. The mean for each item for both lesson were compared. Table 1 shows the comparison of means between the traditional and the jigsaw classroom technique for all the items in the questionnaire administered.

As can be seen in Table 1, all the items are positively-stemmed. Thus, the higher mean indicate the positive outcome. From Table 2, it can be seen that the mean for Item 1 for traditional lesson and the Jigsaw Classroom technique are 2.8 and 4.0 respectively. Item 1 represents the pupils' interest towards the lesson. The results also show that the mean of the Jigsaw technique was 43% higher than the traditional method. The increasing in percentage showing that the jigsaw classroom technique is effective to attract pupils' interest towards the lesson more than the traditional lesson. The results suggest that the jigsaw classroom method is more interesting than the traditional method.

Table 1
Comparison of the Means between the Traditional and The Jigsaw technique method.

No	Items	Means		Difference	Percentage
		Traditional Lesson	The jigsaw classroom lesson		
1	The English lesson today was interesting.	2.8	4	1.2	43%
2	The way my teacher taught me today made me interested in English.	2.4	3.6	1.2	50%
3	I participate actively in the English Lesson today.	2.4	4.6	1.2	50%
4	I volunteered to answer my teacher's questions in the English lesson today.	1.6	3.0	1.4	87.5%

5	I was interested in the English language activities today.	2.6	4.2	1.6	62%
6	I was able to complete the task.	2.8	4.6	1.8	64%

Table 1 also shows the difference in mean for both lessons. Item 3 represents the pupils' participation in class. The mean for Item 3 for traditional method is 2.4. This contrasted with the intervention lesson which obtained a mean score of 4.6 which was almost two times higher than the traditional lesson. The large difference in mean which is 1.2 indicate that the jigsaw classroom technique was able to increase the pupils' participation in class than the traditional method. The results show that the mean for the traditional method was 50% higher than the mean for the traditional method. The high percentage revealed that pupils were participated in the reading class when the jigsaw classroom technique was used compared to when the traditional lesson was employed.

Interview

The other evidence of the effectiveness of the Jigsaw technique in encouraging pupils' participation in reading lesson can be found in the interview data collected. The following are the excerpts of the transcribed interview data.

Table 2: Question 1 : Did you participate in today's lesson? Can you tell me why?

Pupil	Responses
A	Yes. Because I need to help my group to complete the i-think map.
B	I think yes. Because I need to participate to help my home group.
C	Yes because everyone participate in the activity. We were competing each other to complete the task.
D	Yes. I need to complete my task and I do not want to be left behind.
E	Yes. The task is easy. Although I did not read the text, I knew the answer through the discussion in the expert group.

Based on the Table 2, the Jigsaw technique lesson was successful in involving pupils' participation in the reading lesson. Based on the above interview, most pupils were involved in the lesson because they wanted to compete with other group members in completing the task.

Table 3: Question 2 : Did you find the activities in today's lesson interesting? Can you tell me why?

Pupils	Responses
A	I think this lesson is interesting because I can complete the task in group.
B	Yes, because everyone were competing with each other.
C	Yes. I love working in group.
D	Yes. Today's lesson was different than the previous lesson. Everyone was given a part to do so it was fair. Unlike before, some of us did not do any work when we were working in group.
E	Not really because it involved reading. However, today lesson better than before as we were given our own task. In addition, we can discuss the task in the expert group.

Based on the interview data above, it is clear that the pupils found that the Jigsaw technique was interesting. The transcribed data shows that my pupils love working in group. The data also shows that the pupils thought the Jigsaw technique was interesting because everyone was working and participate in the group.

Table 4

Question 3 : Do you want lesson like this again?

Pupils	Response
A	Yes. Everyone was given their own part to do.
B	Yes. I love to see everyone working together.
C	Yes. I can understand the whole text easily.
D	Yes. Because we have time to understand and finish our part in the expert group before presenting to our home group.
E	Yes. Everyone was competing to complete the task.

Based on the responses given by pupils, the pupils wanted the Jigsaw technique again because everyone was given their own part to do. Besides, one of the pupils said that the Jigsaw technique managed to help him understand the text easily.

Results from the observations

The observation form used a rating scale for items 1-5, with the following responses '1' Not at all '2' Infrequent '3' Sometimes '4' Frequent and '5' Very frequent. Data obtained from both observations before and after were analysed. The results of the analysis is as shown in Table 5.

Table 5: Comparison of the Observation Item Ratings between the Traditional and the Jigsaw Classroom Technique.

Classroom Technique.												
No	Item	Method										Difference
		Traditional lesson					The Jigsaw technique lesson					
		1	2	3	4	5	1	2	3	4	5	
1	Pupils engaged actively in the lesson.			/							/	Positive
2	Pupils are engaged in the discussion.		/							/		Positive
3	Pupils work diligently to complete work given.		/							/		Positive
4	Pupils sleep in the class.				/		/					Positive
5	Pupils are off task				/		/					Positive
6	Pupils are day-dreaming			/			/					Positive
7	Pupils look bored				/		/					Positive

As can be seen in Table 5, the items 1,2, and 3 are positively-stemmed items while items 4,5,6, and 7 are negatively-stemmed items. The table shows that item 1 was rated '3' (Sometimes) by the observer compared to the Jigsaw techniques which was rated '5' (Very frequent) by the observer. The results indicate that there was a positive change in my pupils' participation in class. Most of the pupils participated actively in during the Jigsaw technique lesson compared to traditional lesson. The results also indicate that my pupils work diligently to complete work given during the Jigsaw technique lesson compared to the traditional lesson (item 2).

Table 5 also shows that item 5 was scored '4' by the observer for the traditional lesson compared to the Jigsaw technique which was '2'. Given that item 5 was a negatively-stemmed item, the score shows positive change in pupils' behaviour.

Next research cycle

According to Kemmis (1989, as cited in Pitt & Kirkwood, 2011), action research is a spiral process and attempts must be made in further cycles of action to improve on what was done in the first cycle. Specifically, adaptations must be made to the strategy used in the first cycle in order to achieve the best results of using the said strategy.

The result of this study indicated that the Jigsaw Classroom technique was effective in encourage 5X participation in a reading lesson. In the next cycle, the jigsaw classroom technique will be used again with some improvements on it. For one, the lesson will be an independent group learning pupils doing all the work and teacher plays the role as a facilitator only. During the previous lesson, the group members were decided by doing a draw lot. For the next cycle, the pupils will choose their own members. Other than that, they will discuss and choose the reading materials by themselves.

A second improvement that can be further improve is regarding the classroom management skill. In the next cycle, the research will pay more attention to the relationship among group members before starting with any group activity. The pupils will be given more time to work together so that they can reach the state of a mature group. According to Dornyei and Murphey (2003), a mature group is capable of high and effective group work. Dornyei and Murphey also mentioned that inter-member acceptance and cooperation is the key to it. Besides, communication skills such as delivering and accepting ideas are important too as poor communication might convey messages that cause misunderstanding. When the pupils are able to reach the status of a mature group, the discussion in the group will be even more fruitful in terms of practising and learning English.

Conclusion

In conclusion, this study has shown that the Jigsaw Classroom technique indeed can help in encouraging 5X pupils' participation in a reading class. This study shows that collaboration learning not only can encourage pupils' participation in a classroom, indeed it can play a significant role in enhancing pupils' improvement in the English language.

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CORPORATE SOCIAL RESPONSIBILITY ENVIRONMENT IN MALAYSIA: LESSONS LEARNED FROM THE EFFECTIVENESS OF THE CSR PROGRAMME BY AXIATA GROUP

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Abstract: *Corporate Social Responsibility (CSR) is one of the important elements for an organization to sustain in business. The evolution of CSR and its implementation since it was introduced in Malaysia until now has change rapidly. There are many opportunities that can help the organization in conducting CSR to achieve the dual purpose of meeting the organizational goal and helping the society. Organizations that carry out CSR face many challenges. Among the challenges they face include not being able to fully disclose some social issues that their CSR work is involved in, and the lack of measurable outcome of whether they achieved the standard of doing the CSR. On top of that, the theories and practices of CSR in other countries may not be applicable to Malaysia because of the difference in beliefs, norms, culture and socio-economy. This paper attempts to show the effectiveness of how companies in Malaysia can conduct effective CSR programmes through evidence collected and compiled from published data on the Axiata Group, in which the organization received several CSR Awards for being able to conduct many CSR programmes in the different countries where it conducts its business. This paper concludes with the recommendations to organization that would like to emulate the success of Axiata CSR programmes or to meet their own CSR goals.*

Keywords: *Management, Organizational Behaviour, Corporate Social Responsibility*

Introduction

When Henry Ford highlighted the idea of “business is a service” (1917), the idea was unfortunately mocked and rejected by the society that emphasized the maximum profit as main objective for the business. This is because, according to the traditional theory of the firm, the only responsibility of companies is to maximize profits. By maximizing profits, companies are serving the best interest of society (Aishah Bidin, 2008). Only a few decades later, this idea of social responsibilities began to rise again in discussion among academicians, stakeholders and also the society at large (Norajila Che Man, 2011) to the extent that Corporate Social Responsibility (CSR) is now important enough to be for business to sustain in the industry.

This movement then led to various definition of CSR as its meaning depends on a range of factors that include culture, religion, and legal or government framework. One particular definition of Corporate Social Responsibility (CSR) that comes close to the idea of this paper is where CSR is defined as the assumption of responsibility of companies whether voluntary or by virtue of statute in discharging socio-economic obligations to society (Rühmkorf, 2015).

The role of the company therefore is to provide a set of rules and regulations conducive to profit maximization-by strengthening the profit motive within the existing legal framework. This is reinforced by the active role of shareholders within the corporate governance system. CSR can be viewed as an excellent tool for demonstrating the mass of diverse theoretical and ideological approaches to corporate

governance. Approaches to CSR are closely connected to economic and social structures and to political and cultural traditions.

In order to serve the public interest and at the same time to maximise their profits, companies would be subjected to general legal constraints in force at any particular time such as the rules of employment law, consumer law or environmental law. In other words, profit maximisation can also lead to the maximisation of social wealth. In this circumstance, company law and corporate governance can be used as an instrument of broad social policy to construct a 'corporate conscience' or to make the organization more responsive to its social environment. Corporate social responsibility is a concept that emerged in the 1960s.

This is evidenced from the evolution that started in the early 1950s where the primary focus on business was on the responsibilities towards society and doing good deeds only. This continued until early 1960s when key events, people and ideas were instrumental in characterizing the social changes that marked a significant emergence of CSR concept during this decade. In the 1970s, business managers applied the traditional management functions when dealing with CSR issues, while, in the 1980s, business and social interest came closer and firms became more responsive to their stakeholders. During the 1990s the idea of CSR became almost universally approved and CSR progress was coupled with strategy literature. Finally, in the 2000s, CSR became definitively an important strategic issue (Jellinek, 2018).

In Malaysia, CSR was introduced in as early as the year 2000, pioneered by the Non-Governmental Organizations such as the Federation of Malaysian Consumers Association, Consumers Association of Penang and the World Wide Fund for Nature (WWF) of Malaysia as Malaysia progressed itself as a developing country. Later on, in 2002 the Association of Chartered Certified Accountants (ACCA) initiated the first CSR reporting awards for Malaysian Companies named as Malaysia Environmental and Reporting Awards (MESRA). In 2009, the name was changed to Malaysia Sustainability Reporting Awards (MaSRA) to reflect changes in the International CSR development, from responsibility to sustainability (Abdul Hamid, Fathilatul, Ruhaya, & Md Salleh, 2014). However, these awards are given based on the different purpose as defined by the different bodies. As there are varying standards of CSR activities through these different awards, there is no specific measurement of CSR standards for companies in Malaysia to refer to. As such, this paper attempts to show the effectiveness of how companies in Malaysia can conduct effective CSR by reviewing the effectiveness of Axiata Group in carrying out its CSR activities as one of the leading award recipient in the telecommunication industry. This study will then provide an understanding on how companies can adopt some of the effective CSR activities that Axiata has carried out into their own business sustainability model.

The Evolution of CSR in Malaysia

CSR in Malaysia is still at infancy stage. (Amran et al, 2013). Malaysian companies are reported to be lagging when compared to the best practices norm internationally. Philanthropy seems to be the most common form of CSR with Malaysian companies donating over 82 million ringgits to charitable organizations between July 2003 to December 2004 alone (Pratabhan & Abdul Rahim, 2005). As these companies continue to progress in their business, CSR is now seen as very important given that the development and progress of a corporate institution depends largely on other factors besides business profits. Support given to various community groups such as consumers, workers, capital owners, non-user groups as well as the general public are helping in improve the performance and progress of a corporate institution. It is now a social responsibility business to overcome problems and issues related to social and political goals. In other words, the business should be the saviour and trouble-shooter in society.

The commitment of an organization to operate economically and take into account the social environment surrounding them is of utmost important to organizations today. An organization should

not only be concerned of profit, but needs to take into account the social and welfare benefits of the surrounding community. Hence, CSR is being extended and emphasized by the government to the private sector in helping to ensure the welfare of society is always preserved.

Opportunities and Challenges

CSR is one of the practices that are contributing profit and giving recognition to the organization. Government-linked corporations (GLC) in particular, are very supportive in incorporating CSR activities into their business development in order to sustain their business. A study revealed that GLCs have a significant high policy adopted for their business practices as it is important as a strategy towards sustainable business development. CSR practices by GLC are aimed to improve Malaysian living. It can also ensure the growth of the nation.(Siwar & Harizan, 2006). This justifies the good opportunities for the organizations to practices CSR.

Apart from GLCs, Multinational Corporations (MNC) also believe that having the rules and regulation of business environment in the country will help them develop their businesses. The business philosophy of MNCs include a principal and guideline towards CSR implementation as it demonstrates economic, social and environmental responsibilities that usually result in profiting its stakeholders. By operating in more than one country, MNCs enforce greater influence and face huge pressures from more the stakeholders. The people who are highly socially responsible from other countries may demand more CSR practices by MNC (Siwar & Harizan, 2006).

One form of business organizations in Malaysia, the Small and Medium Enterprises (SME), play an important role for the country. Most SMEs are still only focusing on generating revenue rather than doing CSR. Several reasons was found to be the causes that may prevent SMEs from adopting CSR into their business operations because of limited capacity, money and other resources (Siwar & Harizan, 2006). SMEs might have adopted CSR at some level of implementation, but this needs to be further verified in the study. This is because social responsibility is usually done in informally and sometimes unconsciously by SMEs (Siwar & Harizan, 2006). The lack of conscious effort and formal guideline shows an example of challenges SMEs face in order to balance doing CSR and operate their business.

Due to lack of rules and regulations and also public awareness, developing country like Malaysia would not reveal a lot of societal information. This leads to another challenge of the organization to include CSR activities in their business operations that prevent them from doing the activities. Besides that, companies also face challenges in balancing certain rules and regulations and applying to apply good practices expected by various interest groups. Hence, it can be seen that another factor that leads to this challenge is the country itself does not have the specific rules and a benchmark for the organizations to measure the level of CSR that they need to achieve. Because of this, some researchers recommended that Malaysia should follow how other countries apply CSR theories into the business operations. However, in a study by S.R. Abdulrazak and Fauziah Sh. Ahmad (2014), the CSR theories might not be able to be applied in to Malaysia because of our beliefs, norms and culture is different and cannot accept it.

Review of CSR in the Axiata Group

This paper now proceeds with discussion on the effectiveness of CSR activities by the Axiata Group (Axiata) that are compiled and collected through desk research of “*sources of sources*” not limited to Axiata’s own publication. It is worth noting that this paper is the first of two researches in which the researcher will advance to study effective CSR practices that can be adopted from Axiata and produce empirical research paper in the next four to six months. The main reason for reviewing Axiata CSR practices is to study the effectiveness of the programmes and explore some of the variables that can be further examined in the next research.

CSR Programme and CSR Standard by Axiata Group

The Malaysian communications industry has evolved rapidly over the years and has become the most dynamic industry in the world. The rapid development has changed the economy of the country and affected many people that telecommunication companies struggle to be socially responsible companies (Hafiz, Jamaliah, & Ain, 2015). One of the telecommunications companies that strives to be a socially responsible company is Axiata Group (Axiata Group Berhad, 2013).

Axiata is company that has a primary business in investment holding and the provision of telecommunication and consultancy services on an international scale. The main focus of the business is for the emerging markets in Asia, which include low mobile penetration in South and Southeast Asia. Axiata's new tagline, 'Advancing Asia' means that it wants to be one of the Asia's leading telecommunications groups, as it has huge investments in mobile network operations, network infrastructure and digital internet companies. Axiata has mobile operator control interests in Malaysia, Nepal, Indonesia, Sri Lanka, Bangladesh and Cambodia with significant strategic interests in India and Singapore. The group is also involved in non-mobility telecommunications in Thailand and Pakistan (About Axiata, n.d.).

Axiata has its own initiatives in making sure the business sustains besides achieving high profits. In Advancing Asia, Axiata remains committed to its role as a responsible corporate citizen, to make a difference in people's lives, and help transforms the countries in which it operates (Axiata Group Berhad, 2016). With approximately 350 million customers served in the 11 countries (Axiata, 2018), Axiata's effort is well recognized when it was awarded for its commitment to promote and carry out CSR activities (Hafiz et al., 2015). Axiata is one of the Malaysian companies that received the CSR Awards for 2018 organised by The Pinnacle Group International (Global CSR Award, 2018). The mission of the Pinnacle Group is to commit their time and resources to global missions and charities for the betterment of humanlives. Prior to that, Axiata has also received awards for the Corporate Responsibilities (CR) that they did and achieved since 2016. One of the highest achievement for CSR was the recognition of 4th placing for best at CSR in Malaysia (Axiata Group Berhad, 2016).

As a group entity and as individual operating companies (OpCos), the Axiata corporate responsibilities are focused on empowering and enriching people's lives and focus mainly on education, environmental protection, health and sport (Axiata Group Berhad, 2016). A good example of a CSR programme that has been conducted by Axiata Group Berhad is the University Leadership Development Programme. The Program is designed as a summer camp for graduates who study at local and international universities where they spend 15 days or 150 hours taking art in business simulation games. The games allow students to experience running a business which include managing a crisis, conducting an advertising campaign or bringing a business idea to a panel of judges and business leaders who act as venture capitalists. A selected group of students who successfully completed this program will then be given the opportunity to put into practice what they have learned through a structured internship program in Axiata group of companies for eight weeks the following year (Hafiz et al., 2015).

Another programme that Axiata carried out is a career progression and development programmes known as Axiata Group Accelerated Development Programme (GADP) and Axiata OpCos Accelerated Development Programme (OADP). GADP is a program implemented for the senior management team targeted towards high-potential leaders. It aims to accelerate the development and readiness of senior managers for future leadership roles throughout the group. OADP is specialized for high executive and middle management potential employees. It aims to speed up the development and readiness of individual contributors and junior managers for future leadership roles (Axiata Group Berhad, 2013).

Axiata also practices 'Greener Operations'. This is to make sure the environment is treated fairly. At Axiata, its vision is to integrate environmental practices in all aspects of its business activities. The environmental impact as a telecommunications provider is relatively moderate compared to other industries. Axiata is committed to minimizing its environmental footprint by reducing energy and waste

consumption and reducing carbon emissions from its business and its OpCos operations. (Axiata Group Berhad, 2013). This shows that Axiata does not only do the CSR focusing on the people, but also for the environment. Axiata also replaces network equipment in their base stations with energy-efficient equipment to sync with technological innovations and reduce the carbon footprint in their operations around the world (Axiata Group Berhad, 2013). In this aspect, the implementation of these things helps the company in its sustainability agenda.

As at October 2013, another business unit, Edotco was added to own, manage and share the passive network infrastructure of Axiata Group. In addition to driving new levels of operational efficiency in passive infrastructure management and diversifying Axiata's revenue streams, edotco aims to identify energy saving solutions for its networks and base stations to reduce 40 percent of total carbon emissions across all operating companies by 2018. It invests in quality and innovation, striving to be lean, green, and clean in the pursuit of a sustainable future. From what it has developed, Axiata constantly promote green practices. These include design and construction, using new building materials to create durable and green structures, design and build telecommunications towers for multiple tenants while maintaining strict safety standards. Besides, it also focuses in leasing antenna space to other wireless service providers to reduce parallel capacity in the industry. Secondly, *Equipment Efficiency* in long period-term investment in eco-friendlier equipment and systematic equipment controls to improve the life span of equipment for optimal use. Thirdly, they focused on *Renewable Energy* to power the telecommunications towers by using solar, wind, methanol fuel cells and other new technologies. Last but not least is *Energy Consumption* by all of the employees. It is also promoting infrastructure and passive-site sharing among the network operators to reduce the number of masts, which in turn reduces the energy consumption. (Axiata, n.d)

Through these initiatives, Axiata has received several CSR awards locally and globally. Table 1 below shows the awards received by Axiata:

Table 1: List of Awards Received by Axiata

No.	Name of Award	Achievement	Received from	Year
1.	MSWG-ASEAN Corporate Governance Index 2015 Awards	Excellence Award for Environmental, Social and Governance (ESG) Practices	MSWG Malaysia	2015
2.	15th PC.Com Readers Choice Awards 2015	Best Customer Service Telecommunications (Celcom Axiata Berhad)	PCMag.com	2015
3.	Selular Award 2015	(PT XL Axiata Tbk) Best Customer Care Service	PT Global Selular Media	2015
4.	Global Banking and Finance Review 2015	Best CSR Company Cambodia 2015 (SMART Axiata Company Limited)	GBAF Publications Ltd	2015
5.	PERHUMAS Award 2016	PR Excellence Awards 2016 – Corporate Social Responsibility (CSR) Program XL Future Leaders PR	Public Relations Association of Indonesia	2016
6.	Global Banking and Finance Review 2016	Best Corporate Social Responsibility (CSR) Company Cambodia 2016	GBAF Publications Ltd	2016

7.	Telecom Asia Award 2016	Best Community Project (Cambodia)	Telecom Asia	2016
8.	Golden Peacock Award	Corporate Social Responsibility of the Year (India)	Institute Of Directors (IOD)	2016
9.	MSWG-ASEAN Corporate Governance Index 2016 Award	Excellence Award for Environmental, Social and Governance (ESG) Practices	MSWG Malaysia	2016
10.	ACCA Malaysia Sustainability Reporting Awards (MaSRA) 2016	Commendation Award for Innovation	ACCA Global	2016
11.	Finance Asia Best Managed Company Poll 2016	No 4 Best at CSR in Malaysia	HayMarket Media Ltd	2016
12.	CSR Malaysia Awards 2017	Category of Telecommunication	CSR Malaysia	2017
13.	Excellence In Provision Of Literacy & Education Award	Gold	The Global CSR Awards™	2018
14.	CSR Leadership Award	Silver	The Global CSR Awards™	2018
15.	CSR Malaysia Awards 2018	Category of Telecommunication	CSR Malaysia	2018

Source: AXIATA ANNUAL REPORT (2015-2018) & CSR MALAYSIA

Lessons from Effectiveness of the CSR Programmes by Axiata Group

The success of Axiata is contributed through its CSR approach that can be accepted in various countries where Axiata has a business even though its customers have their own norms and traditions. This has shown that Axiata is one of the excellence companies in carrying out CSR activities in all the countries it serves. In this section, this paper attempts to list the features that makes Axiata successful in carrying out the CSR programmes as a basis for reference in the next research paper.

The Axiata Four Pillars

There are four pillars that Axiata practices in order to make sure their business sustainable. All of these things already have given a huge impact towards Axiata company. The four pillars are beyond short-term profits, nurturing people, process excellence and governance and last but not least, planet and society.

Beyond Short-term Profit

Axiata commits to long-term business development in the countries in which it operates and ensures that their investments create long-term value. These investments, involving large-scale infrastructure development projects, not only contribute to the economic development of these countries, but also provide essential connectivity services that improve living standards. Their long-term commitment also extends to the development of digital ecosystems on their markets and to the world's leading mobile industry developments (Axiata Group Berhad, 2016). So, this is the meaning behind of the beyond short-term profits by Axiata Group Company.

Nurturing People

Nurturing people is a training programme that helps its employees achieve personal growth and professional development creating a team which has the potential to provide leadership not just in their operating country, but throughout the region. Axiata delivers talent development initiatives both internally and externally. The internal initiatives are designed to help the employees achieve their full potential through extensive development programmes, both in their personal and professional lives. These programs give employees the skills they need to succeed in Axiata and become the Group's future leaders. Axiata also targets a different group in which it focuses its efforts on external talent development through the Axiata Young Talent Program (AYTP). AYTP is an unique learning opportunity aimed at encouraging and developing future CEOs and youth leaders in Malaysia (Axiata Group Berhad, 2016). Through its sponsorship, the selected students and youth are being developed from their early teens in academic excellence and leadership trainings.

Process Excellence and Governance.

Axiata has established common standards of best practice throughout the group to ensure that its entire value chain complies with the sustainability standards. Axiata takes measures to ensure that it meets the sustainability requirements of the processes, including direct engagement with vendors, retailers and business partners. Axiata also takes its customer commitment process seriously and tracks the level of customer experience through a set of Key Performance Indexes (KPIs). Axiata continues to work on introducing digitization and automation to improve their internal and external processes (Axiata Group Berhad, 2016).

Planet and Society

In mitigating the environmental impact of its business, edotco, the infrastructure company of Axiata, focuses on green technology and on reducing the carbon footprint of the group. edotco works towards the goal of reducing its passive network infrastructure's greenhouse gas (GHG) emissions by 40% from the 2013 baseline year. At the same time, their OpCos delivers corporate responsibility (CR) initiatives to empower and enrich the communities and societies in which it operates. (Axiata Group Berhad, 2013). In phase 2 of their sustainability journey, it began to standardize its CR efforts, which included all OpCos in three core CR initiatives; education, green initiatives and disaster management and disaster response.

Looking at the above pillars, this paper finds that the CSR programmes can be effective when the practices are beyond management and profits. A huge support from all of the stakeholders of the company are required whether they are contributing directly or indirectly.

Recommendations and Conclusions

Organization reputé is built on its rapport with employees, consumers, suppliers, stockholders and the community they operate within. These are among of the stakeholders who involved in CSR activities. The lacking of leadership support from the top is still an obstacle to place corporate responsibility at the heart of every business especially in smaller companies and SMEs as discussed earlier in this paper. CSR might no longer be fashionable but it is still a crucial component in lead towards improved performance, and still requiring dedicated leaders. Thus, for future research, the stakeholders theory will be the most important theory to be included and examined. This paper will also be the basis of future review of CSR theories to examine if the theories can be applied to the Malaysian socio-economic context and whether there exist CSR models of other companies that are similar to Axiata.

One very notable and biggest challenge now is, there is no universal understanding of CSR standard or benchmark. Many organizations claim that they are practicing CSR but unfortunately, they practice CSR without fully understanding the concept and or aware of any standard Even Axiata itself does not state that it has any CSR guidelines in Malaysia. Instead, Axiata produces Corporate

Responsibilities Report to show that it manages its social responsibilities effectively in different countries that its business exist. This shows that Malaysia can have its own CSR standard relevant to the Malaysian environment and socio-economy, so that every company can practice it effectively and that they will be more readily acceptable by the general public. As Malaysia is in pursuit of becoming a developed nation by the year 2020, this paper concludes that there is a need to have nationalized CSR guidelines for the implementation so that every company can follow and that CSR practices will become more successful.

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ATTITUDE AND EFFECTIVENESS OF THE USE OF TECHNOLOGY-BASED LEARNING AMONG IIUM NURSING STUDENTS

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Abstract: *Introduction: The changes of the education system that is taking place in Malaysia is driven by the advanced technology and communication devices that is available to students wherever they are either at campus or home. Hence, the implementation of technology-based learning (TBL) in institutions in Malaysia must be effectively delivered to students. The purpose of this study was to explore the attitude and effectiveness of using TBL among IIUM nursing students. Method/Materials: A quantitative, cross-sectional descriptive study was conducted among 307 IIUM nursing students. A well-structured questionnaire was developed to collect data. Statistical analysis of the data was carried out using SPSS and association between variables was analyzed using Chi-Square test. Result: Majority of the respondents (82.6%) have their own smartphone and laptop. There were 221 (80.1%) respondents almost always get access to a computer and among them, 219 (79.3%) almost always used it in learning. Relatively, there were 96% of the respondents showed positive attitudes toward the use of TBL. 87% of the respondents agreed that TBL is effective in their learning achievement. There is relationship between the attitude toward the use of technology and the effectiveness in learning among IIUM nursing students with $p\text{-value} = 0.007$. Conclusion: Technology indeed provides them a very good channel and platform in facilitating them searching information and getting knowledge. Future research is recommended to conduct a survey among the administrators, lecturers, and other related personnel.*

Keywords: *Technology-Based Learning, Usage, Attitude, Effectiveness, Nursing Students*

Introduction

Education is a very crucial tool for the nourishment of the intellect and developing the social and cultural understanding in building a developed nation (NCERT, 2014). As the world has witnessed the advance and development in information and communication technology (ICT), numerous advancements keep evolving and updating over time. The Ministry of Malaysia has invested over RM6 billion in realizing the integration of ICT in education system (MOE, 2012). The application of technology has grown rapidly in the teaching system and it is no more narrowed to the traditional form of delivery (Hsu *et al.*, 2012). Technology-based learning (TBL) is a type of education that use of any electronic technology, including the Internet, intranets, satellite broadcasts, audio and video conferencing, bulletin boards, chat rooms, webcasts, and CD-ROM, for the purpose of delivering the knowledge and supporting the learning (Koller, Harvey and Magnotta, 2006). Regularly in TBL, it uses desktop or laptop computers or tablets or smart phones to provide the learning materials (Clark and Mayer, 2016).

A variety of delivery methods educators use in delivering knowledge via TBL such as through tutorials, high fidelity simulations, web conferences, Wikis, Blogs, gaming and online forums (Feng, 2013). E-learning, web-based learning and online learning are the examples of TBL. Technology is one of the tools used for students learning needs since it can make interactive learning environment. Some research revealed the significant association between student's achievement and technology

($p < 0.05$) (Al-Hariri and Al-Hattami, 2017), and the benefits of technology integration as an increased motivation, engagement, collaboration, confidence, learning opportunities, and technology skills of students, and allows learning at all level (Costley, 2014).

Despite all the positive impacts, there are some studies that revealed the challenges of incorporating TBL among the students. There have been debates regarding the use of TBL whether it could result in positive impacts on students' academic performance. Thus, this research was conducted to explore the attitude and effectiveness of using technology-based learning among IIUM nursing students.

Material And Methods

A cross-sectional descriptive study was conducted among nursing undergraduate students of International Islamic University Malaysia, Kuantan campus, Pahang. A universal sampling method was used in conducting this study. The sample of this study was taken among all the undergraduate students which consists of Year 1, Year 2, Year 3 and Year 4 students who have been enrolled in Kulliyyah of Nursing, IIUM, Kuantan, Pahang in the second semester of 2017/2018 session. The total sample size was 276 participants after deducted the sample from pilot study. A well-developed questionnaire covered for the respondents' demographic data, technology usage, attitude and effectiveness of TBL. The questionnaire that was used for Section A was developed by Wai and Seng (2015) and the score of the Cronbach's Alpha was 0.7. Meanwhile, for the questionnaire that was used for Section B was developed by McFarlane *et al.* (1997) and the score of the Cronbach's Alpha was 0.95 and the questionnaire that was used for Section C was developed by Gulbahar and Guven (2008) that is considered fit for this research. The score of the Cronbach's Alpha for the reliability was 0.87. The instrument was adopted and modified from the original questionnaire to make it suitable according to the study setting. The results of the pilot study were not included in the analysis.

Prior to collect the data, the permission to conduct the study was obtained from the Kulliyyah of Nursing Post Graduate Research Center (KNPGRC) and IIUM Research Ethics Committee (IREC). The purpose of the study was explained and after getting the informed consent from the respondents, the questionnaires were distributed to them and collected back after completion. The statistical analysis program, SPSS was used for data management. Descriptive and inferential statistic (chi-square test) was used for analysis. P value < 0.05 was set as statistically significant.

Results

Table I: Sociodemographic Data Among Kulliyyah Of Nursing Students

Variables	Items	Frequency (n)	Percentage (%)
Year	Year one	71	25.7
	Year two 1st batch	71	25.7
	Year two 2 nd batch	50	18.1
	Year three	31	11.2
	Year four	53	19.2
Gender	Male	46	16.7
	Female	230	83.3

Current CGPA	2.49	1	0.4
	2.50 – 2.99	46	16.7
	3.00 – 3.49	198	71.7
	3.50 – 4.00	31	11.2
	Smartphone only	5	1.8
	Smartphone & laptop	228	82.6
	Smartphone, laptop & desktop	12	4.3
Technology Ownership	Smartphone, laptop, desktop & tablet	10	3.6
	Smartphone, laptop, & tablet	21	7.6

The total number of respondents who participated in this study were 276, comprising 46 males (16.7%) and 230 females (83.3%). The respondents who were year one students consisted of 71 (25.7%), year two students were 121 (43.8%), year three students were 31 (11.2%) and year four students were 53 (19.2%). Meanwhile, according to the current CGPA, most of the respondents (n= 198, 71.7%) achieved pointer 3.0-3.4999. In term of the ownership of technology, majority of the participants have their own smartphone and laptop which accounted for 228 (82.6%). Table I presents the detailed distribution of sociodemographic data among the respondents.

Table II: Students' Usage of TBL

No.	Item	Never	Rarely	Frequently	Almost Always
1	I use technology devices in learning	0 (0.0%)	1 (0.4%)	56 (20.3%)	219 (79.3%)
2	Use comp for learning and completing class work	0 (0.0%)	2 (0.7%)	53 (19.2%)	221 (80.1 %)
3	Use PowerPoint	0 (0.0%)	5 (1.8%)	60 (21.7%)	211 (76.4%)
4	Use Video	0 (0.0%)	36 (13.0%)	138 (50%)	102 (37.0%)
5	Online exercise and online quiz	10 (3.6%)	106 (38.4%)	101 (36.6%)	59 (21.4%)
6	Educational game	4 (1.4%)	69 (25.0%)	125 (45.3%)	78 (28.3%)
7	Use email	8 (2.9%)	72 (26.1%)	100 (36.2%)	96 (34.8%)
8	Use forum to ask and discuss	24 (8.7%)	140 (50.7%)	74 (26.8%)	38 (13.8%)
9	Search Internet for information	0 (0.0%)	6 (2.2%)	75 (27.2%)	195 (70.7%)
10	Use mannequin	2 (0.7%)	40 (14.5%)	124 (44.9%)	110 (39.9%)

Table II above summarizes the result of the students' usage of TBL. The data indicated their usage of TBL by using a four-point likert-type scale (3=Almost always, 2=Frequently, 1=Rarely and 0= Never). Of all the respondents, there were 221 (80.1%) almost always get access to a computer and among them, 219 (79.3%) almost always used it in learning. From the data obtained, there has been 195 (70.7%) of the respondents almost always used Internet for searching information for a lesson in class. Moreover, 211 (76.4%) respondents almost always used PowerPoint in their assignments and revision. Besides that, half of the respondents frequently used video in learning process (n= 138, 50%). Furthermore, there was about similar number of respondents who are frequently used online exercise

for their revision and used email to communicate with other teachers and students which accounted for 101 (36.6%) and 100 (36.2%) respectively. In addition, there was 125 (45.3%) and 124 (44.9%) respondents who frequently used educational game (Kahoot) in class and used mannequin (physiko) in clinical learning respectively. On the other hand, about half of the respondents (n=140, 50.7%) “rarely” used forum or chat rooms to ask and discuss questions online while 24 (8.7%) of them never used this resource.

As depicted in Table III, the participants used a four-point likert-type scale (i.e. 4=Strongly agree, 3=Agree, 2=Disagree and 1=Strongly disagree) to specify their attitude towards the use of technology-based learning in education. 200 (72.5%) of the respondents strongly agreed that knowing how to use technology is a necessary skill for them and of those 276 respondents, 185 (67%) of them strongly agreed that they are really like using technology in learning. There were 162 (58.7%) of the respondents agreed that they are able to use technology. Moreover, they either strongly agreed or agreed that a task using technology would be very interesting (n=260, 94.2%).

In addition, the attitude of the respondents is very good when 175 (63.4%) of the respondents strongly agreed that they like to use TBL in their study. In addition, 254 (92%) of the respondents wish to continue using technology more frequently in learning with the response rate of either “agree” 104 (37.7%) or “strongly agree” 150 (54.3%). Besides that, 261 (94.6%) of the respondents believed that learning about technology is a worthwhile and a necessary skill for all students with the response rate of either “agree” was 115 (41.7%) or “strongly agree” was 146 (52.9%). In conjunction with that, there were 185 (67%) strongly agreed that it is important to know how to use technology in teaching and learning activities.

Table III: Attitude of IIUM Nursing Students Towards the Use of TBL

No.	Item	Strongly disagree	Disagree	Agree	Strongly agree
1	Learning technology is a necessary skill	0 (0.00%)	0 (0.00%)	76 (27.5%)	200 (27.5%)
2	I like using technology	0 (0.00%)	1 (0.4%)	90 (32.6%)	185 (67.0%)
3	Believe the ability to use technology	0 (0.00%)	8 (2.9%)	162 (58.7%)	106 (38.4%)
4	Nervous	18 (6.5%)	135(48.9%)	108 (39.1%)	15 (5.4%)
5	I use technology as student	0 (0.00%)	3 (1.1%)	125 (45.3%)	148 (53.6%)
6	Like to use technology in study	0 (0.00%)	2 (0.7%)	99 (35.9%)	175 (63.4%)
7	Wish to use technology frequently	1 (0.4%)	21 (7.6%)	104 (37.7%)	150 (54.3%)
8	Use technology makes feel stupid	103 (37.3%)	127(46.0%)	40 (14.5%)	6 (2.2%)
9	Interesting	4 (1.4%)	12 (4.3%)	150 (54.3%)	110 (39.9%)
10	Do not expect to use technology much in education	56 (20.3%)	151 (54.7%)	58 (21.0%)	11 (4.0%)
11	Not doing well with technology	48 (17.4%)	162 (58.7%)	61 (22.1%)	5 (1.8%)
12	Uncomfortable	59 (21.4%)	160 (58%)	49 (17.8%)	8 (2.9%)
13	Boring	90 (32.6%)	162 (58.7%)	20 (7.2%)	4 (1.4%)
14	Learning tech is worth	2 (0.7%)	13 (4.7%)	115 (41.7%)	146 (52.9%)

15	Important to know using technology in learning	1 (0.4%)	1 (0.4%)	89 (32.2%)	185 (67%)
16	I will do well if I work hard to learn technology	0 (0.0%)	12 (4.3%)	132 (47.8%)	132 (47.8%)
17	Will do well working with technology	0 (0.0%)	11 (4.0%)	168 (60.9%)	97 (35.1%)
18	Difficult use technology	68 (24.6%)	166 (60.1%)	38 (13.8%)	4 (1.4%)
19	Using technology makes me feel confused	74 (26.8%)	170 (61.6%)	28 (10.1%)	4 (1.4%)
20	Hard to stop using technology once started to use it	7 (2.5%)	59 (21.4%)	149 (54.0%)	61 (22.1%)

Moreover, 132 (47.8%) of them strongly agreed that they could do well when they learn using technology. Interestingly, most of the respondents disagreed that technology could make them feel stupid which account for 127 (46%) as well as could make them feel nervous when dealing with technology which account for 135 (48.9%). Furthermore, they disagreed that working with technology could make them uncomfortable (n=160, 58%) and boring (n=162, 58.7%). Most importantly, there were only a small number of respondents who strongly agreed to the items that using technology makes them feel confused and difficult to use which just account for 4 (1.4%) both. However, there were 149 (54.0%) of them agreed that once they start using technology, they will find it hard to stop.

As shown in Table IV, the participants used a four-point likert-type scale (i.e. 4=Strongly agree, 3=Agree, 2=Disagree and 1=Strongly disagree) to examine the effectiveness of TBL. Generally, it shows that most of the respondents are aware of the benefits and usefulness of TBL in learning process. The findings show that 157 (56.9%) of the respondents agreed while 108 (39.1%) strongly agreed that technology allows them to be more creative and imaginative. Moreover, there were 182 (65.9%) of them strongly agreed that the use of TBL helps them to find related knowledge and information for learning. Besides that, there were 127 (46.0%) of the respondents agreed that the use of technology could encourage them to communicate more with their classmates whereas 160 (58.0%) of the respondents agreed that technology could increase their confidence to participate actively in the learning process respectively.

Table IV: Effectiveness of the Use of TBL

No.	Items	Strongly disagree	Disagree	Agree	Strongly agree
1	Creative and imaginative	0 (0.00%)	11 (4.0%)	157 (56.9%)	108 (39.1%)
2	Helps to find information and knowledge	0 (0.00%)	0 (0.00%)	94 (34.1%)	182 (65.9%)
3	Using tech encourage me to communicate with classmates	2 (0.7%)	30 (10.9%)	127 (46.0%)	117 (42.4%)
4	Increase confidence to participate in learning	2 (0.7%)	15 (5.4%)	160 (58.0%)	99 (35.9%)
5	Learn more effectively	0 (0.00%)	15 (5.4%)	137 (49.6%)	124 (44.9%)
6	Broaden my knowledge	0 (0.00%)	3 (1.1%)	139 (50.4%)	134 (48.6%)
7	Enhance my practice skill	0 (0.00%)	12 (4.3%)	156 (56.5%)	108 (39.1%)

8	Improves my focus and attention during lecture time	4 (1.4%)	47 (17.0%)	152 (55.1%)	73 (26.4%)
9	Enables me to express my ideas better	1 (0.4%)	13 (4.7%)	171 (62.0%)	91 (33.0%)
10	Promotes active and engaging lesson	0 (0.00%)	12 (4.3%)	156 (56.5%)	108 (39.1%)

Other than that, there were 137 (49.6%) of participants who agreed that they can learn effectively with technology whereas 139 (50.4%) agreed that their knowledge would be broadened when using TBL. In addition, there were a similar number of participants who agreed to the items that the use of technology could help in enhancing the practical skills and technology could promote active and engaging lesson for the best learning experience which accounted for 156 (56.5%). In another item, there were 152 (55.1%) agreed that TBL could improve focus and attention during lecture time. Furthermore, more than half of the respondents (n=171, 62%) agreed that the use of TBL enables the students to express their ideas and thoughts better.

The result in Table V shows that majority of the respondents have positive attitude towards the TBL which accounted for 265 (96%), and only 11 (4%) respondents have negative attitude towards the TBL. As depicted in Table VI, most of the respondents agreed that the TBL implementation is effective as the percentage covered 87%, while just 13% of the respondents said that the TBL is ineffective.

Table V: Students' Attitude Towards TBL

Attitude	Frequency (n)	Percentage (%)
1-2 (Negative attitude)	11	4.0
3-4 (Positive attitude)	265	96.0

Table VI: Effectiveness Of TBL

Effectiveness	Frequency (n)	Percentage (%)
1-2 (Not effective)	36	13.0
3-4 (Effective)	240	87.0

In addition, this relationship was measured using Fisher Exact test as the assumption for Chi-Square is not met. Based on the data, the p-value appears 0.007 ($p < 0.05$) which shows that the result is significant. Thus, the null hypothesis is rejected. There is relationship between the attitude toward the use of technology and the effectiveness in learning among IIUM nursing students ($p = 0.007$).

Discussions

Based on the findings, technology users were high in number and they frequently used Power Point to do the revision. It is in accordance with the study of (Wai and Seng, 2015) that there were 93 % of students in Malaysia used slides in Power Point to do the revision. In a survey regarding the experiences of pharmacy student with educational technology, it was also reported that 86.9% of students almost always used electronic class presentations (Stolte *et al.*, 2011). This is because Power Points usually provides simple and understandable notes. Students opt to read notes through the Power Point as it eases

them in understanding the subject briefly. Furthermore, this method gives them chance to study on their own path and it facilitates them to get access to the lecture notes.

Moreover, the study reported that majority of the respondents showed positive attitudes when dealing with technology in learning. This is consistent with a study among undergraduate Bachelor of Science in Nursing students that revealed that most of the participants showed a positive attitude towards technology and there were 78.3% of students demonstrated that they are more well-prepared for the skills in clinical practice when they watch related-videos (Kelly *et al.*, 2009). It is because by watching any related nursing skills through videos, students can manage to catch up the procedure step-by step correctly. It gives opportunity for them to get more preparation for the clinical examination. Nonetheless, a study among Psychology students found that there was 67% of the students get distracted when they use laptop while learning (Fried, 2007). The lecturers need to pay concerned in this situation by making the learning process more interesting so that the students did not get distracted in using the technology during teaching-learning process.

In addition, the use of technology could help create active participation and improve the skills of students as technology is flexible and it allows students to have access to it anytime and anywhere (Horiuchi, 2009). It suggests that the use of technology in learning could be an effective learning tool in the classroom. A study to assess the impact of e-learning among nursing students found that technology allows students to access resources, participate in activities and communicate and interact with teaching staff and fellow students remotely (Moore, 2012). Since students can develop the confidence to have better communication and able to express their thoughts and ideas, TBL helps students to be more creative and imaginative as their knowledge paradigm expand. Furthermore, the use technology gives the outcomes of knowledge increase, enhanced communication skills, increased confidence, improved satisfaction, decreased anxiety, and increased critical thinking and clinical reasoning (Hall, 2017). This created satisfaction to the students, and they are more likely to stay engaged with the technology because it helps the teaching and learning process more meaningful than without such opportunities.

Conclusion

Technology indeed provides them a very good channel and platform in facilitating them searching information and getting knowledge. Moreover, it provides interactive learning environment for the students and lecturers. The students play their best role in dealing with the technology during learning and the TBL itself is effective in helping the students in their education. Hence, the implementation of TBL in institutions in Malaysia should be effectively delivered to students to make sure they achieve the target of Ministry of Education (MOE) in conducting TBL in education system. The impact developed from this study may contribute to the adjustment and enhancement of TBL in nursing education so that the result of students' performance in academic will further be improved and it goes in line with the growing world technology.

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THE DIFFERENCE IN THE DEFINITION OF SUCCESSFUL IMPLEMENTATION OF THE ICT CURRICULUM BETWEEN THE TEACHER TRAINEES, ADMINISTRATOR AND LECTURER

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Abstract: *The study is a case study on a group of teacher trainees currently in their sixth semester in a teacher training college. The study investigated the implementation of subjects to prepare teacher trainees to use ICT in the classroom. The study was conducted in a teacher training college in Kota Kinabalu, Sabah. The focus in this case will be on how the teachers were trained in the college to use technology, integrate technology into their pedagogy and use technology to deliver the content of the lesson. The study utilized Trowler's (2003) implementation staircase to establish how the implementation was carried out in the teacher training institute by the lecturer in charge. The study was conducted on a group of 30 teacher trainees, a teacher training lecturer and an administrator of the institute. The data was collected via a TPACK survey to ascertain the teacher trainees' TPACK level. A focus group interview on the teacher trainees and lecturer was conducted to the implementation of ICT via the curriculum in the college. The data collected indicated a mismatch in the results of the implementation. The teacher trainees perceived that the implementation of the ICT curriculum is insufficient whereas the implementation of the ICT curriculum was perceived as a success by the lecturer.*

Keywords: *Technology, ICT, Curriculum, Teacher Education, TPACK*

Introduction

The integration of ICT (information and communications technologies) in education is common in any education system of any nation seeking to address the challenges of the 21st Century. In addition, many developed nations in Asia are supportive of the use of ICT in education (Latchem & Jung, 2010). The use of ICT in the classroom is paramount in preparing students for the 21st century as well as the future work force.

As ICT is important in education, teachers should be taught how to implement ICT in the classroom. The implementation of ICT in the classroom is important as it helps with student learning in the classroom (Bingimlas, 2009). However, there are issues when it comes to ICT implementation in the classroom.

Statement of the Problem

Ambient insight (2014) stipulated that Malaysia was one of the nations with the highest growth rates in E-learning. However, one issue that could hinder the full potential of E-learning from being realized is the poor implementation of the ICT curriculum in teacher training colleges. This is seen especially with subjects or implementation that are not aligned with the needs of the teacher trainees. This is seen in curriculum and curriculum implementation in Hong Kong where Hu (2015) pointed out the lack of guidelines in how ICT application in the classroom should be carried out, resulting in the impediment

of E-learning in the classroom. Many studies have also pointed out the importance of teacher training in ensuring the success of ICT implementation of a particular nation. Heo (2016) pointed out the importance of ICT implementation in the college for the needs of teacher trainees, citing the new framework implemented in south korea to have assisted the teacher trainees to better implement ICT in the classroom. Kendall (2009) cited the example of the need for pre-service teaching courses to be supplied with the appropriate infrastructure in order for the teaching and training of teacher trainees to be done to its fullest potential.

Jizat (2012) claimed that teaching training in Malaysia does expose future teachers to ICT literacy. However, teachers in Malaysia were found to prefer the use of large pieces of paper and blackboard as compared to ICT in the classroom. This suggests, according to Jizat that pre-service teachers know what ICT is but application of these tools were not fully realized. Mat-jizat, Osman, Yahaya & Samsudin (2016) also concurs with this, citing inadequate training in using and applying ICT related tools to spur E-learning. This is in line with Bingimlas (2009) where a review of literature pointed out a few common issues in ICT implementation for the teacher training college. These challenges include, the lack of technical support, the lack of training, the lack of time and the resistance to change.

To be more specific with ICT implementation in teacher training, two aspects would be focused on, one is the definition of successful ICT implementation and the other on the guidance by the teacher trainer in guiding ICT implementation in the classroom. Studies such as those by Mugisha (2007) pointed out the importance of guidance from the curriculum in terms of how to implement ICT in the classroom. This points to a likely focus on the content knowledge instead of application in the classroom and would lead to different points of view of what success means in the classroom. This is seen in studies by Sheard & Carbone (2007) as well as Waycott, Bennett, Kennedy, Dalgarno & Gray (2010) whereby studies conducted in both contexts indicated the lecturer pointing out successful ICT implementation by the students but the students felt that training was lacking and were not able to use ICT in the classroom effectively. With that, this study aims to address the gap of how the difference in definition with regards to successful implementation of ICT in the classroom can affect the teacher trainees' ability to utilize ICT to spur E-learning.

Objectives of the Study

This study aims to investigate how:

- i) Teacher training guides future teachers to utilize ICT to spur E-learning in the classroom.
- ii) The lecturer's and administrator's definition of success similar/different from students'?

Research Questions

The research questions of the study are as follow:

- i) How does teacher training guide future teachers to utilize ICT to spur E-learning?
- ii) How is the lecturer's and administrator's definition of success similar/different from the students'?

Significance of the study

This study is significant as curriculum implementation is one of the issues faced. As there is a myriad of reasons attributed to curriculum implementation, one such factor can be linked to how both lecturer and student define successful ICT implementation. Results from the study can be used to address how ICT curriculum is being implemented. In addition, the results for this study can be used to better inform how ICT application in classroom can be better carried out, further equipping future teachers in better implementing ICT in the classroom.

Review Of Literature

This section will expound on the theories and frameworks that will be utilized in the study. This includes the TPACK learning theory as well as Trowler's (2003) implementation staircase. This section will describe the theories and models that will be utilized in this study.

TPACK learning theory in the classroom

Essentially, the TPACK learning theory has been seen in many studies to be a form of a benchmark to ascertain the full implementation and integration of ICT in the classroom. An example is seen in the study by Dong, Chai, Sang, Koh & Tsai (2015) pointed out that the use of TPACK can be beneficial to teacher education, educational technology and ICT integration in the classroom. More specifically, it is used as a way to gauge integration of ICT in the classroom. In addition, studies also show the use of TPACK as a way for teachers to develop a form of link or connection between technology, content and pedagogical knowledge.

TPACK was chosen for this study due to its use and how that fits the objectives of this study. Another framework that can be potentially used for this study and is similar to TPACK, is the Substitution, Augmentation, Modification and Redefinition (SAMR) framework. Pamuk (2012) posited that the use of TPACK and SAMR have its differences but are used to guide the assessment, planning and use of technology in the classroom.

This study will utilize the TPACK framework due to the objective of the study to examine if technology is integrated in a pedagogically appropriate manner to support learning (Khan, 2014). In addition, the study by Chai, Koh, Tsai & Tan (2011) pointed out the use of TPACK to be used for course design evaluation for pre-service and in-service teachers for the purpose of integration in the classroom. Whereas, the use of SAMR is used to assess change when technology is incorporated and this point to a more to an evaluation of change due to the use of technology (Myers, 2014). As such, this does not investigate how the use of ICT can be used to spur E-learning in the classroom.

Trowler's (2003) Implementation staircase framework and Vedung's (1998) taxonomy on policy instruments

Trowler's (2003) implementation staircase framework will be used in tandem with Vedung's (1998) taxonomy on policy instruments to investigate the implementation of ICT in the teacher training institute. The combination of both frameworks is done in order to provide a more extensive explanation on certain aspects of the study. For example, the implementation aspect which can be investigated using Trowler's implementation staircase framework. In the context of the study, how do the teacher trainees acquire techniques and methods on incorporating ICT in the classroom which is being carried out by the lecturers of the higher learning institutions. The implementation staircase would provide an insight of how the curriculum is implemented.

This would be used in tandem with Trowler's implementation staircase to investigate the effects between and within the system to ascertain how does the curriculum on ICT contribute to the teacher trainees being equipped in the classroom. This will provide a good overview of the success or failure of the curriculum implementation. This will be displayed in the table 1 below:

Classification	Explanation
Regulations	The study aims to use this classification to ascertain what regulations/step by step and decrees encourages or prompts certain actions.
Economic means	This study will use this classification to ascertain what are the particular incentives provided to the trainers, institutions or trainees.

Information	This study will use this classification to ascertain the moral justification and reasons behind the curriculum implemented.

Table 1: Vedung's (1998) taxonomy on policy instruments for the context of this study

As such, with both frameworks used in tandem, this should provide a good overview as to how policies are interpreted from one staircase to the other and how are these policies implemented and sustained.

The incorporation of two frameworks will be illustrated in Figure 1 below:

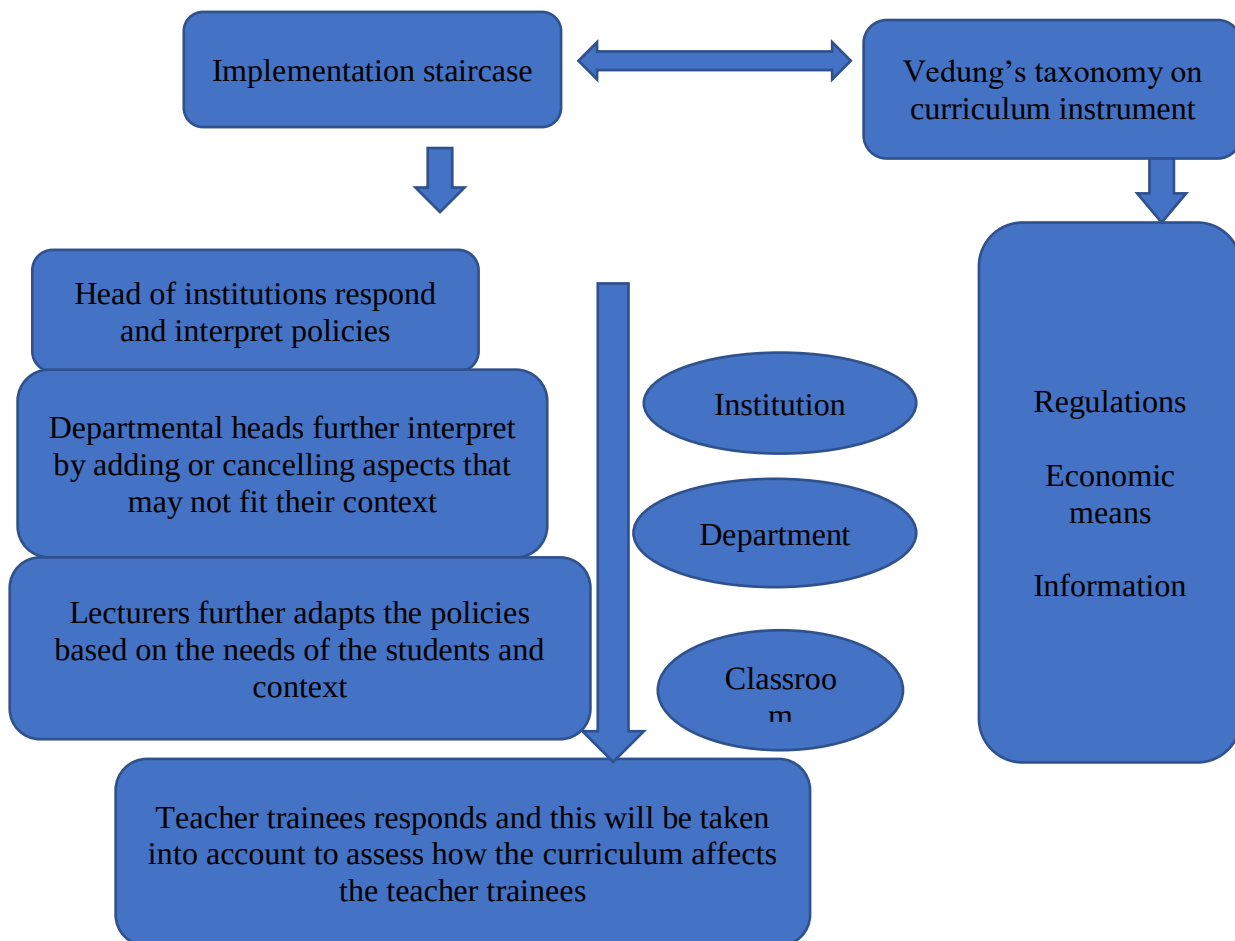


Figure 1: Trowler (2003) implementation staircase supplemented with Vedung's taxonomy on curriculum instruments

Methodology Of The Study

This section will discuss about the methodology that will be used in this study. Specifically, this chapter will cover the research design that will be utilized in this study, covering aspects related to study. In addition, the population and sampling that will be used in this study will be expounded.

Research design

This study will be of a mixed method design whereby Creswell (2012) pointed out that a mixed method design is a combination of both quantitative and qualitative design. In addition, Fraenkel, Wallen and Hyun (2012) pointed out that the use of a mixed method design can help explain the variables between both quantitative and qualitative design. Fraenkel, Wallen and Hyun pointed out that there are different

types of mixed method design. However, for this study, the specific type of mixed method design is the triangulation design whereby both quantitative and qualitative design are of equal importance and can be used to ascertain the research questions set forth in the study.

With the use of the triangulation design, the qualitative aspect of the design will be of the interview. In addition, this study's primary focus is to investigate how the difference in definition for successful implementation affects the implementation of the ICT curriculum in the teacher training college. However, this study will not discount the use of quantitative elements and as such will be utilizing a survey to ascertain the teacher trainees TPACK levels. This will be later supplemented with an interview as well to ascertain the conclusion to the research questions.

Population and Sampling

The study will use a purposive sampling method to select the respondents of this study. The study will consist of 40 pre-service teachers who have just returned from their industrial training or also known as practicum. The 40 pre-service teachers will be taken from a teacher training college in Kota Kinabalu, Sabah. These pre-service teachers will be referred to as respondents for the purpose of this study. These pre-service teachers are selected purposefully as this study requires the respondents to have at least some internship or practicum experience. As most institutions may have a number of students, this study will only be focusing on those who have been to school for an extended amount of time.

The respondents selected for this study is representative of the data as Creswell (2012) pointed out a number of 30 to 40 samples to be acceptable in a qualitative study. However, Fraenkel, Wallen & Hyun (2012) mentioned that the importance is not with the number but of the hierarchy of power where a certain curriculum is implemented from the top down. Fraenkel, Wallen & Hyun pointed that an interview of the heads of departments, teachers and implementers of a curriculum will suffice despite not interviewing the students involved in the curriculum. As such, the sample selection is justified as the study will consist also of one lecturer to provide a better understanding to the results obtained. The lecturer involved in this study teaches ICT and thus can provide a good insight into the research objectives set forth. In addition, an administrator of the institution will also be interviewed.

Instrumentation

The data collection methods for this study consists of a survey and an interview. This will be utilized to investigate and triangulate different sets of data to answer the research questions.

Survey

The survey and interview will be designed according to TPACK was chosen as a framework for Nordin's (2014) study. However, a few modifications will be made to the TPACK survey from Nordin's study. The survey will utilize a four-point Likert scale instead of a five-point Likert scale and this is deemed acceptable by Lozano, García-Cueto & Muñoz (2008) who pointed out that the acceptability of Likert scales range between a four-point to a seven-point Likert scale. The use of a four point Likert scale and calculated via Cronbach alpha has been done in studies such as those by Terrace (2003). The questionnaire will be distributed via Google Forms.

The TPACK survey will be distributed to all of the pre-service teachers in the study via Google forms. The TPACK survey was modified from a five-point Likert scale to a four point Likert scale. This is done in order to avoid students from selecting the neutral stance over the questions. This is deemed as acceptable by Lozano, Garcia-Cueto & Muniz (2008). The survey was used to assess the students' TPACK levels and to provide a basis for the follow-up interview questions. From the TPACK survey, the focus group interview will investigate the extent of the success of curriculum in guiding the implementation of ICT in the classroom.

The questions for technological pedagogical content knowledge will focus on the combination of all technology, content and pedagogical aspects in their classroom. The questions will focus on how

teacher training courses has contributed to their TPACK levels. To support and confirm the findings, interview questions from the implementation staircase will be used to investigate the process of the implementation. This will be elaborated in the section below.

Interview

The interview is divided into two portions, one is adapted from the TPACK survey while the other consist of the questions from the implementation staircase. The interview questions for the teacher trainees will be modified from the TPACK survey.

In addition, other respondents such as the institute's lecturer in charge of ICT will be interviewed to investigate how the implementation of ICT in the teacher training college was carried out. The implementation staircase is adapted from Mofarreh & Ibrahim's (2016) interview questions that was designed based on the implementation staircase. Furthermore, an administrator will also be interviewed to further investigate the administrator's point of view on this.

Data analysis method

The interview will be adapted from Mofarreh & Ibrahim (2016) with the incorporation of questions that take into account the implementation staircase and can be used to confirm how curriculum is implemented from the top implementers down to the students.

The TPACK survey will be analyzed in a quantitative manner. The responses will be analyzed via mean scores and will only be done so to addresses the extent to which teacher training has helped the teacher trainees' TPACK. The TPACK survey will be modified to incorporate a qualitative component. This is to prompt the participants to further elaborate on their technological pedagogical content knowledge. The participants will be called for an interview and will be questioned further on the interview with regards to how the curriculum has helped provide the necessary content knowledge for ICT implementation in the classroom. Comparatively, Nordin's (2014) implemented a similar method in another study, utilizing a focus group interview upon the completion of the survey. This is to further provide confirmation to the scores obtained in the survey.

The transcript of the interview will be analyzed via assigning different themes and categories to the data garnered from the interview (Creswell, 2012). Creswell also pointed out the themes from an interview are based on the themes specific to the context of the research. This is to provide context and meaning to the responses obtained in the interview.

Results

The results section will be divided into two sections, first section will consist of the data from the survey while the second section will consist of results and statements garnered from the TPACK interview and implementation staircase interview conducted throughout the study:

TPACK survey results

The results from the TPACK survey will be divided into different sections. The first section consists of the technological knowledge which investigates the teacher trainees' knowledge on technology, the overall mean score obtained was 2.69 out of the Likert scale of 4, suggesting many who perceive the lack of knowledge on technology. In terms of content knowledge, the overall content knowledge score was 3.114, indicating that most of the teacher trainees are confident with the content that they are teaching and have a rather good knowledge on what they are teaching.

In terms of pedagogical knowledge, the overall pedagogical knowledge score was 3.088, indicating that most of the teacher trainees are confident with the methods they employ in teaching a class. In terms of pedagogical content knowledge, the overall pedagogical content knowledge score was 2.96, indicating that most of the teacher trainees are confident with how knowledge and strategy were employed in teaching a class.

In terms of technological content knowledge, the overall pedagogical content knowledge score was 3.05, indicating that most of the teacher trainees are confident with how technology and what was taught in the classroom were successfully integrated. In terms of technological pedagogical knowledge, the overall technological pedagogical knowledge score was 3.16, indicating that most of the teacher trainees are confident with how technology and what was taught in the classroom were successfully integrated.

In terms of technological pedagogical knowledge, the overall technological pedagogical knowledge score was 3.05, indicating that most of the teacher trainees are confident with how technology, content of the lesson as well as pedagogical skills were integrated well.

TPACK interview results

The section below consists of the interview results obtained using TPACK.

Technological knowledge

The interview questions for this study will be divided via the categories as stipulated in the TPACK survey. The first section is technological knowledge where the respondents provided a general response that the technological knowledge obtained was from the internet and from family and not from the courses taught in the teacher training college.

This is seen in the following statements by the respondents:

“... learnt how to solve technical problems in technology from friends and cousins...” (R3TK1)

“...the courses on ICT did not teach me anything on how to use ICT...” (R6TK6)

“...technology taught in the teacher training course was not relevant...” (R2TK2)

The overall results indicated that teacher training did not provide the respondents with any relevant guidance that contributed to their technological knowledge.

Content knowledge

The responses for the content knowledge section is seen below:

“...learnt much in teacher training in terms of management and how to handle the classroom...” (R3CK1)

“Yes, I have learnt much in terms of strategies and theories in teaching.” (R1CK2)

“Not able to make learning less complex because I tend to keep explaining to the students who don't understand.” (R9CK4)

“Yes, I get to teach my class how to apply and how to speak English.” (R3CK5)

Based on the responses above, the respondents in general perceive that their content knowledge is adequate and are able to teach the students of their class the content well. The content in this case refers to the English primary curriculum.

Pedagogical knowledge

In terms of pedagogical knowledge, the responses of the respondents are displayed below:

“...taught how to design a lesson plan in the teacher training course and we know what to do step by step...” (R11 PK 1)

“...courses such as linking theory to practice has helped me in knowing what to do in the class sometimes.” (R8PK 2)

“...learning and the learner taught me about the things that I should and should not do in the classroom.” (R5PK 5)

In general, the respondents perceive that pedagogical knowledge is one thing that they have benefitted them a lot in the teacher training course. They were able to name more than one course that has contributed to this.

Pedagogical content knowledge

In terms of pedagogical content knowledge, the responses of the respondents are displayed below:

“...difficult to assign content that fits teaching...” (R12 PCK1)

“...not very confident in teaching...” (R3 PCK2)

“I learnt mainly through experience, not exactly from any course in IPG.” (R7 PCK3)

“Some courses such as language description and development does help.” (R4 PCK4)

“...learnt mainly from experience and do so by varying activities...” (R8 PCK5)

In general, the respondents mentioned that their ability to perform well in the pedagogical content knowledge section is due to experience with some limited help from certain courses in teacher training college.

Technological content knowledge

In terms of technological content knowledge, the responses of the respondents are displayed below:

“...through mentoring sessions and common sense...” (R13 TCK1)

“...forced to explore by ourselves, not specified in any course..” (R10 TCK1)

“...forced to explore as part of an assignment but were never taught specifically how to use it...” (R5 TCK2)

“...apps such as Kahoot and quizlet were obtained from mentoring and extra-curricular activities...” (R8 TCK5)

In this section, respondents attributed the knowledge on technology and content to mainly extra-curricular and mentoring sessions of the course. No specific course was mentioned to have taught the respondents methods or guided the respondents towards implementing technology in the teaching of specific content in the classroom.

Technological pedagogical knowledge

In terms of technological pedagogical knowledge, the responses of the respondents are displayed below:

“...choose the correct technology from the google playstore...” (R5 TPK 1)

“...choose it from the internet...” (R7 TPK 1)

“...not really taught or know how to choose, no internet and computers...” (R3 TPK2)

“...not really taught how to teach but was introduced to technology in the ICT course...” (R1 TPK3)

All in all, the respondents responded that self-experimentation and experience were ways of how technology was applied in the pedagogy of the class. However, some minor attribution to the education technology course has prompted the use of technology in pedagogy either via the content of the course or the assignment.

Technological pedagogical content knowledge

In terms of technological pedagogical content knowledge, the responses of the respondents are displayed below:

“...learnt mainly from the modules in school, no guidelines from training.” (R2 TPACK1)

“...had to google and find out from the internet...” (R6 TPACK1)

“...learnt from English from young learners, which is not part of the curriculum.” (R4 TPACK5)

“...some courses do teach us LMS like Schoology.” (R2 TPACK5)

Overall, the respondents found the lack of guidelines and infrastructure to be a deterrent to the integration of content, technology and pedagogy in the classroom. In addition, the lack of explicit guidelines and requirement has made it unnecessary for the implementation of ICT to support content and pedagogy in the classroom.

Implementation staircase interview with lecturer results

The implementation staircase interview was conducted on the lecturer in charge of ICT in the teacher training institute. The results are displayed according to the questions set forth below:

No	Questions	Response
1.	How does your institute implement a curriculum provided by the Ministry?	No one software, from the common ones to the high end one, no limitation by the ministry, Use of a course outline, to guide the implementation,
2.	Is the use of technology incorporated into all of your school policies for each subject area?	Everything including TESL
3.	What is your role in the implementation process?	Exams/assignments questions are set by the lecturer, so software is determined by the lecturer. Exposures and step by step are given by the lecturer in class and not just in their practicum only providing them guidance, giving them a storyboard.

4.	Why do we need to have ICT curriculum to spur learning in Higher learning institutions?	It's very useful in getting information across, getting the students to understand concepts such as pictures or things that they may not understand.
5.	Is there an incentive in implementing ICT curriculum?	It's a need and in a way part of regulation.
6.	How does a manager of the institute /main department/lecturer of ICT implement the ICT curriculum?	Leaders encourage it, but not much support. However, students are committed to use data on their expense?
7.	Are you satisfied with ICT curriculum in teacher training institute? If yes how? If no why?	Not satisfied, feel like a burden for the trainees feel like they don't have the facilities but are required to do so. Issues with infrastructure
8.	Do you think your teacher trainees/lecturers are satisfied with implementation of the ICT curriculum? And how would teacher trainees/lecturers' satisfaction be measured? Do you ask for teacher trainees/lecturers feedback? How?	Not satisfied, unhappy due to the lack of facilities.
9.	To what extent do you think ICT curriculum in teacher training institutes is well designed and does it provide tangible results?	The assignments and how they apply it when presenting it.
10.	In your opinion, what factors facilitate the implementation of ICT curriculum in teacher training institutes?	Internal motivation and no choice and they are required to use it no matter what.
11.	In your opinion, what factors that hinder the implementation of ICT curriculum in teacher training institutes? What do you suggest to overcome these obstacles?	The lack of facilities hinders implementation. Internal motivation spurs implementation, it's whether the students are willing to implement it or not.
12.	Do cultural factors hinder the implementation of ICT curriculum in teacher training institutes? If so can you identify some of these cultural factors? To what extent does it support or hinder the implementation of ICT curriculum in teacher training institutes?	Most people are more than willing to use ICT in the classroom.

13.	What are the major requirements for successful implementation of ICT curriculum in teacher training institutes?	Interest and drive to want to learn to implement new things in the classroom

Table 2: Implementation staircase interview with lecturer results

Implementation staircase interview with administrator results

The implementation staircase interview was conducted on the lecturer in charge of ICT in the teacher training institute. The results are displayed according to the questions set forth below:

No	Questions	Response
1.	Is there an implementation plan for the ICT education for teacher training institutes?	Not exactly... Some collaboration with other colleges were done and other forms of implementation include research conferences.
2.	Which subject areas in teacher training institutes does it cover? Does it cover the TESL subjects?	Every subject, especially TESL and education subjects have ICT implementation in the classroom.
3.	Is there a mechanism for evaluating the implementation of ICT education in teacher training institute?	No assessment, just the use of talent review to review the lecturers but not the student.
4.	What is your role in the implementation process?	Implementing the talent review on the lecturer to ensure ICT implementation in the classroom.
5.	Is there an incentive in implementing ICT policies?	No motivation for implementing ICT in the classroom.
6.	To what extent do you think ICT education in teacher training institutes is well designed and does it provide tangible results?	Well implemented in practicum especially when the trainees search for ideas to implement ICT in the classroom. This is seen in good reviews from the headmasters
7.	In your opinion, what factors facilitate the implementation of ICT education in teacher training institutes?	Curriculum is a key factor and the teaching of the lecturers. Curriculum and the teacher in schools too. Theories have to be new and updated.
8.	In your opinion, what factors that hinder the implementation of ICT in Teacher training institutes? What do you suggest to overcome these obstacles?	No internet in schools but in IPG, most students have their own internet.
9.	Do cultural factors hinder the implementation of ICT education in teacher training institutes? If so can you identify some of these cultural factors? To what extent does it support or hinder the implementation of ICT education in teacher training institutes?	Attitude , since no internet so most people feel like they don't have to use it,

10.	What are the major requirements for successful implementation of ICT education in teacher training institutes?	Internet and google

Table 3: Implementation staircase interview with administrator results

Discussions

Based on the findings of the study, the findings were divided based on the research questions of the study.

How is the lecturer's and administrator's definition of success similar/different from the students'?

In the interview for both lecturers and trainees, the lecturer pointed out that ICT implementation by trainees are successful as the assignments are carried out well, the lecturer further pointed out that the teacher trainees were able to carry out ICT implementation in the classroom via assignments well. In addition, the lecturer further pointed out that guidance was provided, indicating that guidance is specific to providing the trainees an idea of how the implementation process should be like. The administrator also pointed out good reviews by the headmasters of the school, indicating those as a measure of successful implementation of the ICT curriculum.

The trainees pointed out a different point of view, indicating that it can be difficult to find materials on how to implement ICT well in the classroom. The trainees pointed out that despite guidance given, more guidance would be preferred as the assignment does not prepare for ICT implementation in a real classroom context.

The differences found here can be attributed to the TPACK learning theory where it is likely the focus of the curriculum and lecturer is more on the technology knowledge (TK) and Technology pedagogical knowledge (TPK). The trainees are perhaps finding it difficult to implement ICT in the classroom as they may find it difficult in helping the students in the classroom learn better and more efficiently via ICT. This is seen in the interview with regards to the trainees' pedagogical content knowledge (PCK) and technology.

However, both lecturer, administrator and trainees concur that there is a lack of adequate facilities, infrastructure and support from administrators in implementing ICT in the classroom. This is seen in the teacher trainees' TPACK interview as well as the interview with the lecturer. With both lecturer and teacher trainees pointed out different and similar definitions of ICT implementation in the classroom, it is important for curriculum assessments to take into account the needs of the teacher trainees. After all, the teacher trainees are the product of the curriculum and as the teacher trainees are quite aware of their needs, a review should be done to address those needs. Furthermore, constant feedback from the lecturer, teacher trainees as well as schools should be incorporated to ensure that ICT implementation in the classroom is carried out successfully.

How does teacher training guide future teachers to utilize ICT to spur E-learning?

Teacher training guides future teachers to utilize ICT to spur E-learning via the guidance provided by the lecturer. This is seen in the interview of both the lecturer and the teacher trainees where the lecturer pointed out guidance to have been provided in training for ICT use. The teacher trainees indicated that guidance were given by some lecturers on how on to implement ICT in the classroom, however it was of other non-ICT related courses in which the lecturer in charge implemented ICT in the teaching process.

The lecturer also deemed that the teacher trainees were able to successfully implement ICT in the classroom to spur E-learning from the practicum courses, stating that many school administrators have given positive comments towards the trainees' ability to implement ICT in the classroom. The interview with the lecturer also pointed to the assessment done in courses and practicum where ICT

implementation in the classroom was evaluated. This has spurred the students to be more willing to implement ICT in the classroom. The teacher trainees concur with this, citing a need to implement ICT in the classroom. However, the challenges mentioned include the lack of knowledge on how to implement technology effectively. This could be likely due to the trainees being assessed only with their technology knowledge (TK) and Technology pedagogical knowledge (TPK) However, in order for TPACK to be fully implemented, the assessment should take this into account and provide better guidance. This can also be applied in the trainees' practicum and assignments where more aspects of ICT implementation should be assessed in order for the lecturer to better guide the trainees in implementing ICT in the classroom.

Another issue that was frequently brought up by the lecturer and teacher trainees point to the lack of infrastructure for ICT implementation in the classroom. This has resulted in the trainees preferring conventional whiteboard and paper methods. The lack of infrastructure is a concern; however, the curriculum of the teacher training institute could include methods that can guide the implementation of ICT even where infrastructure for ICT implementation is lacking. This is especially the case for most rural areas in the country where internet and ICT infrastructure is lacking (Alias, DeWitt, Siraj, Rahman, Gelamdin & Rauf, 2014).

In conclusion, teacher training does help guide the teacher trainees in implementing ICT in the classroom. However, when evaluated with TPACK, teacher trainees may have good knowledge on technology (TK) and being able to apply technology in the classroom to a certain extent (TPK), however, what is lacking is the ability to implement technology, incorporating content and pedagogy. As such future curriculum and practicum can place a further emphasis on this in order for teacher trainees to implement ICT in the classroom more effectively. Furthermore, the lack of appropriate infrastructure may also hinder ICT implementation which is a point that both lecturer and teacher trainee share, stating that it does hinder the instruction of ICT implementation.

Conclusion

The curriculum implemented in the teacher training institute is essential in encouraging the use of ICT in the classroom. Based on the study conducted, the focus should not only be on encouraging the implementation of ICT based on technology knowledge use in the classroom but how it can be implemented in the classroom as well. Furthermore, the lack of proper infrastructure and assessment could likely affect the future implementation of ICT in the classroom as the guidance needed to effectively build the teacher trainees' TPACK is lacking. In addition, both lecturer and teacher trainees' definition on successful ICT implementation in the classroom should be aligned to equip the teachers in their future classroom practices. A follow up study should investigate how curriculum can be better implemented to ensure how the curriculum can better increase the teacher trainees' TPACK levels.

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EDUCATIONAL MISMATCH AND NON-COGNITIVE SKILLS OF WOMAN ON BOARD IN THE CREATIVE INDUSTRY:A LITERATURE REVIEW

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Abstract: *Productivity and wages can be motivated by education, skills and experience. This paper is literature study of woman on boards in the creative industry with a focus on interrelationship educational mismatch and non cognitive skills to strategic decision making in the sustainability of the business they lead. The method used is to examine some the results of previous studies. The findings of this study inform that educational mismatch and non cognitive skills can influence the strategic decisions and more positively affect to cognitive conflict. The limitation of this research is study only conducted at creative industry and only focuses on woman on board. Further qualitative and quantitative research of male and female workers in other types of industries is required to investigate application of such recommendations.*

Keywords : *Educational Mismatch, Non Cognitive Skills, Woman on Board, Strategic Decision, Creative Industry.*

Introduction

Economists have long recognized the important role of formal education and cognitive skills in labor market participation and wages since the Becker (1964) and Mincer (1974) studies. In general, schools or formal education can increase workers' wages only if they produce skills that have a rate of return on the labor market (Hanushek, 2002). This is especially true in developing countries such as mathematical analysis and scientific (Hanushek and Woessman, 2008; Das & Zajonc, 2010; Singh, 2016).

Based on previous research related to the supply of labor markets and the demand side found that there was an mismatch education in developed countries (McGuinness, 2006). The literature that examines the economic impact of mismatch educational has been investigated by Duncan and Hoffman (1981), where there is a difference between the level of education achieved by individuals and the work they do.

Previous research has emphasized that IQ and cognitive measures have a major influence on the productivity of high-skilled workers or also affect more educated workers, so non-cognitive skills play a more important role in the entire spectrum of workers (Almlund et al., 2011), especially for workers who under normal wages (Lindqvist and Vestman, 2011). However, the study of Lindqvist and Vestman (2011) found that a standard increase in non-cognitive skills for workers could increase wages by 4% - 8%. Likewise Heckman, Stixrud, and Urzua (2006) also estimate that non-cognitive skills can increase workers' wages by 11.2% from increasing latent non-cognitive skills in the US. This can mean that non-cognitive skills can predict adult wages. However, when viewed from the research of Heckman et al. (2011), found that non-cognitive skills greatly predicted educational attainment but had little influence on wages.

The emergence of the industrial revolution era 4.0 with employment opportunities could be a great opportunity to increase women's wages. Why are women? Because, the study of gender diversity is very broad to be studied (Torchia, Calabrò, Gabaldon, & Kanadli, 2018). Research Eagly, (2016) found the effect of gender diversity in leadership tasks and strategic decision making. Other studies have found

that a woman's leader can influence strategic decision making besides that women on board can have influences that can trigger biased cognitive decisions such as processes in information and decision making (Kanadli, Torchia, & Gabaldon, 2017).

This paper is important to do, given the changes in the era of disruption, which are basically strategic changes in the aspects of business fundamentals (Kasali, 2017). For this reason, it is very important to discuss the role of women on board in the face of change in this era, especially when many women work to increase family income, so the domain era disrupts the implications that business management is no longer centered on individual ownership but shares role, Kasali (2017) .

This study is a literature survey that discusses the relationship between female workers by looking at mismatch education and non cognitive skills in making strategic decisions in the companies they lead. This survey is important as an input for corporate sustainability studies especially if women play an important role in making decisions.

Systematically, this paper will begin with a description of the educational background and non-cognitive skills, how to measure them, and various forms of influence on woman on board decision making in the creative industry. This paper can help provide what information has been found from the results of previous studies. In addition, information for researchers who are interested in gender issues, woman on board with entrepreneurial skills and their relationship as decision makers. In addition, this research is useful in determining the direction of future research that has not been achieved. This paper has differences from various previous writings, because researchers want to include elements of the Islamic approach beyond the conventional approach that has been revealed in previous research.

Educational Mismatch

Qualification requirements refer to the educational mismatch with requirements from employers, (Heijke, Meng, Ris, 2002). To compare worker qualifications and qualification requirements for employment, there are four qualification categories that can be carried out obtained from the PIAAC survey. The level of formal education is based on the ISCED 97 classification namely basic education, secondary education without school leave examinations, secondary education with school leave and higher education. Three alternative categories can then be distinguished, i.e. over education (over qualification), undereducation (under qualification) dan educational match (qualification match). (Rašovec & Varivnova, 2014)

While research from Chevalier (2003) distinguishes educational incompatibility between "too high" workers in the sense of having a higher level of education for their work but showing the same skills as those who are well educated by their coworkers. In addition, he also saw the difference between truly over-education workers, namely workers who were actually paid low in the workplace. The study of Allen and Van der Velden (2001) also discusses differences in human capital from each individual to achieve the same level of education and analyze the level of educational incompatibility with incompatibility in skills.

From a different perspective, the job competition model (Thurow, 1975) assumes that the characteristics of employment determine wages because most of the skills of workers are obtained at work and not through formal education. In the same vein, signaling theory (Spence, 1973) shows that individuals invest in education to tell their abilities to prospective leaders where they will work. Finally, assignment theory (Sattinger, 1993) takes into account the supply side and demand side of the labor market, with wages determined by both parties in the work or the productive characteristics of each individual. The empirical analysis of these theories is based on the framework proposed by Mincer (1974), with estimates of wage equations relating to each individual's school years and their experiences according to their income in mathematical equations.

Based on the previous study, education mismatch is a description of the formal education background of a worker which is sometimes different from what is needed by the employer and this can provide qualifications that can be more than expected or not. There are three distinct categories of

alternatives for this variable, which are over education (over qualification), undereducation (under qualification) dan educational match (qualification match). And there are four levels of education, namely basic education, secondary education without school leave, secondary education with school leave and higher education.

Non Cognitive Skill

Non-cognitive skills can be defined as forms in thoughts, feelings, and behaviors that can influence social interaction with others (Borghans, et. Al., 2008). Recent social scientists have also begun to recognize the important role of personality traits, or non-cognitive skills in determining work productivity. In the study of Cunningham and Villaseñor, (2014) which reviewed 28 surveys of workers in various countries, found that social emotional skills were at the top priority of 76.5%. White, (2013) found that social skills are based on ratings of employee ability preferences. In addition, efforts to improve skills can be done by increasing worker programs for some developing countries, especially in Latin America (World Bank 2010).

By improving soft skills, it is expected that each employee will be able to work optimally and get the wages that are obtained as expected (Mateos Romero, Murillo Huertas, & Salinas Jiménez, 2017). Other studies show an indirect relationship between education and skills of workers, Pietro and Urwin, (2006; Green and McIntosh, (2007). Other researchers found differences in educational background with their expertise (Hillman et al., 2002; Singh et al. ., 2008; van der Walt & Ingley, 2003; Westphal and Milton, 2000).

From various research results, it can be concluded that non cognitive skills are also needed in the world of work because it can affect worker productivity. In industry 4.0, the millennial generation needs to improve non-cognitive skills, the ability to continue to learn and adapt to changes in the environment, so that the skills of workers are in accordance with existing needs. Especially nowadays skills must be related to mastery of computer technology, communication skills, and the development of the ability to collaborate collaboratively (high level four skills CS / HOSC4C / Creativity, critical thinking, Communication and Collaboration,(Siswanto, Sudira, & Suyanto, n.d.).

Woman on Board

Selby, 2000; Eagly, (2016) sees that women with unique values. Woman on Board can be interpreted as a woman who occupies a position of strategic decision making and has the nature of leadership through professional development, Eagly, (2005). In a researcher meeting in Brussels on April 11, 2018 with the theme "All on Board - Closing the Digital Gap for Women and Girls in Developing Countries", it was stated that technology in industry 4.0 could improve women's welfare.

Based on the behavioral approach, gender diversity can be seen from a demographic perspective both in terms of differences in education and in the acceptance of information. When viewed from the existence of woman on board among male workers, a woman who occupies a woman on board position will be different in her behavior and how to make decisions (Bilimoria & Wheeler, 2000; Eagly, 2005).

Based on the results of the opinions of several experts, it can be seen that women can be women on board, occupy top leadership even though they have unique things and have different educational backgrounds and expertise than their positions.

Creative Industry

From the study of the Ministry of Trade of the Republic of Indonesia in 2017, the main obstacles faced by creative resources in Indonesia are: (1) the context of artistic creativity in the era of the creative industry has not been comprehensively understood and populist; (2) non-artistic based creativity (science and technology) which is understood to be too microscopic in seeing its profession so that it is too mechanistic and less innovative. Human resources prefer to work in large companies that tend to sink into daily routines; (3) Experimental and expression facilities are still very lacking so that the results of his work become less creative and less innovative. For this reason, it is very important for workers to

improve updated and innovative skills, given that competition is increasingly sharp in this industrial era 4.0.

Creative economy is the creation of added value based on ideas born of the creativity of human resources (creative people) and science-based, including cultural heritage and technology (Hidayat, 2016). creative economy consists of *core creative Industri, forward and backward linkage creative Industri* (kemenparekraf, 2014). Indonesia classifies creative industries into 15 sub-sectors, namely: (1) architecture; (2) design; (3) film, video and photography; (4) culinary; (5) crafts; (6) mode; (7) music; (8) approval; (9) interactive games; (10) advertisements; (11) research and development; (12) fine arts; (13) performing arts; (14) information technology; and (15) television and radio, (RAJM Creative Economy, 2014)

Models of research Educational Mismatch And Non-Cognitive Skills Of Woman On Board In The Creative Industry

According to the study of Kanadli, Torchia, & Gabaldon, (2017) the first is that gender diversity follows women's participation (*boardrooms worldwide*), and especially in Europe, and the results are the same as increasing the number of women on boards (*quota laws in Italy, Spain, Iceland, France, Germany, and EU target di tahun 2020*). The second is how competent women leaders can influence a company. This study uses a sample of 317 companies in Norway. Where the result is that attaining critical mass going from one or two women (few tokens) to a minimum of three women (consistent minority) makes an increase in the level of innovation of the company. This is in line with the research Huse & Solberg, (2006); Post & Byron, (2015) that gender diversity will also be in line with firm level outcomes (Finkelstein, Hambrick, & Cannella, 2009; Johnson, Schnatterly, Hill, 2013). Laud and Johnson (2012), Bredin dan Söderlund (2013) have limited understanding of career strategies by gender and industry.

The research Cyert, March, & Clarkson, (1963) see the side “the behavioral theory of the firm”, where this theory is recognized as the main perspective for understanding organizational behavior and decision making (Argote & Greve, 2007; Van Ees, Gabrielsson, & Huse, 2009), (Nielsen & Huse, 2010). There are three dimensions used by women on the board : including structural, cultural and action, and project-based organizations.

In addition, the research Hillman, Canella, & Harris, (2002) notice different human capital found the indicator is knowledge, experience, and perspectives. In addition Eagly, (2005) uses values and views in the dimensions of his research, while the results of his research are that women make a difference to their business partners whose gender is different. Women on board positions will have a more positive influence on cognitive conflict. Other views show that there are mixed results from the existence of gender diversity, such as better corporate performance by making variables in their research with moderating and intervention variables (Eagly, 2016; Post & Byron, 2015). Another study that connects the woman on board mechanism to important company decision making (Husse, Gabrielsson, & Minichilli, 2009; Huse & Solberg, 2006; Nielsen et al., 2010; Singh, Terjesen, & Vinnicombe, 2008), including strategic decisions (Nielsen & Huse, 2010; Westphal & Milton, 2000). For this reason, in explaining the contribution to the behavioral approach.

In addition there is also a research model by looking at the perspective of an organization's behavior and decision making (Argote & Greve, 2007; Van Ees et al., 2009), although empirically adapting the types of companies they lead (Miller & Triana, 2009). The behavior theory of companies builds the key to success: bounded rationality, satisficing, problemistic search, the routinization of decision making in standard operating procedures, and the dominant coalition (Argote & Greve, 2007).

In addition, there are also models to minimize and even negate the main constraints faced by Indonesia's creative resources. It is important to develop a vocational training model to support the growth of the creative industry. Based on the analysis of the above constraints, the development of Indonesia's resource capacity in the creative industry is not enough only on hand-on skills. Development in vocational and professional fields in the creative industry requires Higher Order Skills Four C

(HOS4C) yaitu: (1) Creativity, (2) Critical thinking, (3) Communication, (4) Collaboration (Chinien & Sigh, 2009; Wagner, 2008; Lucas, Spencer, & Claxton (2012).

Furthermore there is a model with non-monetary comparative analysis of competencies and educational incompatibility with differences in three different job satisfaction: satisfaction with overall work (SOJ), with type of work (STJ), and with income earned (SW). Each is included as the dependent variable in the following three distributions:

$$Y_i = \Lambda(\beta_0 + \beta_1 Year\_School_i + \beta_2 OC_i + \beta_3 UC_i + \beta' X_i) + \varepsilon_i \quad (1)$$

$$Y_i = \Lambda(\alpha_0 + \alpha_1 Year\_School_i + \alpha_2 OE_i + \alpha_3 UE_i + \alpha' X_i) + \mu_i \quad (2)$$

$$Y_i = \Lambda(\delta_0 + \delta_1 Year\_Req_i + \delta_2 Year\_OE_i + \delta_3 Year\_UE_i + \delta' X_i) + \pi_i \quad (3)$$

Research (Badillo Amador, Lopez Nicolas, & Vila, 2008) see *undereducation* (*under qualification*) equation (1), *date education* (*datequalification*) in equation (2) and equation (3) is *overeducation* (*overqualification*). Educational incompatibility has the advantage of being easier to measure and broader in the range of "skills", but also has disadvantages because it is far less precise than skill mismatch.

Based on the theory of human capital, each individual invests their funds in human capital in the present to obtain future benefits from the investment made, either directly or viewed from opportunity costs. The National Earnings specification is:

$$w = a_1 Sa + X a_2 + e$$

Sa is the actual years of education attained, X is a vector of control variables and e is a random error, split the schooling variable (Sa) years of required education (Sr) and years of surplus (So), deficit (Su), of schooling-years of over-education and under-education dapat ditulis

$$Sa = Sr + So - Su$$

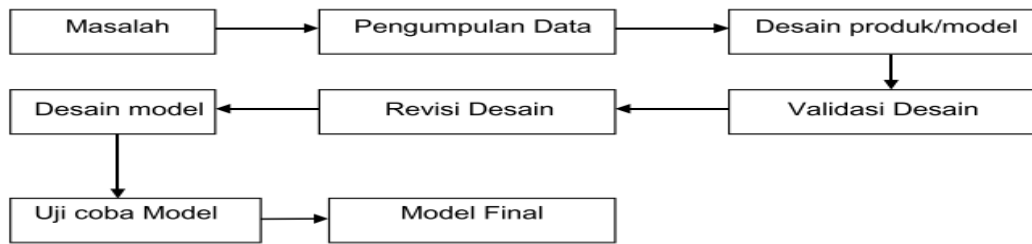
Next:

$$\ln w = \beta_0 + \beta_1 Sr + \beta_2 So + \beta_3 Su + X \beta_4 + e \text{ (Badillo Amador et al., 2008)}$$

Similarly, research in ten countries in Europe analyzed the economic impact of education by estimating the different specifications of the HOS4C model which consists of two models, not only taking into account the education year but also the level of skills actually obtained by individuals in the creative industry (Mateos Romero et al., 2017). The results of his research are grouping labor in more homogeneous blocks (Nordic, Mediterranean, Continental, and Eastern Blocks). In the research procedure the development of the HOS4C model was divided into 3 groups of activities, namely pre-development, development and implementation of the operational model outlined in the following description:

1. the Pre-Development Phase, information is collected about the implementation of the improvement program
2. In addition, it also examines the scope of the product (fostering workplace-based SDI / WBL), the extent of use and supporting conditions,
3. In the conceptual development phase, the direction of developing the HOS4C model that supports the creative industry is formulated based on needs
4. In the model implementation phase, the development of the HOS4C model that supports the workplace-based creative industry is a theoretical or semi-perfect prototype model that will be further developed.

Based on the HOS4C prototype model, the support of the workplace-based creative industry is equipped with a review assessment instrument from other parties involved in the development, users of the HOS4C model supporting the workplace-based reative industry, management support, and then results are made. Development procedure in Figure 1 below (Siswanto et al., n.d.)



Gambar 1: Prosedur pengembangan Model

Siswanto et al., In Model I, saw a direct relationship between woman on board (ratio) and the level of organizational innovation. This research is in line with the research of Baron & Kenny, (1986). Furthermore, in model II looks at the ratio of women to organizational innovation. Whereas model III looks at cognitive mediation conflicts with respect to the relationship of independent variables and dependent variables (organizational innovation) or full mediation or partial mediation. The results of his research turned out that the ability of woman on board to develop and improve labor could be well trained. The suggested scheme for developing 4C soft skills can be seen in Figure 2

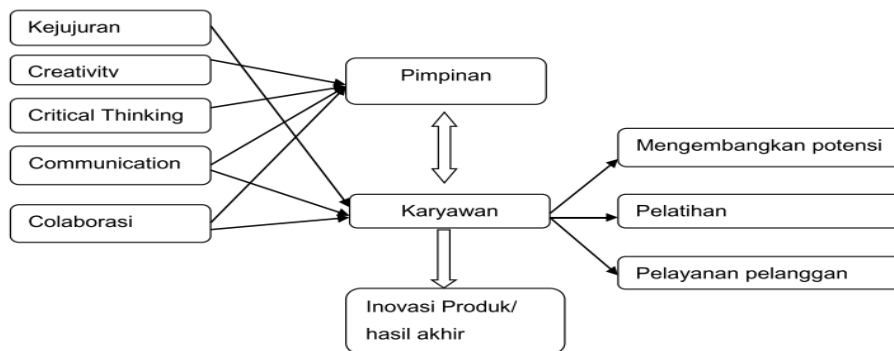


Figure 2 : Skema pengembangan soft skill dalam industri kreatif

Conclusion and Discussion

The definition, size and problem of women on the board in the creative industry is very diverse. This is related to individuals who are always changing and developing. It is hoped that further research can discuss women's workers qualitatively and quantitatively or discuss male workers who work outside the creative industry sector using multivariate such as discriminant analysis, factor analysis, SEM or with other assistance so that they will be shown, among others : (1) How is the woman on board development model framework in creative industries in Indonesia (2) How is the empirical model of educational mismatch and non cognitive skill woman on board in the creative industry so as to develop high-order skills in the form of creativity, critical thinking skills, communication skills, and the ability to collaborate and build networks with people from various disciplines and skills as well as from various cultural and traditional backgrounds; (4) What is the empirical model in the face of educational mismatch (both of the four backgrounds of three alternative categories that can be distinguished for this variable, namely over education (over qualification), undereducation (under qualification) dan educational match (qualification match) and by considering three different measures of job satisfaction: satisfaction with overall work, type of work, and wages received and non-cognitive variable skills in increasing wages and productivity in labor in Indonesia or (5) The empirical model of how to deal with the incompatibility of education and non-cognitive skills of female workers who occupy the top

positions can make decisions for the companies they lead with the diversity of their workers when viewed from the dimensions bounded rationality, satisficing, problemistic search, the routinization of decision making in standard operating procedures, and the dominant coalition.

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INFLUENTIAL FACTORS ON ENGLISH LEARNING BASED ON ESP MATERIAL

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Abstract: *Inspired by the learners' interests in English for specific purposes (ESP), we have applied ESP for nursing students and developed ESP material. To know the effectiveness of the ESP with the material, we examined the learners' self-evaluation and questionnaire. The results were analyzed from the following viewpoints: how the learners' terminological, grammatical or idiomatic knowledge relevant to the material improved after classes; how their knowledge on diseases correlated with other factors; and how they appreciated their achievement or satisfaction with the course. Constant progress was seen in every item after classes. Moreover, significantly high correlations were revealed among such knowledge as terminology and diseases, and understanding of questions for comprehension and their answers. Disease relevant material showed their practicality in this study and the next step is to examine the effectiveness of other material from the medical or health fields.*

Keywords: *English for specific purposes (ESP), motivation, material, nursing students*

Introduction

English for specific purposes (ESP) has been accepted as a motivational English teaching approach designed to meet learners' needs relevant to their major (Dudley-Evans & ST John, 1998; Master, 2005; Takeuchi, 2003; Matsukawa, 1994; Holme, 1996; Kozawa & Yamato, 2005). Following the needs analysis (Kozawa, 2006), we have developed medical material for students to be medical specialists (Kozawa, 2009; Kozawa and Takagi, 2015) and applied them in ESP classes for nursing students on the belief that "ESP is a material-led movement" (Dudley-Evans & ST John, 1998, p175). The favorableness of the developed material had been felt through students' positive attitudes during classes, however, their effectiveness has not been investigated yet. Therefore, we will examine further after a brief background review.

Background

Nursing students tend to have less interest in English learning than other students (Kozawa, 2006a) and they hesitate to take extra English courses because of their severe schedule of major subjects including practical training in hospitals (Kozawa & Yamato, 2005). Nursing students, however, enjoyed medical topic conversation in English with less hesitation in Task-Based-Language-Teaching (TBLT) classes (Kozawa, 2013), although an obstacle to the deepening of the conversation seemed to be their lack of knowledge concerning medical topics (Kozawa, 2011). Due to the necessity of giving enough information, we have developed English material for students of medical fields. We need text analysis as well as needs analysis as Dudley-Evans and St John (1998) mentioned. In what follows we would like to discuss how the effectiveness of the material was investigated and the results, followed by explaining the notions of ESP.

Notions of ESP

It must be difficult to explain ESP without the statement by Dudley-Evans and ST John (1998).

They noted the characteristics of ESP as follows:

ESP is designed to meet specific needs of the learner;

ESP makes use of the underlying methodology and activities of the disciplines it serves;

ESP is centered on the language (grammar, lexis, and register), skills, discourse and genres appropriate to these activities (pp. 4-5).

These characteristics are taken over to Nunan's (2004) statement of ESP as "an important subcomponent of language teaching with its own approaches to curriculum development, material design, pedagogy, testing and research" (p. 7) and "a sub discipline in applied linguistics aiming at using the English language to create a technical variety of language with certain discourse features to achieve a particular specific or academic purpose" (Khalil's, 2016, p. 1). Thus ESP is essentially practical "is based on ideas about the nature of language, learning, and teaching (Basturkmen, 2006, p. 9). Therefore we performed ESP on the basis of the notions above.

Research Questions

Courses based on ESP aim to improve English learning with practical English usages as stated above. When nursing students learn specific content in English, how do they learn English and medical content? In this study, we examine the classes whose material dealt with topics of diseases. We are interested in how the students' knowledge or understanding concerning language or the topics of disease improve after they learn in classes. Influential learning factors for each development could be applied more in ESP classes if they are clarified by examining correlations among factors. Moreover, we want to examine how students' evaluation of their achievement in learning medical content would lead to successful learning. Therefore, the research questions are as follows:

1. How does the learners' knowledge concerning material improve after classes?
2. How are the students' knowledge on diseases correlated with other factors in their learning?
3. How are the students' evaluation on achievement by learning ESP material?

Methodology

Participants

Nursing students in their first year who had an ESP course in the second semester (59 out of 97 students) agreed to use their data for this study. Most of the students were 18 or 19 years old and 4 of them were male and 55 were female. They have studied English for 6 years in junior and senior high schools, however, their English level is novice or pre-intermediate.

Course Schedule

The students studied English using an ESP textbook that dealt with explanatory articles on diseases, namely, influenza, hepatic disease, diabetes, traumatic fractures, lung cancer and bronchial asthma and also on such medical specialists as nurses, medical technologists, registered dietitians, physical therapists, radiological technologists, pharmacists and acupuncturists (see Table 1). The textbook gave a general explanation about different diseases including symptoms, examinations for the diagnosis, treatments and prognosis in each unit, followed by a subsequent unit introducing one of the medical specialists who take care of the patient of each disease.

Table 1: Course Schedule

Date	Theme	Date	Theme
1 Sep. 13	Influenza	9 Nov. 8	Test review/Lung cancer
2 Sep. 20	Nurse	10 Nov. 22	Radiological technologist
3 Sep. 27	Hepatic disease	11 Nov. 29	Bronchial asthma
4 Oct. 4	Medical technologist	12 Dec. 6	Pharmacist
5 Oct. 11	Diabetes	13 Dec. 13	Acupuncturist
6 Oct. 18	Registered dietitian	14 Dec. 20	Medical team
7 Oct. 25	Traumatic fracture	15 Jan.22	Term test
8 Nov. 17	Midterm test/Physical therapist	16 Jan.31	Reviewing the course

Class Construction

The students learned medical terminology every week. For example, they needed to memorize words such as contracture, squamous cell, incubation period and eosinophil for vocabulary quizzes which were given at the beginning of every class. The quizzes also asked about idioms covered in the former class. Students were handed a so called QA-sheet, in which there are comprehensive questions from the reading material after being taught by the teacher. Questions were printed in both English and Japanese, each of which having a few parentheses to fill in. Students tried to fill in the blanks by answering the questions. They check their answers in pairs and they share the correct questions in class.

Then the teacher and students read the material aloud and they read in groups. Some grammatical points and idioms in the material were introduced to students and they tried to write the Japanese meanings which helped them understand the medical material. They filled in the answers in the QA-sheet in both English and Japanese. They discussed their answers in groups of 3-4 students. Before they shared their answers, the teacher explained the grammar points and idioms.

At the end of the class they made a list of grammatical points and idioms and reported in the class to make sure they understood. They also evaluated their learning of vocabulary, idioms, grammatical points, questions and answers, topics of disease or medical specialists and their feelings of achievement or satisfaction for the class. These self-evaluations and perceptions were used as data and the details were written in the next part.

Data Collection and Analysis

The students had learned using material both about diseases and medical specialists, however, disease-related topics were focused in this study. Collected data are results of weekly quizzes, mid-term and final exams, self-evaluation addressing the statement “I understand very well” by choosing from 5 to 1 correspondingly, I strongly agree, I agree, I’m not sure, I disagree, I strongly disagree. In addition, after the whole semester, a questionnaire asked the students’ preference in all the activities from each class and what they thought to be useful for their English learning

At the beginning of every class, they had a quiz constructed of a) review of useful expressions they learned in the former class and b) preparation of medical terminology for the day. They had the mid-term exam on the 8th week on the content from the 1st to 7th classes and the final exam on the 15th week covering the 8th through the 14th class content.

On a weekly basis, at the end of each class, they evaluated their knowledge about medical terminology, idioms, and sentence structures, indicating how they understood the content before and after each class. They also indicated their sense of achievement or satisfaction after class by choosing 1 to 5. Furthermore, they evaluated the effectiveness of the weekly quizzes, objective confirmation, the QA sheet questions, the midterm and final exams.

The data concerning the six disease-related questions were focused and analyzed to investigate the influential factors by means of grand total and interrelations using SPSS Statistics 22.

Results

Grand Total

Self-Evaluation Before and After Classes

Self-evaluation of terminological knowledge of each disease, knowledge of idioms and understanding of sentence structure before and after classes increased (see Figures 1, 2 and 3).

Self-evaluation of understanding questions and answers of the content in the textbook also increased after classes compared to that of before classes (see Figure 4 and 5). Sense of achievement or satisfaction

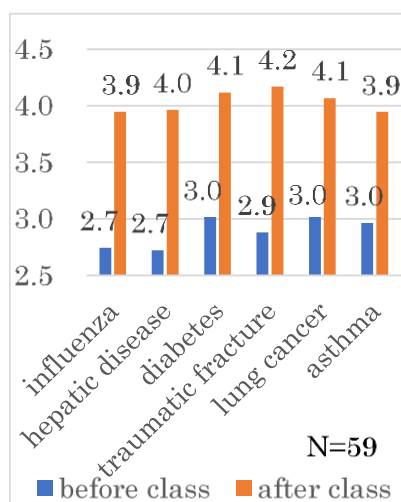


Figure 1: Terminological Knowledge of Disease Before and After Classes

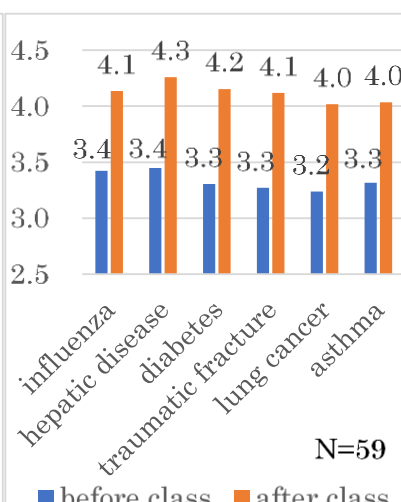


Figure 2: Knowledge of Idioms Before and After Classes

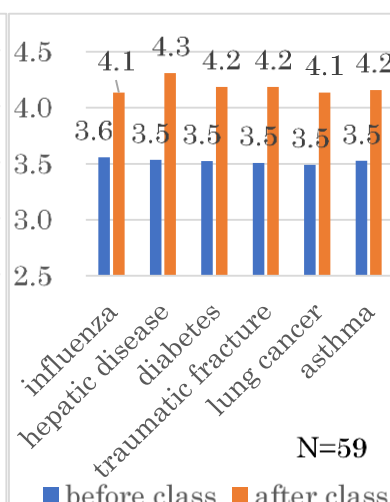


Figure 3: Understanding of Sentence Structures Before and After Classes

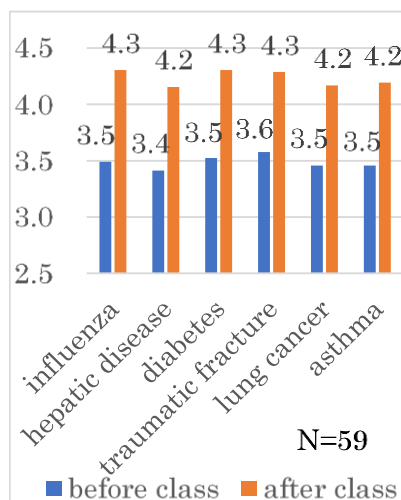


Figure 4: Understanding Questions Before and After Classes

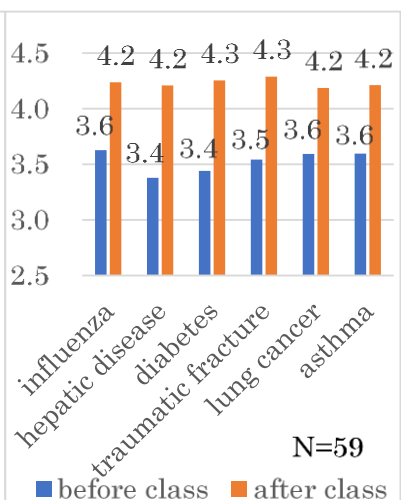


Figure 5: Understanding Answers to Questions Before and After Classes

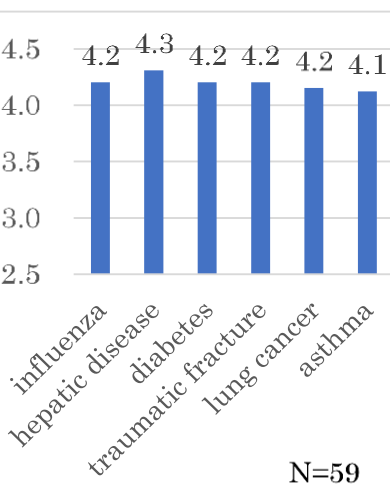


Figure 6: Sense of Achievement or Satisfaction After Class

showed higher than 4 points after every class (see Figure 6).

Questionnaire After the Course

The students answered they didn't like the final exam (3.6), midterm test (3.5), the Questions & Answers (3.1), review sessions after each class (2.9), the quiz (2.3) and confirming objectives (1.1) although they admitted the helpfulness of the final exam (3.4), the midterm exam (3.5), the Questions & Answers (3.5) and quiz (3.4). It showed that the helpfulness was low in reviewing the lecture after each class (2.2) and confirming objectives (1.5) (see Figure 7 and 8).

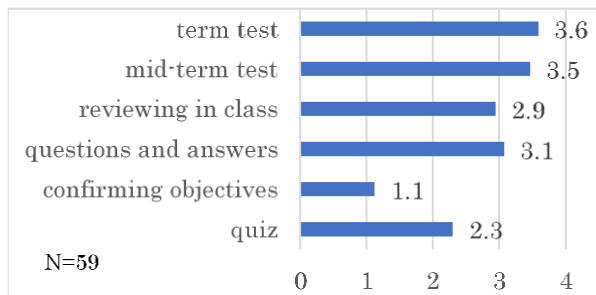


Figure 7: Unpreferable Activity

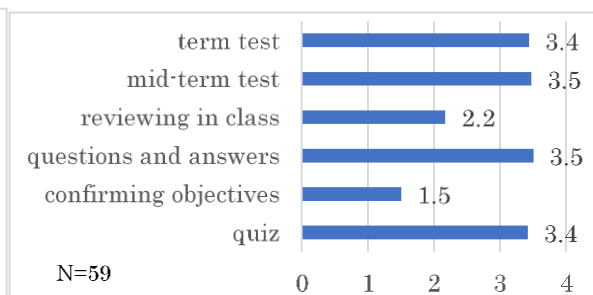


Figure 8: Helpful Activity for My Study

Correlation

Changes of Knowledge Concerning Diseases Before and After Classes

For the influenza related materials, there were significantly high correlations between before and after in terminological knowledge on the disease ($r(59) = .622, p < .01$), understanding questions concerning the material ($r(59) = .489, p < .01$) and answers to questions ($r(59) = .480, p < .01$) before and after classes (see Table 2).

Table 2: Correlations in the Learning with Influenza Material Before and After Classes

	Change in terminological knowledge on diseases before and after classes	Change of understanding questions concerning the material before and after classes	Change of answers to questions before and after classes
Change in knowledge on influenza before and after classes	.622**	.489**	.480**

** $p < .01$

In the learning with hepatic disease material, change in knowledge on hepatic diseases before and after classes showed significantly high correlations between changes in terminological knowledge ($r(59) = .654, p < .01$), understanding questions concerning the material ($r(59) = .491, p < .01$) and answers to questions ($r(59) = .548, p < .01$) before and after classes (see Table 3).

In the learning with traumatic fracture material, change of knowledge on traumatic fracture before and after classes had significant correlations with change of terminological knowledge ($r(59) = .522, p < .01$) and answer to questions ($r(59) = .411, p < .01$) before and after classes (see Table 4).

As in the learning with lung cancer material, change of knowledge on the disease before and after classes showed correlations between change in terminological knowledge on the disease ($r(59) = .608, p < .01$), change of idiom knowledge concerning the disease ($r(59) = .521, p < .01$) and change of understanding questions concerning the material ($r(59) = .412, p < .01$) before and after classes significantly (see Table 5).

Table 3: Correlations in the Learning with Hepatic Disease Material Before and After Classes

	Change in terminological knowledge on diseases before and after classes	Change of understanding on questions concerning the material before and after classes	Change of answers to questions before and after classes
Change in knowledge on hepatic diseases before and after classes	.651**	.491**	.548**

** $p < .01$

Table 4: Correlations in the Learning with Traumatic Fracture Material Before and After Classes

	Change of terminological knowledge on the disease before and after classes	Change of answers to questions before and after classes
Change of knowledge on traumatic fracture before and after classes	.522**	.411**

** $p < .01$

Table 5: Correlations in the Learning with Lung Cancer Material Before and After Classes

	Change in terminological knowledge on the disease before and after classes	Change of knowledge concerning the disease before and after classes	Change of understanding of questions concerning the material before and after classes
Change of knowledge on lung cancer before and after classes	.608**	.521**	.412**

** $p < .01$

Between the change of knowledge on asthma and change in terminological knowledge on the disease before and after classes, there was significant high correlation ($r(59) = .491, p < .01$) (see Table 6).

Table 6: Correlation in the Learning with Bronchial Asthma Material Before and After Classes

	Change in terminological knowledge on the disease before and after classes
Change of knowledge on asthma before and after classes	.491**

** $p < .01$

There was no correlation between change of knowledge on diabetes before and after classes and other factors.

Knowledge of Diseases Before Classes

Knowledge of influenza before class has correlations between terminological knowledge of the disease ($r(59) = .615, p < .01$), understanding questions concerning the material ($r(59) = .572, p < .01$), answers

to questions concerning the material ($r(59) = .557, p < .01$) before class, and knowledge of the disease after class ($r(59) = .439, p < .01$) (see Table 7).

Table 7: Correlation in the Learning with Influenza Material

	Terminological knowledge of the disease before class	Understanding questions concerning the material before class	Answers questions concerning material before class	to the disease after class
Knowledge of influenza before class	.615**	.572**	.557**	.439**

** $p < .01$

There are significant correlations between knowledge of hepatic disease before class and terminological knowledge of the disease ($r(59) = .549, p < .01$), understanding questions concerning the material ($r(59) = .438, p < .01$), and answers to questions concerning the material ($r(59) = .446, p < .01$) before class (see Table 8).

Table 8: Correlation in the Learning with Hepatic Disease Material

	Terminological knowledge of the disease before class	Understanding questions concerning the material before class	Answers to questions concerning the material before class
Knowledge of hepatic disease before class	.549**	.438**	.446**

** $p < .01$

Significant correlations between knowledge of diabetes and terminological knowledge of the disease ($r = .505, p < .01$), understanding questions concerning the material ($r(59) = .474, p < .01$) and answers to questions concerning the material ($r(59) = .562, p < .01$) were seen after class (see Table 9).

Table 9: Correlation in the Learning with Diabetes Material

	Terminological knowledge of the disease before class	Understanding questions concerning the material before class	Answers to questions concerning the material before class
Knowledge of diabetes before class	.505**	.474**	.562**

** $p < .01$

In the learning with material of traumatic fracture, knowledge of traumatic fracture showed significant correlations between and terminological knowledge ($r(59) = .689, p < .01$), knowledge of sentence structure ($r(59) = .433, p < .01$), understanding questions concerning the material ($r(59) = .507, p < .01$), answers to questions concerning the material ($r(59) = .566, p < .01$) before class and answers to questions concerning the material after class ($r(59) = .477, p < .01$) (see Table 10).

Table 10: Correlation in the Learning with Traumatic Fracture Material

	Terminological knowledge before class	Knowledge of sentence structures before class	Understanding questions concerning the material before class	Answers to questions concerning the material before class	Answers to questions concerning the material after class
Knowledge of traumatic fracture before class	.689**	.433**	.507**	.566**	.447**

** $p < .01$

As for the correlation through the learning with the material of lung cancer, significant correlation was seen only in knowledge of the disease and terminological knowledge before class ($r(59) = .556, p < .01$) (see Table 11).

Table 11: Correlation in the Learning with Lung Cancer Material

	Terminological knowledge before class
Knowledge of lung cancer before class	.556**

** $p < .01$

In the learning using the material concerning bronchial asthma, knowledge of the disease before class showed significant correlations between terminological knowledge ($r(59) = .699, p < .01$), knowledge of idioms ($r(59) = .501, p < .01$), knowledge of sentence structure ($r(59) = .412, p < .01$), understanding questions concerning the material ($r(59) = .483, p < .01$), answers to questions concerning the material ($r(59) = .492, p < .01$) before class and knowledge of the disease after class ($r(59) = .452, p < .01$) (see Table 12).

Table 12: Correlation in the Learning with Bronchial Asthma Material

	Terminolog- ical knowledge before class	Knowledge of idioms before class	Knowledge of sentence structures before class	Understanding questions concerning the material before class	Answers to questions concerning the material before class	Knowledge of the disease after class
Knowledge of bronchial asthma before class	.699**	.501**	.412**	.483**	.492**	.452**

** $p < .01$

Sense of Achievement/Satisfaction After Class

In the learning with material bronchial asthma, sense of achievement or satisfaction had significant correlations between knowledge of idioms after class ($r(59) = .458, p < .01$), understanding sentence structures before class ($r(59) = .404, p < .01$), understanding questions concerning the material before class ($r(59) = .418, p < .01$), understanding questions concerning the material after class ($r(59) = .494, p < .01$), answers to questions concerning the material before class ($r(59) = .457, p < .01$), answers to questions concerning the material after class ($r(59) = .539, p < .01$), knowledge of the disease after class ($r(59) = .498, p < .01$) and course grade ($r(59) = .437, p < .01$) (see Table 13).

Table 13: Sense of Achievement/Satisfaction in the Learning with Influenza Material

	Kno w- ledge of idio ms after class	Under- standin g sentenc e structu res before class	Understand -ing questions concerning the material before class	Under stand- ing questi ons conce rning the materi al after class	Answers to questions concerni ng the material before class	Answers to questions concerning the material after class	Know- ledge of the disease after class	Course grade
Sense of achieve- ment or satisfacti on after class	.458*	.404**	.418**	.494**	.457**	.539**	.498**	.437**

** $p < .01$

In the learning using material of influenza, sense of achievement or satisfaction after class showed significant correlation between understanding questions concerning the material before class ($r(59) = .481, p < .01$), understanding questions concerning the material after class ($r(59) = .445, p < .01$), answers to questions concerning the material before class ($r(59) = .450, p < .01$), answers to questions concerning the material after class ($r(59) = .458, p < .01$) and knowledge of the disease after class ($r(59) = .506, p < .01$) (see Table 14).

Table 14: Sense of Achievement/Satisfaction in the Learning with Influenza Material

	Understanding questions concerning the material before class	Understanding questions concerning the material after class	Answers to questions concerning the material before class	Answers to questions concerning the material after class	Knowledge of the disease after class
Sense of achievement or satisfaction after class	.481**	.445**	.450**	.458**	.506**

** $p < .01$

In the learning with the material of diabetes, sense of achievement or satisfaction had significant correlations between understanding questions concerning the material ($r(59) = .562, p < .01$) and answers to questions concerning the material ($r(59) = .416, p < .01$) after class (see Table 15).

Table 15: Sense of Achievement/Satisfaction in the Learning with Diabetes Material

	Understanding questions concerning the material after class	Answers to questions concerning the material after class
Sense of achievement or satisfaction after class	.562**	.416**

** $p < .01$

In the learning using the material of traumatic fracture, sense of achievement or satisfaction after class showed significant correlations between terminological knowledge after class ($r(59) = .587, p < .01$), understanding sentence structures before class ($r(59) = .409, p < .01$), understanding questions concerning the material after class ($r(59) = .506, p < .01$), answers to questions concerning the material after class ($r(59) = .505, p < .01$), knowledge of the disease after class ($r(59) = .409, p < .01$), term test ($r(59) = .469, p < .01$) and course grade ($r(59) = .442, p < .01$) (see Table 16).

Table 16: Sense of Achievement/Satisfaction in the Learning with Traumatic Fracture Material

	Terminolog- ical knowledge after class	Understand- ing sentence structures before class	Understand- ing questions concerning the material after class	Answers to questions concernin g the material after class	Knowledg e of the disease after class	Term test	Cours e grade
Sense of achievement or satisfaction after class	.587**	.409**	.506**	.505**	.409**	.469*	.442**

** $p < .01$

As for the learning with the material about lung cancer, sense of achievement or satisfaction had significant correlation with terminal knowledge ($r(59) = .438, p < .01$), knowledge of idioms ($r(59) = .459, p < .01$), understanding sentence structures ($r(59) = .405, p < .01$), understanding questions concerning the material ($r(59) = .535, p < .01$), answers to questions concerning the material ($r(59) = .614, p < .01$) and knowledge of the disease ($r(59) = .447, p < .01$) after class and term test ($r(59) = .449, p < .01$) (see Table 17). There was no outstanding correlation between sense of achievement or satisfaction in bronchial asthma after class with other factors.

Table 17: Sense of Achievement/Satisfaction in the Learning with Lung Cancer Material

	Terminol- ogical knowled- ge after class	Knowl- edge of idioms after class	Understa nd-ing sentence structure s after class	Understan d-ing questions concernin g the material after class	Answers to questions concernin g the material after class	Knowled ge of the disease after class	Ter m test
Sense of achieveme nt or satisfactio n after class	.438**	.459**	.405**	.535**	.614**	.447**	.449**

**p < .01

Findings

Self-evaluation for knowledge concerning medical terms, idioms, sentence structures, question/answer understandings, and diseases improved after class though there were no significant differences among the diseases. According to the questionnaire, the students admitted the helpfulness of exams, quizzes or questions and answers although they did not like them. Comparing their self-evaluation before and after the classes, the changes of knowledge of diseases significantly correlated with the changes of medical terminology in five diseases. Especially in influenza, hepatic diseases and lung cancer, the correlation functions were higher than 6.0. Moreover, significantly high correlations were found between changes of the disease knowledge and understanding of questions in the three diseases above. Examining the knowledge of the diseases before classes, significantly high correlations ($.505 \leq r \leq .699$) were shown between terminological knowledge before diseases in all of the six diseases. Furthermore, knowledge of influenza, hepatic disease, diabetes, traumatic fracture and bronchial asthma before classes had rather high correlations ($.412 \leq r \leq .572$) with knowledge of sentence structure, understanding questions and answers to questions before classes. Lastly, sense of achievement or satisfaction after class correlated significantly with understanding questions and answers in all diseases except for bronchial asthma. It also had correlations with knowledge of diseases after class in influenza, hepatic disease, traumatic fracture and lung cancer.

Discussion

This study found that there are high correlations between changes of terminological knowledge and changes in knowledge of diseases as well as high correlations between knowledge of diseases and terminological knowledge before class. The findings suggest that improving vocabulary that is relevant to students' major is the key to improving their vocabulary. It is important that the students can have an environment in which they can learn vocabulary through the experience of learning of their major relevant material.

Despite the significant correlations between terminological knowledge, understanding questions and answers to the questions, correlations in knowledge of idioms and sentence structures with knowledge of the diseases were limited. This might be because idioms or sentence structures are not characteristic to certain diseases. For example, unlike certain diseases, in topics of influenza, traumatic fracture and bronchial asthma which students were more familiar with in their daily lives, data showed more correlated factors than others. This suggests students are ready to learn more widely with material of more common diseases. In addition, the limited factors of correlation in the learning of lung cancer, shorter class hours caused by the review of midterm exam might have influenced: the teacher might

have given answers before students considered enough by themselves. In spite of this fact, sense of achievement or satisfaction after class showed significant correlation diversely in lung cancer as well as in influenza, hepatic disease and traumatic fracture. The students might still tend to be satisfied with given answers or passive class though we have tried to perform student-centered teaching for the effectiveness.

Students' sense of achievement or satisfaction were more various in influenza, hepatic disease, traumatic fracture and lung cancer. The difference between knowledge of diseases and sense of achievement or satisfaction is difficult to explain, however, the correlation with course grade or term exams were shown in influenza, traumatic fracture and lung cancer, which had more correlated factors. This suggests the sense of achievement or satisfaction after class may lead to English learning.

Conclusion

By investigating various factors, we have gained many concrete conditions for preferable English material for nursing students. English material of well-known diseases has a higher possibility of developing vocabulary and understanding the content. Therefore, it is necessary to make English material of more familiar diseases.

Moreover, students' sense of achievement and satisfaction, which can foster nursing students' positive attitude can lead to English learning. Consequently, such classes to give sense of achievement or satisfaction are important. Even if students hate exams or quizzes and the QA sheet, they admit their helpfulness for their English learning.

The study compared only English material about diseases and other topics concerning students' major should be explored in the near future.

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THE IMPACT OF FOOD ANIMAL WELFARE ON HUMAN WELLBEING: SCIENTIFIC AND ISLAMIC PERSPECTIVE

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Abstract: *Animal warfare includes consideration for all aspects of animal welfare and meeting their physical and mental needs. It generally concerns at keeping, handling, providing nutrition, disease prevention of animals especially in three important stages which are production, transportation, and slaughtering process for food animals. From the holistic medicine point of view, human wellbeing covers all aspects of physical, social, psychological and spiritual. About 80 percent of the human population of the world relies animals for their food in which the food animals serve as the main source for most of protein, fats, iron, and some vitamins. World Health Organization (WHO) reported that chronic diseases such as obesity, diabetes, cardiovascular and dental diseases, cancer and osteoporosis are related with human diet and nutrition. This paper aims to explore the impact of food animal welfare to human wellbeing by using literature search as a methodology. The Islamic perspectives as well as the scientific findings in the related area are presented in this paper. Islam provides fundamental ethical guidelines in dealing with animals and highlights the importance of halal and toyyiban to achieve meat quality for human wellbeing. The scientific findings supported that mishandling of animals while keeping or slaughtering lead them to face physical and psychological stress which in turn affect the quality of the meat and chances of getting foodborne diseases. Both scientific and Islamic perspectives pointed out the requirement of animal welfare for human well-being. Thus, the welfare of food producing animals such as ruminants and poultry should not be neglected since they have positive and negative consequences on human wellbeing. It should be implemented and integrated the existing and established guidelines of the meat industry and the Islamic perspectives so that to achieve the optimal value of human wellbeing.*

Keywords: *Animal Welfare, Human Wellbeing, Islamic Ethics, Meat Industry, Scientific Findings*

Introduction

Along the human history, animals and their products have been used as food and other numerous purposes. Animals used for foods are known as food animals and they are raised for its meat, milk, egg and honey. They include cattle, sheep, goat, swine, chicken, fish and bee. Among them, livestock such as ruminants and poultry basically convert feed roughages and grains into food for human consumption. About 80 percent of the human population of the world gets most of its protein, fats, iron, niacin, and some vitamins (including vitamin B12) from the meat produced by ruminant animals (James and Frank, 2009:12). In recent times, people not only consume animals as their food, but they also demand better quality food such as leaner meat and less fat in meat and dairy products. These changes in lifestyle and eating habits of people have a significant impact on the production, processing, and marketing of meat, poultry, and dairy products throughout the rest of the twentieth century and beyond. Moreover, World Health Organization, (WHO, 2003) also reported that diet and nutrition are related with chronic diseases such as excess weight gain or obesity, diabetes, cardiovascular diseases, cancer, dental diseases and osteoporosis.

In recent times, animal welfare is also considered as one of the contributing factors to human well-being. According to World Organisation for Animal Health (OIE) (2018), animal welfare means the physical and mental state of an animal in relation to the conditions in which it lives and dies and so that good animal welfare requires disease prevention and appropriate veterinary care, shelter, management and nutrition, a stimulating and safe environment, humane handling and humane slaughter or killing. In other word, it also includes the concept of anticruelty and trying to meet the physical and mental needs of animals. Furthermore, five freedoms for farm animal welfare prescribed by Farm Animal Welfare Council (FAWC) (Manteca, 2012) (Cooper; Duncan & Hawkins, 2010) and three concerns for animal welfare can be seen the following figure 1 for comprehensive understanding of food animal welfare.

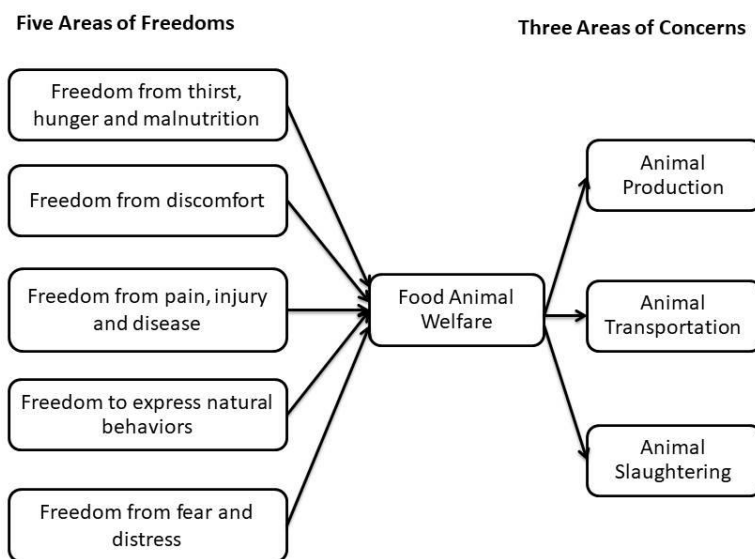


Figure 1: Five Freedoms and Three Concerns for Food Animal Welfare

On the other hand, the meaning of human wellbeing is generally mentioned as living a good or satisfactory life. From the holistic medicine point of view, human wellbeing covers all aspects of physical, social, psychological and spiritual, and not merely the absence of disease or infirmity as stated by World Health Organization. In public health area, human wellbeing encompasses under the primary prevention or health promotion in which not only health care professionals but also the individual person should strive for achieving or maintaining the maximum level of health. Another definition of wellbeing was mentioned as the balance between an individual's resource pool and the challenges they faced (Dodge, Daly, Huyton, & Sanders, 2012), and White, (2008) also supported the similar meaning with three dimensions of wellbeing as shown in the figure 2.

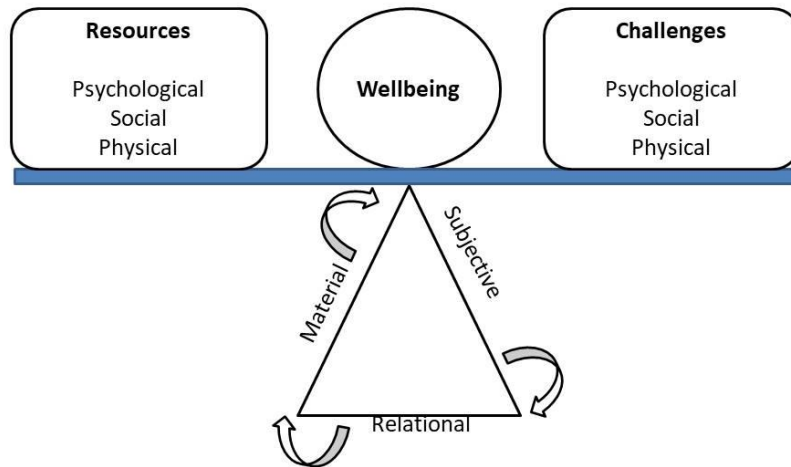


Figure 2: Definition of Wellbeing [retrieved from (Dodge *et al.*, 2012) and three dimensions of wellbeing - the material concerns practical welfare and standard of living while the relational concerns personal and social relations, and the subjective concerns values, perception and experiences [retrieved from (White, 2008)].

Thus, this paper explores on the link between taking care of animal welfare and how it has contributed to human well-being from scientific and Islamic perspectives.

Background of The Study

Researches have been conducted focusing more on either animal welfare/rights or the human wellbeing only. Some studies have done on the relationship between animal welfare with the stunning method (Al-kahtani, 2013), meat quality (Rani, Hugo, Hugo, Vimiso, & Muchenje, 2017), (Hafiz, Hassan, Nazmi, & Manap, 2015), (Ndou, Muchenje, & Chimonyo, 2011), and religion (Rahman, 2017). The authors ourselves (Min & Zaw, 2016) have been studied and highlighted on the animal care from the perspective of Islam with special reference to unwanted pets. However, little or no study have explored on the link between food animal welfare and human well-being especially from the Islamic perspective.

Thus, this study aimed to explore the impact of food animal welfare to human well-being. The Islamic perspectives as well as the scientific findings in the related area are presented and discussed in this paper. The literature search was used as a methodology for this study and the data were collected from the primary and secondary sources such as books, articles, journals, dictionaries and online websites. All available sources regarding animal welfare and human wellbeing are identified and discussed. The Islamic perspectives regarding animal welfare are also presented based on the Qur'an, the practices of Prophet Muhammad (peace be upon him) and the writing of the scholars from Islamic perspectives. It is hoped that this study served as a knowledge and awareness source on the importance of animal welfare and the wellbeing of human.

Animal Welfare From The Scientific Perspectives

Animal welfare includes the concepts of respect for their life, living in harmony with nature, and enjoying the co-operation of animals for human survival (Dwyer & Lawrence, 2008). It describes the animal in the condition of good health, comfort, nutrition, safety, and reduce unnecessary stresses and pain. In recent times, several issues and incidences of animal abuse have been raised concerning their welfare. Instances of animal abuse cases include cruel treatment, feeding non-natural foods, inhumane practices on factory farms and commercial areas. Thus, animal welfare is considered in three important areas such as production, transportation, and slaughtering of them as described in figure 1.

Hygiene and Sanitation in Animal Production

It is observed that well cared for domestic animals are healthier and less apt to spread disease in a community. The food animals going around the pasture in the open space freely and getting their fresh natural food and drinks are healthier compared to animals keeping in overcrowded area like a factory or indoors. Moreover, hygiene, sanitation, good ventilation are the necessary requirements for the animal health. Contaminated animals could serve as the source of foodborne diseases (FBD) and foodborne zoonoses (FBZ) for the people who handled the food animals (Cook *et al.*, 2017), (Pal, Tesfaye, & Dave, 2013) and who consumed their meat, milk, eggs and by-products. FBD and FBZ Pathogens that presented in animal carcasses or shed in animal wastes, might transmit to meat handlers through equipment, tools and/or slaughter processing area and finally to the consumers.

Usage of Antibiotic in Animal Production and its Effects on Human Health

Aidara-Kane *et al.*, (2018) described World Health Organization (WHO)'s guidelines on antibiotic use and it is stated that antimicrobials are widely used in food-producing animals for mainly three purposes which are therapeutic use to treat ill animals, prophylactic use to prevent disease for healthy animals at risk of infection, and growth promotion use to improve rate of gain or feed efficiency respectively. About 40 percent of antibiotics are used as growth promoters although antibiotics are also used therapeutically for animals (Hughes & Heritage, 2004).

In animal husbandry, people are still using the large quantity of antibiotics in food animals for nontherapeutic reasons. Thus, antibiotics should be allowed for therapeutic use only and misuse of it should be controlled by developing proper guidelines in animal production. According to Marshall & Levy, (2011), it is noted that antimicrobial use in animals lead to develop antimicrobial-resistant bacteria in animals and also could spread to humans through water and food sources. Thus, the use of antibiotics especially for the purpose of growth promoting must be strictly observed and restricted.

Feeding and Keeping Systems in Animal Production

One of the debatable controversial issues is feeding animals with the use of genetically modified foods, and it has been proven to affect the health of human beings. Animals are being fed with non-natural products produced for the commercial purpose that was to accelerate animal growth and increase profitability (Masri, 2007: 24). These kinds of products should not be allowed into the food chain without insisting on rigorous testing for its effects on human health. Thus, the companies and responsible government authorities should pay greater attention to the possible risks to public health. The details of the nutrients and ingredients involved in feeding animals are to be identified since a safe animal feed supply is important for ensuring health of animals and humans.

Moreover, the animals were increasingly taken off the land and reared intensively, and tightly packed together in windowless houses of the factory farms. Another concern in the poultry factory farming is the beak trimming in which the removal of 1/3 to 1/2 of the beak, is a routine husbandry procedure practiced to prevent feather pecking and cannibalism (Heng-wei Cheng, 2010). This removing highly sensory organ of the chicken which is used for foraging, feeding, drinking, preening, nest building and arranging eggs and using as a weapon during defencing time is one of the animal welfare issues. It is noted that free range animals with direct exposure to sunlight and fresh air reduce muscle weakness than caged birds and produce healthier and taste better eggs than eggs from other systems (Duncan and Hawkins, 2010). Thus, animal welfare should be considered to maximise the benefits of human wellbeing.

Animal Welfare Issues during Transportation

Animals suffer from bruises, injuries, starvation, tiredness, and water and food deprivation in loading and unloading of them during transport. Animal handlings during transportation (heat, cold, overcrowding) and marketing (noise, unfamiliar environment) are reminded to be careful since these lead to animal stresses. In addition, Abdela & Mohammed, (2016) explained that animals can be stressed

by either psychological stress such as restraint, handling or physical stress such as hunger, thirst, fatigue, injury or climate extremes. They also stated that animal stresses could affect their immune function and susceptibility to disease, an increase in the prevalence of mastitis in dairy cows, decreased food intake and rumination, inhibition of oxytocin release, reduced fertility and effect on meat and by-product quality (Abdela & Mohammed, 2016). Thus, animals should be handled carefully, and their stress should be reduced to a minimum at the time of transportation.

Animal welfare at the time of slaughtering

Animals are being killed by applying different methods; the manual killing with sharp materials such as knives, arrows, axes, or the use of automatic machines and advanced tools such as pistol, captive bolt, electric or gases. These methods are based on specific purpose of slaughtering livestock and poultry (SLP). Human mostly conducted SLP for the purpose of getting benefits from them, not only meat as the main product but also other animal by-products such as skin, bones, fat/oil, and feather/hair/wool. Animal skull, meat trimmings and fatty tissues are also taken for a wide variety of products including pet food or processed materials in soap, fertilizer or fuel. The merciful or humane killing of animals is required for animal welfare and thus the suitable methods are unfailingly required to be applied along the process of SLP.

It is quite interesting to know that animals exposed to stress is varied depends on the type of animals in which non-ruminants (poultry and pigs) are more susceptible to stress compared to ruminants (sheep, cattle, and goat) (Adzitey, 2011). It is also noted that animals should be slaughtered with very little or no stress so that only trained person should be assigned to conduct slaughtering animals by proper handling.

Animal Stress and Meat Quality

Animals can be stressed due to poor nutrition and/or starvation, presence of infection/disease, and mishandling of them. They should be fed and watered regularly to prevent starvation and dehydration and keep them in clean and conducive environment to prevent infections. Animals feeding at farming play a major role in meat quality in which animals with adequate nutrition (grazing, grasses, and vitamins) have better meat quality compared to animals fed on chemical and drug products. There is some evidence linking stress with pathogen carriage and shedding in farm animals, the mechanisms underlying this effect have not been fully elucidated. Understanding when pathogen loads on the farm are highest or when animals are most susceptible to infection will help identifying times when intervention strategies for pathogen control may be most effective and consequently increase the safety of food of animal origin (Abdela & Mohammed, 2016).

Animal could also suffer stresses during the farming, transportation, marketing and even at the time of slaughtering. Gebregeziabhear, Ameha, Zeit, & Dawa, (2015) suggested that minimizing farm animal stresses can make optimizing in product yield and quality. Hence, it is noted that animal stress is related with the quality of meat and their products, and thus, it is associated with health and wellbeing of the humans who consumed it.

Practical Approaches in Animal Welfare

No matter how much discussion was made on the link between animal welfare, meat quality and human health, it will not be beneficial if it is not applicable in actual setting. The new keeping system should combine the best of traditional husbandry with technological advances that allow us to satisfy an animal's basic interest. Moreover, some instances of animal abuse are related with commercial purpose. It is important to make changes to improve animal welfare and the benefits and impact of those in commercial area. Thus, the organizations which focus on animal welfare as a balance between practical and commercial sense should be developed.

One of the examples stated by Dawkins, (2008) is that maintaining hygienic environment in chicken production reduce the incidence of *Salmonella* which in turn beneficial not only for human health but also for commercial purpose. For this respect, it is noted that Food Animal Initiative (FAI) based at Wytham, near Oxford was set up to address the issue of making changes in farming to improve the animal welfare worldwide. FAI put effort in conducting research for developing farming system to deliver good animal welfare. The organizations with similar purpose should be set up around the world and their research work should be more encouraged. The awareness on the impact of animal welfare to human beings should also be raised among the public.

Animal Welfare From The Perspective Of Islam

There are plenty of Islamic teachings regards to the rights of animals and their welfare. Animals are the creatures on earth like human being and they have their rights and thus, encourage to treat them with kindness and compassion. Moreover, the rewards and punishments regarding animal treatments are clearly mentioned in Islam, and thus Animal warfare should never be neglected. These could also be studied from the examples of Prophet Muhammad (PBUH) who treated the environment and animals with respect and kindness. He taught his followers that animals are part of Allah's creations (Qur'an 6:38), so they should be treated with dignity and due care.

Prophet Muhammad (PBUH) forbade the practice of cutting tails and manes of horses and of keeping horses saddled unnecessarily. It is forbidden to stay long on the back of an animal (Horse, Donkey, and Camel) when it is not in motion. The Prophet made a remark on this cruelty as "Do not turn your animals into chair" and he mentioned that beast of burden like camels, ox, donkeys, horses, elephants are not allowed to carry load that is too heavy and should be well fed and watered. Whenever the Prophet saw any animal over-loaded or ill-fed, he would approach the owner and said, "Fear Allah (SWT) in your ill treatment of animals" (Muslim and Bukhari).

The Prophet (PBUH) said, "Whoever kills a sparrow or anything bigger than that without a just cause, Allah (SWT) will hold him accountable on the Day of Judgment" (Muslim and Bukhari). The Prophet (PBUH) explained that a killing would be for a just cause if it was for food (Khan, M. Muhsin 1995). Being disobedient to Allah's (SWT) instructions of having to be kind to animals can be seen in the example of the destructions of the ancient nation (the tribe of Thamud) and a she-camel as a symbol in the story of Prophet Saleh (PBUH) (Qur'an 7:73; 11:64; 26:155-6; 54:27-31). And it is stated that "He, who is not merciful to others, will not be treated mercifully" (narrated by Jarir bin 'Abdullah (pbuh) from Sahih Al-Bukhari, Hadith No. 42 of Vol. 8, Book 73 - Good Manners and Form (Al-Adab), (Khan, 2009). For these reasons mentioned, one should never underestimate the treatment of animals, while being receiving benefits from them as a source of food and a mercy from Allah (SWT). Thus, this study considers the animal warfare issues in handling and killing process as the necessary requirements of *Islam*. These issues include food and water deprivation time, ventilation, humidity, their transportation mode and duration, and the sharpness of knives to reduce their undue sufferings and pain.

Moreover, there has been an instance that someone who is travelling with Prophet took some eggs from a nest, causing the mother bird great grief. He forbids the actions of man and told him to return the eggs (Abu Dawud). The Prophet also mentioned about the rewards and charity regards to treating animals. "there is a reward for acts of charity to every beast alive" (Al-Bukhari). Regarding punishment to treating animals with cruelty, it is stated that "A woman was tortured and was put in Hell because of a cat which she had kept locked till it died of hunger" but "a prostitute was forgiven her sins as the reward because of her activity of easing thirsty dog" (Sahih al-Bukhari, 54/538; Khan, 2009). Not only physical but also emotional care of animals was much emphasized by the Holy Prophet (PBUH), that he once reprimanded his wife, Hazrat A'ishah (R.A.), for treating a camel a bit offhandedly. She herself narrates: "I was riding a restive camel and turned it rather roughly. The Prophet (PBUH), said to me: 'It behoves you to treat the animals gently' (Narrated by A'ishah (R.A.). Muslim, Vol. 4, Hadith No. 2593; Masri, 2007).

Even though, animals as necessity for food are allowed, there are certain guidelines to be followed at the time of slaughtering them. Humans are not allowed to torture animals “If you must slaughter, slaughter without torture” (Prophet Muhammad (PBUH), Al-Bukhari). And it also highlighted the need for pronouncing the name of Allah before the slaughter process ‘*So eat of (meat) on which Allah’s name has been pronounced if you have faith in His signs*’ (Qur’an 6:118).

Other than the facts mentioned above, the concept of *halalan toyyiban* is prescribed deeply for animal welfare as well as the wellbeing of consumers which can be known as the principle of diet in Islam. The food which is *halal* (lawful/permissible) is mentioned in the *Qur’an*, “*They ask you what is lawful for them (as food); Say: Lawful to you are At-Tayyibat [all kinds of halal (lawful-good) food which Allah (SWT) has made lawful (meat of slaughtered eatable animals, milk products, fats, vegetables and fruits)] ...*” (Qur’an 5:4). Even though, animals are used for food, some animals or animals with certain conditions are forbidden to consume as stated in the Qur’an 2:172-173; “*flesh of dead animals, blood, the flesh of swine, and anything which has been sacrificed to any other than Allah*”. This means that the meat of the beast or fowl which dies of natural causes, without being slaughtered or hunted by men, as well as blood and swine flesh are forbidden.

In addition, five different categories of dead animals not to consume are also revealed in the Qur’an (5:3-4) and they are the strangled, the beaten, the fallen, the gored, and the animal which has been (partly) eaten by wild beasts. Moreover, Muslims are guided not to consume carnivorous animals like lions, tigers, dogs, cats, eagles, and the like while the herbivorous animals such as cattle (Qur’an 16:10; 32:27) are exclusively allowed to eat.

Concerning the forbidden animals, and their conditions, some studies identified the possible risks involved in consuming pigs and the animal blood. There are more than 20 different parasitic worm species that are known to affect wild boars and domestic pigs can also infect to humans (Brondz, 2018). Regarding the use of blood in human, (Mandal, Rao, Kowale, & Pal, 1999) stated that “Blood, the first by-product obtained after the slaughter of an animal, has long been used in European and Asian countries as an ingredient in traditional foods such as blood sausages, puddings, blood soups, breads and crackers” (J. A. Ofori & Hsieh, 2011). However, Islamic ways of slaughtering include letting flow of the blood after cutting the animal throat (Nurdeng, 2009). The Qur’an completely prohibits eating of dead meat where free blood has coagulated (Qur’an; 6:121, 145; 5:3,5).

In regard to animal blood, J. Ofori & Hsieh, (2015) highlighted that blood as a risk of pathogenic or harmful metabolic materials, the infectivity of prion diseases, and the presence of identified allergens such as bovine serum albumin (BSA) and as a cause of many consumers avoiding from any product containing either animal blood and/or ingredients derived from it. Hence, it is noted that consuming animal blood could jeopardize and affect to human health because blood is the mediums for microorganisms and a carrier of diseases. From the reasons mentioned above, the forbidden animals or the stated conditions in Islam are aimed for the benefits of mankind by preventing them from any form of impurity or food borne diseases.

In addition to these, some research has proven that the way of *halal* slaughtering could be accepted as the most humane method of slaughter (Pozzi, Geraisy, Barakeh, & Azaran, 2015). The captive bolt and/or electric stunning method is still controversial for either reducing or increasing pain of animals from Islamic perspectives. This opinion is supported by the research conducted by Professor Schultz and Dr. Hazim of Hanover University, Germany. They proved it through an experiment using an EEG and ECG that the Halal method is a more humane method of slaughter than the captive bolt stunning method.

There are various other methods such as killing by strangulation and beating the animal to death with a blunt stick. All these techniques are more painful and allow the animal to die before complete bleeding, with the result that the flesh of the animal poses the characteristic of a dead meat (Schulze, 1978: 62-66). “It is found that Islamic practice on slaughtering food animals is not only *halal* (lawful) but also *toyyiban* (wholesome), on which maintaining conventional practice of safety and hygiene.

From all the findings and discussions above, the following figure summarizes the link between the important role of *halalan toyyiban* and the impact of animal welfare on human well-being. The concept of *halalan toyyiban*, covers directly on animal welfare, hygiene and safety and human wellbeing and indirectly on foodborne disease prevention through three stages - animal production, transportation, and slaughtering.

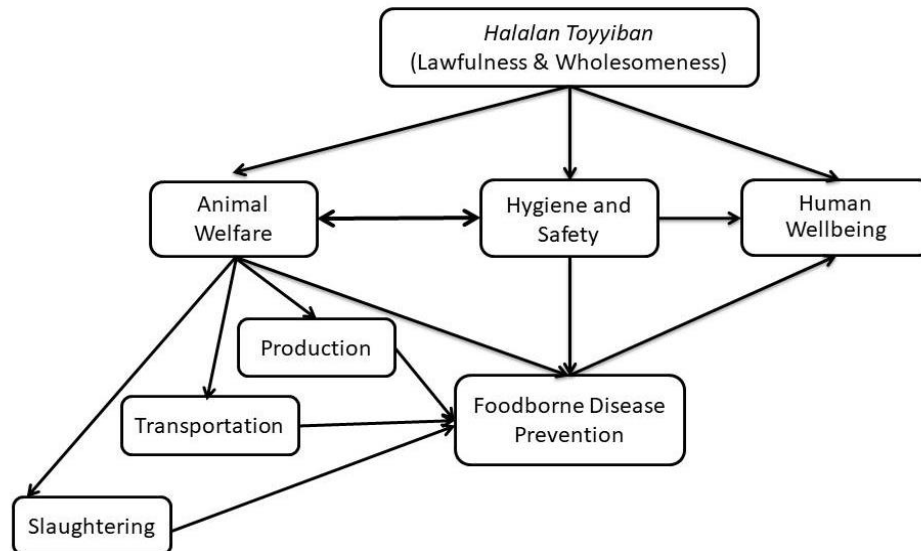


Figure 3: The Role Of *Halalan Toyyiban* And The Impact Of Animal Welfare To Human Wellbeing.

Conclusion

To summarize, human beings and animals complement each other when it comes to survival. We care for animals and in return, they provide us with food and warmth, as mentioned in the Qur'an, An-Nahl, verse 5, "And cattle He has created for you (men): from them ye derive warmth, and numerous benefits, and of their (meat) ye eat". In addition, it is noted that animal welfare is linked to animal health, free from food borne diseases, and meat quality which in turn related with human wellbeing. Thus, animal welfare should be observed in their production, transportation, and slaughtering stages. Animal stress should be reduced by taking care of their hygiene and sanitation, by providing enough space and shelter, proper and adequate nutrition. They should be well handled at all three stages based on the required guidelines of the authorized organizations and the religious organizations in the country. By following these guidelines, the food obtained from animals will meet *halalan toyyiban* (lawful and wholesomeness) with hygiene and safety status which will be contributed to human well-being by achieving the whole value of physical, mental and spiritual benefits.

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THE ACCOUNTING SIMS'S GAME AS A LEARNING MEDIA OF ACCOUNTING CYCLE FOR SENIOR HIGH AND VOCATIONAL SCHOOL STUDENTS

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Abstract: Pathways Commission on Accounting Higher Education (PCOAHE) stated that the accounting education face more and more difficult challenges. The implementation of accounting is forced to balance the reality that seems more advanced. The scope is more global and it caused problem that more complex than before. In addition, in an article that was published by Kompasiana attach three main focus of 2013's curriculum. One of them is about the reinforcing of character education. Another challenge is related to contemporary education which emphasize how important to shift the focus on teaching into learning based on the achievement of student learning (Huba and Freed, 2000). In this relation with the accounting learning, based on the authors' early survey, there is a difficulties that the students face in learning accounting after they enter Senior High or Vocational School in the middle of educational challenges. See all these challenges – advances in technology, character education, and active learning, there for the authors initiated a strategic idea about the accounting learning media especially for accounting cycle material which named "The Accounting Sims". The authors are using descriptive research technique with qualitative discussion to find the solution. This paper carries a simple survey to strengthen the data, literature review is conducted to produce a conclusion. "The Accounting Sims" is a game as a platform to train the students' skill especially on accounting cycle. This game is programed based on technology in order to adapt the condition of the now day's students that crazy about technology. The result showed that in process playing "The Accounting Sims" games can train the student's positive character as an accountant in facing the transaction case – case in the program. With the existence "The Accounting Sims", it is expected to fulfill the challenges that happen in accounting learning, as has been previously explained.

Keywords: Accounting Education, Accounting Games, Technology

Introduction

The Pathways Commission on Accounting Higher Education (PCOAHE), as stated in a journal written by Abbasi (2013), states that accounting education faces increasingly difficult challenges in this changing era. The implementation of accounting implementation is increasingly demanded to balance increasingly advanced conditions. The scope is increasingly global, technology is increasingly advanced and plays an important role, the problems faced are increasingly complex. The younger generation now prefers to tend to beat home with all the technology and become a little not "working" with traditional learning methods.

On the other hand, education today, especially in Indonesia, provides a focus and a portion that is more related to the character that must be built in students. As stated in a Kompasiana article written by Apandi, there are three main focuses in the 2013 curriculum which currently continue to be applied and developed in Indonesian education. The first is about Penguatan Pendidikan Karakter (Strengthening Character Education) which includes three things, strengthening honesty and integrity,

strengthening attitudes related to performance, and strengthening nationalism and pride races. The second focus is Penguatan Budaya Literasi (Strengthening the Literacy Culture) to increase Indonesia's low reading interest, and the third focus is Pembelajaran Abad 21 (21st Century Learning).

Another thing presented by Abbasi (2013) about contemporary education is the importance of shifting the focus from teaching to learning to the ultimate goal of achieving student learning (Huba and Freed, 2000). In relation to accounting learning itself, there is a problem faced by students who face accounting lessons. As is well known, accounting is not a main lesson that students always get from being in elementary school. This is in line with what was said by Wulandari (2014) in his journal entitled "Analisis Kesulitan Belajar Akuntansi Pada Materi Jurnal Penyesuaian". In addition, not all junior high schools make accounting as one of the lessons that students will get. Based on the initial survey tried by the author, around 81,7% of the total 82 respondents of accounting students at SMKN 50 Jakarta received accounting lessons. This means there are at least 18,3% of students who do not get accounting lessons in junior high school. Therefore, this can be one of the reasons there are difficulties faced by students in learning it when they are in high school in the midst of demands for active learning.

Seeing the three "demands" that need to be faced by accounting education, they are 1) technological progress, 2) character education, and 3) active learning, a learning method is needed that facilitates these three things. Therefore the author agrees on an accounting learning media especially in the accounting cycle material which is expected to be able to adjust to the world of students with all technological advances, but can facilitate or support character education that will be built in students, as well as train students to actively learn. This learning media is also expected to be a place for students to continue to do individual exercises regarding the accounting lessons they face, so the students will be able to balance the abilities of other students when in class. The learning media is called "The Accounting Sims".

Formulation of The Problem

By looking at the background that has been stated, the problem that the writer formulated in this scientific paper is:

1. What are the challenges faced in the learning process of accounting?
2. How "The Accounting Sims" game able to answer the challenges in the learning process of accounting as a learning media solutions of accounting learning process on Senior High School Students?

Purpose Of Writing

Based on the formulation of the problem, the purpose of making this paper are:

1. Help to solve the problem of accounting learning issues
2. Give learning media an innovation as "The Accounting Sims" game

Literature Study Methods

The author uses descriptive research methods because this study has the purpose of obtaining answers related to opinions, responses or perceptions of a person. The discussion is qualitative or uses a description of words. "Descriptive research tries to find the right and sufficient description of all activities, objects, processes, and people" (Sulistyo-Basuki, 2010: 110). Descriptive research recognizes various forms that can be categorized such as surveys, case studies, studies, causal-comparative, correlation studies, and so on. Every form of descriptive research has different functions and objectives. As for the paper that the author is trying to present, it carries a simple survey to strengthen the data, then a literature study is carried out to produce a conclusion.

Literature Review

Definition Of Accounting Education

Ministry of Education (2003: 6) in Diah (2012) accounting is a study material about a system aimed at producing information regarding financial transactions. This information is expected to be used as a consideration in making decisions and responsibilities in the financial sector either by private economic actors (corporate accounting), government (government accounting), or other community organizations (public accounting).

Reinforced with the opinion from the Ministry of National Education (2003: 6) states that accounting subjects functions are to develop knowledge, skills, rational attitudes, thoroughness, honesty and responsibility through procedures for recording, grouping, summarizing financial transactions, preparing financial statements and interpreting companies based on Financial Accounting Standards (FAS). The scope of accounting learning starts from the conceptual foundations, structure, and accounting cycle. The material of the Accounting subject in Senior High School are: 1) Accounting and information system, 2) the legal basis for the implementation of accounting, 3) the basic structure of accounting, 4) accounting cycle on services company, 5) accounting cycle on trading company, 6) cooperative accounting cycles, 7) financial statement analysis, 8) and quantitative methods .

Abbasi (2013) in his journal entitled "Competency approach to accounting education: A global view" suggests that critics argue that accounting education is currently unable to respond to environmental changes and requires a paradigm shift (Behn, et. al. 2012 a and 2012 b, Black , 2012).

In addition, there are a number of observations and criticisms about other contemporary accounting education, such as:

1. Reform of accounting education has experienced a shortage of the latest integrative schemes in implementing recommendations.
2. Albrecht and Sack (2000) state that accounting education is thought to have a threatened future. In line with the opinion of Demski et al (2007) which argues that the validity of accounting statements as a scientific discipline has been doubted. Even Fogarty and Markarian (2007: 137) clearly concluded that accounting education is now experiencing its decline.

Nitkin (2011) in his journal entitled "Game of Business": a Game for Use in Introductory Accounting quotes Gregoryk and Eighmy (2009) and several other researchers who noted that the change in style of learning has made the traditional classroom format, based on a lecture and study of the problem, inadequate in meeting the learning needs of students today. Whether because of years of watching television or playing computer games, these researchers found that there was an increasing need among contemporary students for instant gratification and entertainment. In addition, such students are increasingly visual and become kinetic learners. In response to the students' desire to do direct activities, faculties in various disciplines have added simulations and other activity activities to the class strategy mix (Lippincott and Pergola 2009, Gast and Leathan 2005, Sarason and Banbery 2004).

Another problem faced in the accounting learning process is the difficulty for students in learning accounting lessons. The author conducted a simple survey of one of the schools in Jakarta, namely State Vocational High School 50 Jakarta. The survey results obtained from total of 82 respondents out of 108 total student population accounting majors grade 10. The survey produced some statement as follows:

1. As many as 81.7% of students get accounting lessons in junior high school
2. As many as 78% of students experience difficulties in studying accounting
3. A total of 81 respondents or around 98.8% said that they felt the need to practice the ability to work on the accounting cycle
4. All respondents stated that additional accounting learning media needed to be in the form of games / games similar to accounting monopoly games

5. A total of 81 respondents felt very helpful when using learning media in the form of similar games
6. 51.2% or 42 respondents stated that technology-based game media such as online games made their learning process easier

In addition, related to the accounting material itself, it is known that the material that is considered to be the most difficult for students is the cash flow statement, then adjustment journals, lane balance sheets, closing journals, and journal entries. While the reasons that make the students not happy to study accounting are teacher teaching methods (24,4%) and learning media used by teachers (7,3%). (Attachment 1)

Indonesian Education Curriculum

Indonesian Education is currently implementing 2013 Curriculum in its learning. This curriculum emphasizes character education as its main education. This can be seen from its core competencies which contain religious and social attitudes in each subject, according to what was conveyed by Apandi in an article published by Kompasiana. This religious and social attitude is expected not only to become students' knowledge but as something that is embedded and manifested in the personality of students.

This was further confirmed in the National Education Goals (Article 3 of Law No. 20 of the National Education System of 2003) which states that the purpose of education in Indonesia is developing students' potentials to become a human who believe and pious to the Almighty God, noble, healthy, knowledgeable, skilled, creative, independent, and become citizens democratic and responsible.

The Ministry of Education and Culture, through the Human Resources Development Agency for Education and Culture and Education Quality Assurance, explained in the 2013 Rational Curriculum on external challenges faced in Indonesian education, including: 1) globalization such as WTO, ASEAN Community, APEC, CAFTA , 2) environment life problems, 3) advance in information technology, 4) convergence of science and technology, 5) science-based economy, 6) Creative industry and cultural movements, 7) Shift in world economic power, 8) Movement and impact of techno-science, 9) quality, investment and transformation in the education sector, 10) and TIMSS and PISA material.

In the materials, it was also explained how the improvements expected in the 2013 curriculum were included. One of them was the shift from teacher-centered learning to student-centered learning or in other words active learning. It is important to shift the focus from teaching to learning to the ultimate goal of achieving student learning. This was stated in "The Learning Paradigm" in the book Huba and Freed (2010) cited by Abbasi (2013). In other words, Active Learning is one of the encouraged learning models. Many tools and methods are used to achieve active learning (AL). The AL provides more responsibility for learning for students compared to the passive method (Weimer, 2002). According to Killian et al. (2012: 337) in Weimer (2002) states student involvement in the AL causes deliberate learning in-depth learning, and self-discovery learning with benefits along with student motivation and ultimately results in increased learning.

Learning Media Definition

Gagne (1970) says that media is a component of the environment that can stimulate learning. Media that carries information with the purpose of instructional or containing teaching intentions is referred to as teaching media. Yusufhadi Miarso in Mahnun (2012) limits the understanding of media as everything that can be used to deliver messages that can stimulate the mind, feelings, concerns, and the willingness of students to learn. Gerlach and Ely in Mahnun (2012) describes the media more broadly, which includes people, materials, equipment, or activities that create conditions that allow students to gain knowledge, skills, and attitudes.

Media Selection

According to Professor Ely (1982) in Mahnun (2012) it is said that media selection should not be separated from the context that media is a component of the overall instructional system. Therefore, even though the purpose and contents are known, other factors such as student characteristics, teaching-learning strategies, study group organizations, time and source allocation, and assessment procedures also need to be considered. Arsyad (2013: 74) himself explained that the media selection criteria originated from the concept.

Yusufhadi Miarso in Mahnun (2012) which says that the first thing teachers do in the use of the media effectively is to look for, find and select media that meet the learning needs of children, attract children, according to the development of maturity and experience as well as the special characteristics of existing in the study group. These characteristics are the maturity of the child and the background of his experience and mental conditions related to the age of development.

Functions And Benefits Of Learning Media

According to Yayan (2012), the functions and benefits of media are presented as follows: Levie & Lentsz (1982) in Hujair AH. Sanaky (2009: 6), presents four functions of learning media, especially visual media, they are Attention Functions, Affective Functions, Cognitive Functions, and Compensatory Functions. The attention function of visual media is the core, which is attracting and directing the attention of students to concentrate on the content of the lesson relating to the visual meaning displayed or accompanying the text of the subject matter. The affective function of visual media can be seen from the level of enjoyment of students when learning or reading pictorial text. The compensatory function of learning media can be seen from the results of research that visual media that provide a context for understanding text helps students who are weak in reading to organize information in the text and remember it again.

Solutions Ever Offered

Learning media that previously existed in order to overcome the problem of accounting learning that has been described above is "Game of Business". In a journal entitled "Game of Business": a Game for Use in Introductory Accounting explained that this media is a game intended as a media to introduction to accounting. This game takes the form of a monopoly game that is played in groups, and is used when the learning process takes place in the classroom.

This game adopted a game carried by Hasbro named "Game of Life TM and carried the form as a monopoly game. Like most monopoly games, this game uses a stack of cards as its main tool. There are three objectives in this game: 1) to review the accounting cycle, 2) introduce the students to the industry-based Information Industry Annual Database, air base industry information, 3) and support competitive cooperative learning or cooperative learning.

There are several advantages and notes regarding this game, including:

1. This game can adjust the style and method of teaching the teacher
2. When setting up the game, students can be asked to choose a particular industry and then look for the Annual Report Study (electronic report) that is appropriate for determining the distribution of funds rather than directly providing business card data and e-Statement data collection
3. There is an option for a collection of transaction cards that can be used, and adapted to the material needed, even the teacher can direct students to create a collection of their own transaction cards.
4. In making adjustments, students can be given different directions such as making assumptions or making observations related to interest rates, taxes, economic age or residual value
5. This game can indirectly "force" all students to learn, including students who rarely do homework

Discussion

Accounting Learning

Accounting learning activities is a process for make students to learn about a bunch of accounting material. Later, participants are expected to develop their knowledge about accounting, have skills, rational, thorough, honest and responsible through a series of accounting procedures that include recording, grouping, summarizing financial transactions, preparing financial statements, and interpreting the company , which are mostly summarized in cycle material accounting for both service and trade companies. This accounting cycle material is one of the spheres of the scope of accounting learning proposed by the Ministry of National Education.

Challenges Of Accounting Learning

At present accounting learning faces several challenges, including summarized as follows:

Accounting education has not been able to respond to increasingly advanced environmental changes. In this era, accounting learning should try to adapt to existing needs and trends. Creative thinking is needed related to accounting learning including accounting methods. But what happened was that accounting education experienced a setback. There are still many traditional learning formats used in accounting learning that make it fail to meet modern student learning needs that demand instant satisfaction and entertainment. Therefore we need a learning method that can adjust the characteristics of the generation that is surrounded by advanced technology.

Reflecting on the survey results that the researchers did, it can be said that today's accounting students, especially those in the early levels of secondary education, have difficulty learning accounting. This is due to several reasons including the teacher's learning method and the learning media used by the teacher. Even so, half of the respondents stated that they had no reason to not like to study accounting. On the other hand all responses show that they need to practice their skills in accountancy. So it can be concluded that students only need more practice, and the media and appropriate learning methods to make it easier for them to study accounting.

Another challenge is the demand from the Indonesian curriculum itself which emphasizes the character of students. The religious and social attitudes that are included in each subject are expected to build the personality of students, not just become knowledge. Especially for accounting lessons, it is hoped that students can become individuals who have a rational, thorough, honest and responsible attitude.

Based on the description of external challenges which faced by current education as stated by the Ministry of Education and Culture, it can be said that the challenges faced are around problems related to technological progress and all the ability to adapt to them. Not only that, learning is also needed to shift the center from the teacher-centered learning to student-centered learning. In other words, active learning is an imperative that is embedded in the learning process.

Solution Offered

With the challenges mentioned above, one solution that can be offered is to hold learning media that are expected to solve these problems. The learning media itself is present as an extension of the teacher who is expected to help facilitate the achievement of learning goals. The media that is used ideally is an effective media. Effective media are media that meet children's learning needs, in this case the need for technology, the planting of characters, and the habit of active learning. The learning media that the author tries to put forward as this solution is called "The Accounting Sims".

Later, it is expected that "The Accounting Sims" can carry out media functions as stated by Levie & Lentsz (1982), namely visual media that perform attention functions, attract and direct students' attention to concentrate on the material. Besides that, it also operates affective functions that make

students enjoy the learning process and carry out compensatory functions that help students better understand the material.

The Concept of “The Accounting Sims”

"The Accounting Sims" is inspired by the online game "The Sims" which is a life simulation game. Through this game, the player seems to control the life of the game character. The concept of "The Accounting Sims" itself can be said as a start to life in business.

The content contained in it will include the content of the game "Game of Business" or the accounting monopoly that has been described previously. To further clarify, the differences and similarities between the two are described as follows:

1. The completeness of the base. "Game of Business" is a manual game that does not involve computer technology, but monopoly. While "The Accounting Sims" is like an online game, and is accessed via android
2. If the "Game of Business" character is ourselves, then on "The Accounting Sims" the character's appearance can be adjusted to the player's wishes. Even characters can live their lives like the game "The Sims", he can build a family and run daily activities.
3. If the "Game of Business" is in the form of papers, then in "The Accounting Sims" all the data has been computerized. Characters only need to make a choice as to what kind of business they will run and will also get the company's initial data automatically. However, players still need their own manual records to help them in the accounting cycle.
4. The types of transactions contained in the "Game of Business" are absolute and have been printed on the cards that will be obtained, in contrast to "The Accounting Sims" which will stimulate students to make decisions about what steps and transactions need to be carried out in running their business. However, the system will supervise and assist players, this is to anticipate players who have a low level of understanding, the system will help to direct it to the transactions that should be done
5. In the "Game of Business" transactions are recorded manually in each student's record, in "The Accounting Sims" each transaction will record the entries that the player enters into the system so that players no longer need to record them on paper.
6. In the financial statement, players only need to enter the numbers requested filled with transaction data he has done and is recorded in the game system.
7. As with "Game of Business", "The Accounting Sims" can adjust the recording method used to suit the students' learning
8. Transaction sets on "The Accounting Sims" will be sorted according to the level of difficulty, players who have passed level 1 will be able to continue to level 2 and so on.
9. In the course of his character, it will often be found conditions where the player must take actions that exercise his integrity as a businessman. Players will be faced with potentially fraudulent transactions and players will be required to take the right action. If not, the system will immediately warn it.

"The Accounting Sims" is expected to answer the challenges of accounting education described earlier. This technology-based game carries the game concept that is loved by teenagers with the sophistication of their mobile phones. He can adjust the needs and character of today's students.

In addition, "The Accounting Sims" promotes habituation both in the face of business transactions faced. For example, the player will find a case where the client asks him to print proof of the transaction that is not in accordance with the nominal in the interest of profit. In such conditions, the client will also give the player the choice to accept bribes for his actions. This is expected to trigger honest and professional Characters as a chartered accountant. If the player takes the wrong action, the system will

immediately warn him. At the end, there will be an assessment of his integrity as an accountant in addition to the assessment of the accounting cycle material that has been done by the students themselves.

Unlike the "Game of Business" which is played in groups, "The Accounting Sims" is an individual game that can be done anytime and anywhere. Therefore this learning media is said to be a learning media that carries active learning. This game is a place for individual students to practice the ability of their accounting cycle before finally "competing" with the abilities of other students in the class.

"The Accounting Sims" can also be used as a teaching aid for teachers. Through the value that appears at the end of the financial period, which featured an assessment of the accounting cycle honesty and character of students, teachers can determine the extent of the ability of their students.

Conclusion

"The Accounting Sims" is a learning media in the form of technology-based games. This game is inspired by the online game "The Sims" which is a life simulation game. Through this game, the player seems to control the life of the game character. The concept of "The Accounting Sims" itself can be said as a start to life in business.

"The Accounting Sims" is a media to train students' special abilities in accounting cycle material. This game is designed based on technology to adjust the conditions of today's students who are passionate about technology. In addition, "The Accounting Sims" can be said as a medium of learning that supports active learning where students train their own accounting skills. Moreover, in the process the game is also expected to be able to practice its positive character as accounting in dealing with cases of transactions that test it.

With the existence of "The Accounting Sims", it is hoped that it can meet the challenges and problems that occur in accountant learning, which has been described previously.

Recommendations

Some suggestions that can be given for further development of the game "The Accounting Sims" are:

There needs to be a technology expert who embodies this game design to then be tested and the results are known to be further developed

Further research needs to be done to ascertain the problems faced by beginner accountants.

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Attachments

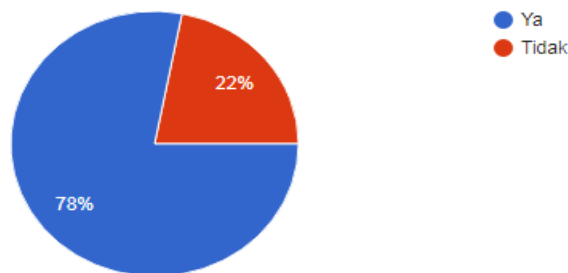
Attachment 1 Result Of The Initial Accounting Specialization Survey

Population : 10 Grade students of SMKN 50 Jakarta

Sample : 82 respondents of 10 Grade

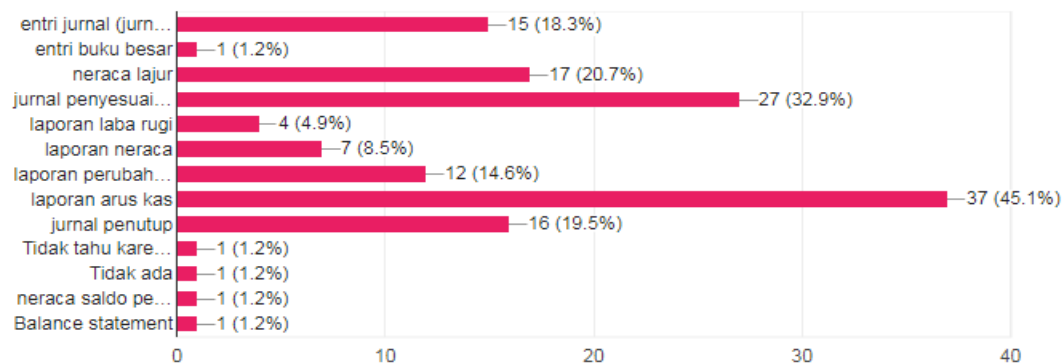
Apakah anda mengalami kesulitan dalam mempelajari akuntansi?

82 responses



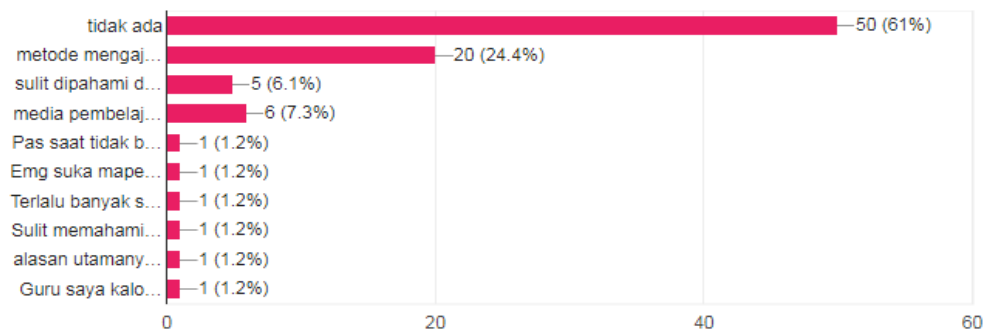
Jika ya, pada materi apa sajakah anda mengalami kesulitan?

82 responses

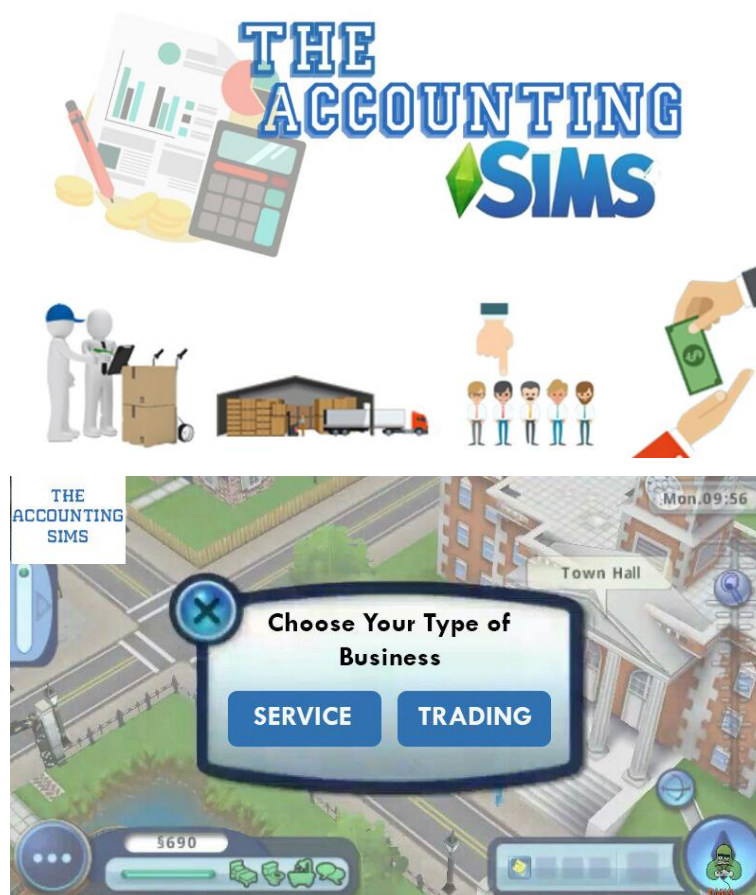


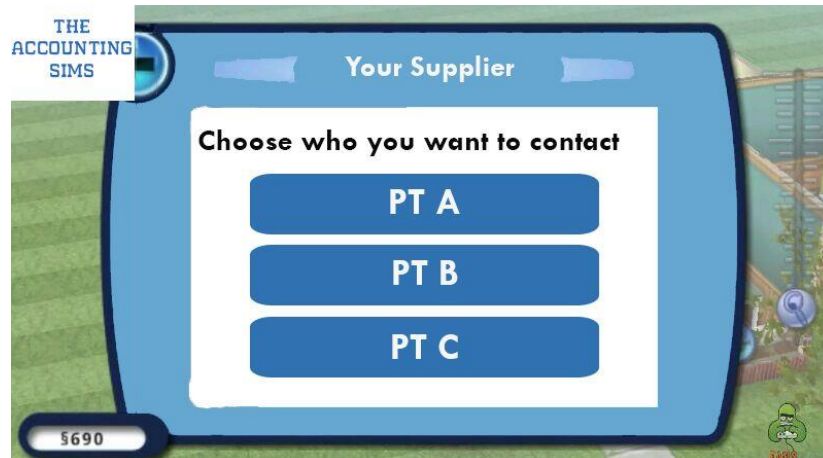
Apa sajakah alasan yang membuat anda tidak senang mempelajari akuntansi?

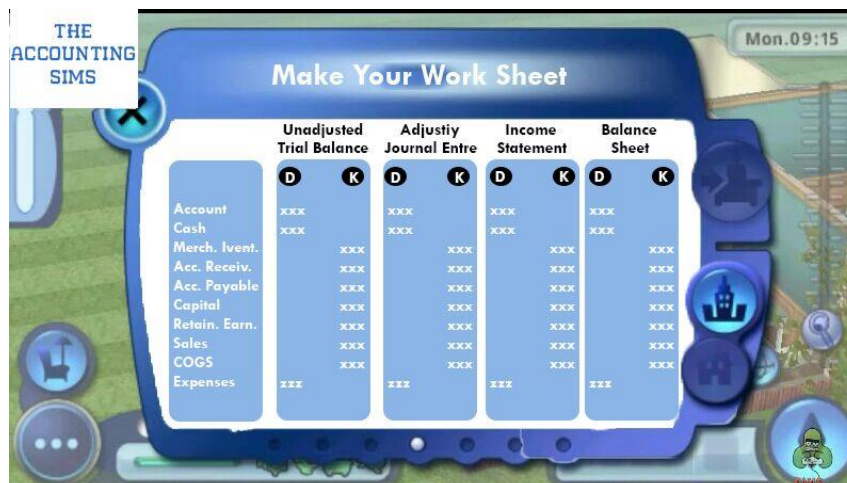
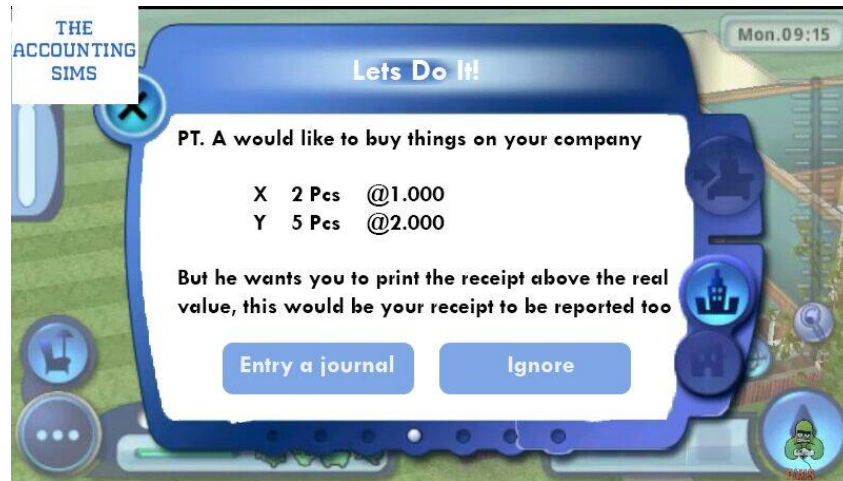
82 responses



Attachment 2 Pictures of The Game









BOARD GAMES AS INTERACTIVE LEARNING TOOLS TO INCREASE LEARNING INTEREST IN SHARIA ACCOUNTING COURSE

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Abstract: *This study aims to find the design of learning tools that can increase students' learning interest in Sharia Accounting courses. Learning tools designed are in the form of a board game. This study uses a research and development approach developed by Borg and Gall. The steps taken are; (1) collecting data on learning models by using board games for students and some lecturers, (2) developing products based on research results, (3) conducting field tests on product design, and (4) reducing deviations found in the field trial stage . By designing the game board for the Sharia Accounting course, it is expected that students' learning interest will increase, as well as their knowledge and skills, and the moral values that should they have.*

Keywords: *Sharia Accounting, Learning Tools, Board Games*

Introduction

Low student participation is a common phenomenon in the learning process and it becomes a problem to be solved. In order to overcome this problem, it is necessary to have interesting and attractive learning ways or media for college students. One of the ways that can be done by lecturers is by developing learning media that have the concept of learning while playing so that students' motivation in learning can be increased. The way is through the development of games for learning. Muhibbin Shah (2010) says that there are three factors that influence the learning of an individual, namely internal factor (the factor from the inside of an individual), external factor (the factor from the outside of an individual) and learning approach factor. The rapid development of Islamic economics and Islamic financial institutions in Indonesia results in the increasing number of Islamic accounting courses. As a matter of fact, in Islamic accounting courses, there is a problem of students' enthusiasm or interest in learning, which could hinder the success of the learning process. Therefore, the learning process of Islamic accounting requires right learning methods in order to support the accomplishment of learning objectives and, at the same time, to create a fun, interactive and attractive learning atmosphere.

The learning process can be undertaken in many ways in order to achieve a number of goals. In order that the learning objectives can be accomplished to the maximum, of course a lecturer as an educator will continually be required to always develop his/her learning methods. Creativity in administering the learning process requires educators to be able to present pleasant learning (Narwati, 2011). In fact, according to Hernowo, learning is most effective when it is fun (Narwati, 2011). Susanto (2012) says that the use of games in learning has tremendous impact and games can also be used as an approach to students through a relaxed learning atmosphere so that the students will play a positive role and actively respond to what is being taught.

Literature Review

Learning Media

‘Learning media’ means that the media carry messages or information aimed at doing instruction or contain teaching purposes (Arsyad, 2014: 4). Educational media can be defined as a set of auxiliary tools used by teachers or educators in order to communicate with students (Danim, 2008: 7).

Board Game

According to Mike Scorviano (2010) in *History of Board Game and Game Psychology*, board game is a type of games in which tools or parts of the game are placed, displaced, or moved on a surface that has been marked or divided according to a set of rules. Meanwhile, Wikipedia online encyclopedia states:

“A board game is a tabletop game that involves counters or piece moved or placed on a pre-marked surface or "board", according to a set of rules. Some games are based on pure strategy, but many contain an element of chance; and some are purely chance, with no element of skill.”

Islamic Accounting

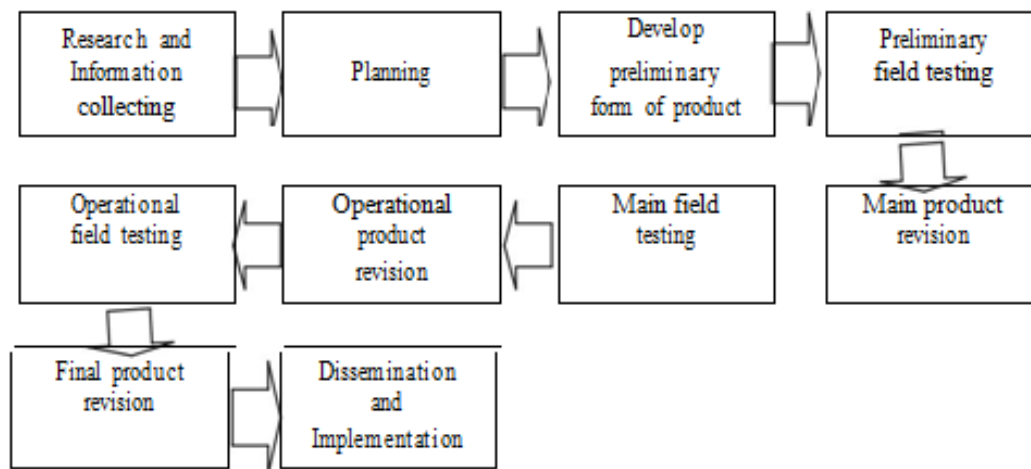
Islamic accounting is social-oriented accounting. This means that accounting is not only a tool for translating economic phenomena in the form of monetary measures but also a method of explaining how economic phenomena take place in Islamic societies (Nurhayati and Wasilah, 2013). According to Sofyan S. Harahap in Nurhayati and Wasilah (2013), Islamic accounting is essentially the use of accounting in carrying out Islamic law. Islamic accounting has several important meanings because Islamic accounting is required as an obligation to implement sharia.

Interest in Learning

According to Slameto (2003: 57) students who are interested in learning are as follows: 1) having a fixed tendency to pay attention and remember something that is learned continuously; 2) having the sense of enjoyment and delight in something that interests him/her; 3) obtaining something of pride and satisfaction in what is in demand; 4) preferring things that are more of his/her interest than anything else; and 5) being manifested through participation in activities. According to Djamarah (2002: 132) the indicators of learning interest are feeling like or happy, statements of preference, the sense of interest in the awareness of learning without being told, participating in learning activities, and giving attention. According to Slameto (2010: 180), several indicators of learning interest are the feelings of pleasure, attraction, acceptance, and involvement.

Borg and Gall Model

According to Borg and Gall (1989: 782), what is meant by research and development model is "a process used to develop and validate educational products", or sometimes such research is also called 'research based development', which aims to improve the quality of education. According to Borg and Gall (1989: 783-795), the research and development (R & D) approach in education includes ten steps. The chart of the research steps is shown below.



Picture. The Steps of Using Research and Development (R & D) Method according to Borg and Gall

Research Method

This study was intended to produce learning media that will be used as media in learning process; therefore, the research employed was the R&D (research and development) method. Furthermore, the samples of this study were accounting students who took Islamic accounting course; first-year students who have taken Islamic accounting course in previous semester, and second-year students currently taking Islamic accounting course. Designing the board game was carried out before the trial. Besides, it has undergone the design process that was then consulted to board designer, experts in the field of education, and lecturers who taught Islamic accounting.

Results

This research has produced a research instrument in the form of a questionnaire that has been filled out by 65 respondents who have taken Islamic accounting course. These respondents were from 2 different classes of Islamic accounting course. The purpose of questionnaire was to get an overview of the ideal board game and also to find out which chapters / sub-chapters that were deemed interesting. Besides, in order to get more complete data, interview was conducted to some students and lecturers teaching this course.

Based on the answers given by respondents, it was revealed that the majority of respondents preferred this game with 4 (mostly chosen number) maximum numbers of players and 30-60 minutes duration. Moreover, the results concluded that respondents would enjoy if the game was equipped with game guide cards consisting of instruction cards and question cards.

In addition, respondents gave various answers to the statement "how the completion of the Islamic accounting board game should be done." 66.15% of respondents responded that the game ended when the game mission was completed. Meanwhile, in terms of topic and contents for the game, most respondents chose *Zakat* and Islamic contracts as the suitable and interesting topics in the game. As for the less interesting topics, respondents chose Islamic financial reports, and contemporary issues of Islamic finance and history of Islamic accounting thought.

The depth interview conducted gave quite similar results and further strengthened the results obtained. For lectures, they were admonished to really pay attention to the accuracy of the topic / materials delivered through the board game media, and use the board game as a supplementary (not the main one) in the teaching and learning process.

Discussion

Based on the results of data analysis which were supported by study of literature, the researcher then designed board games that were evaluated on the content, game methods, and the design of the board. Besides, creating the design for board game required sources of information which was retrieved from the internet. The researcher has reached the stage in which there were several designs that were ready to be evaluated and asked for input to experts in Islamic accounting course, educational field, and board game.

The results of the exploration carried out resulted in four thematic game board prototypes. The prototypes were accordance with the results of questionnaires in which *Zakat* and Islamic Contracts as the main topics which were then combined with other topics. 4 board game prototypes to learn Islamic accounting are:

1. Board game with the labyrinth game concept.
2. Board game with electronic board game concept (using help and computer display) – taken from existed board game which later was transformed into digital version.
3. Another type of board game – that is printed behind the labyrinth game (in one board which can be flipped), with the theme of Islamic tourism with Islamic accounting content. This game is equipped with map of the Islamic world, wherein players go on traveling around the Islamic countries and find questions / instructions / information about Islamic accounting there. Players can also get information about the country and the Islamic civilization of the country where they land on.
4. Board game with the role-play concept.

For each design, except electronic board game (for this, there is a lecturer acting as a host), there is someone acting as a host as well as referee equipped with a stopwatch / timer. Moreover, each game is equipped with:

1. The rules of the game as guidelines / instruction or manual as well as rule play
2. A set of game tools - which consist of cards, pawns, a thing other than dice (dice is prohibited in Islam) that functions as the step indicator and coins as rewards

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THE LINK BETWEEN SERVICE QUALITY, CORPORATE IMAGE AND BEHAVIORAL INTENTION: SATISFACTION AS AN INTERVENING VARIABLE

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Abstract: *This study aims to analyze the relationship between service quality, corporate image, customer satisfaction and behavioral intention of Garuda Indonesia Airways' customers. This research also investigates the roles of customer satisfaction as a mediating variable. The population of this study is all customers of Garuda Indonesia Airways. This study employs 150 customers as the respondents. The data collection has been conducted by using a convenience sampling method. This research analyzes the data by using the Structural Equation Modelling (SEM) with Partial Least Square (PLS). After some preliminary tests, this study found that service quality has a positive and significant impact on corporate image and customer satisfaction. Service quality has no significant direct impact on behavioral intention. The corporate image has significantly and positively related to behavioral intention. Customer satisfaction is a significant and positive antecedent of behavior intention. Even though there is no significant direct effect of service quality on behavioral intention, surprisingly, it has a significant indirect impact on behavioral intention through customer satisfaction as an intervening variable. Furthermore, some limitations and further research have been addressed.*

Keyword: *Service Quality, Corporate Image, Behavioral Intention, and Customer Satisfaction*

Introduction

Indonesia is one of the countries which is experiencing a relatively high growth in the aviation industry. This is supported by Indonesia's geographical condition which is an archipelagic country, even the largest archipelagic country in the world. Indonesia has more than 100,000 islands stretching from Sabang to Merauke. Thus, the geographical conditions make air transportation become one of the main choices of transportation in Indonesia. Garuda Indonesia is one of the Aviation Company In Indonesia which provides a better service by offer the best facilities to increase its customer satisfaction in building behavioral intention.

There are still many problems related to this aviation industry which consumers complain about in Indonesia. Common problems include delay, lack of alertness of employees in overcoming delays, baggage loss or damage and many other problems. So that, customers have considered that the services in the aviation industry in Indonesia are still needed to be improved. Whilst, consumers are the key for the success of a company in industry competition, hence, creating a higher customer value is a primary requirement to make consumers feel satisfied and are expected to be loyal customer. Customers who are satisfied with the performance provided by the company will encourage customers to behave in certain ways. According to Namkung & Jang (2007) Behavioral Intention is defined by the behavior of

customers who are loyal to the company so that they are willing to recommend to others because they have received good service from the company. This is in line with the results of research conducted by Purwati & Tio (2017) where positive Behavioral intention also has many benefits for the company. One of them is consumers become loyal to the product or services.

Moreover, in creating customer satisfaction, Garuda Indonesia has to provide the best quality services, such as providing a full-service carrier with several facilities, namely: lobby lounge, Garuda Frequent Flyer, etc. In running a Garuda Indonesia business that prioritizes customer satisfaction rather than having to compete with other airlines in lowering prices, Garuda Indonesia offers higher ticket prices with a superior service commitment. Therefore, in improving the service quality, Garuda Indonesia has created the Garuda Indonesia Experience concept. Service quality is the main factor that needs to be considered by Garuda Indonesia such as: carrying out a rejuvenation program for the old fleet, replacing the interior of the aircraft, increasing the ability of employees to provide servants and so on.

Service quality and company image are important points to be considered. The better the quality of service provided by transportation service providers, the more the image of the company will be improved. This means that Garuda Indonesia have to balance the quality of service so that the creation of customer satisfaction and a good corporate image will make customers conduct repurchase and create good behavioral intention. Therefore this study focuses on the Influence of Service Quality, Corporate Image toward Behavioral Intention with Customer Satisfaction as Intervening Variables at Customers PT. Garuda Indonesia (Persero) Tbk in Padang City.

Litrature Review

According to Namkung & Jang (2007), behavioral intention is the behavior of consumers who are loyal to the company so that they are willing to recommend to others because they get a good service from the company. Moreover, Purwati & Tio (2017) have stated that the positive behavioral intention also has many benefits for the company. One of them is that it may make the consumers become loyal to the product or service used. Furthermore, Kuo & Tang (2013) said there are several behavioral indicators, namely: (1) Repurchase (2) Word of Mouth (WOM) and (3) Frequency.

To build consumer loyalty and positive behavioral intentions, the first step that must be taken by the company is to create customer satisfaction. According to Kotler & Keller (2008) customer satisfaction is the feeling of being happy or disappointed from someone towards a product after the customer compares the performance of the product with their expectations. Kuo & Tang (2017) then added the indicators of customer satisfaction are comparisons between expectations and reality.

Efforts to build customer satisfaction cannot be separated from the efforts of companies to provide good service to customers. According to Tjiptono (2011) service quality is an expected level of excellence where control over the level of excellence aims to meet customer needs. In addition, Loanata (2015) stated the quality of services provided by the company can meet customer expectations and be able to create a good perception of its service image. Furthermore, Aryani & Rosinta (2010) said that there are several service quality indicators, namely; (1) tangible, for example: Cleanliness of Physical facilities, Neatness of employees, modern or good physical facilities owned. (2) Empathy, Such as: Personal attention, Ease of contacting, Understanding Customer needs. (3) Reliability like Good service from beginning to the end, Administrative accuracy, Service as promised. (4) Responsiveness, such as: Service speed, overcoming difficulties quickly, Employee time. And (5) Assurance, for example: Corporate reputation, Employee competencies, and Employee friendliness.

Besides the efforts in providing excellent service quality which to create customer satisfaction, the company must also be able to build a good corporate image in order to create sustainable excellence. According to Kotler & Keller (2012) imagery is a set of beliefs, ideas, and impressions that a person has towards an object. Based on Adona (2006) the image of the company is an impression or an image of a company in the eyes of the audience formed based on their own knowledge and experience. Then, Kuo

and Tang (2013) used several indicators of corporate image, they are: (1) Reputation (2) Timeliness (3) Companies in the form of safe transportation.

Kuo and Tang (2013) have asserted that customer satisfaction has a direct and significant influence on behavioral intention. In addition, Ryu, et al (2012) also have found that the customer satisfaction is significantly related to behavioral intention. Moreover, the study was conducted by Tahelele (2017) has explained that customer satisfaction has also positively influenced the behavioral intention. Accordingly, we argue the customer satisfaction is an antecedent of customer behavioral intention, therefore, we hypothesize that customer satisfaction has a positive and significant effect on behavioral intention (H1).

Furthermore Chou & Kim (2009) found that service quality and customer satisfaction have a direct and positive relationship. Moreover, Kuo & Tang (2013) have asserted that the service quality plays an important and significant role in customer satisfaction. The study was conducted by Tahelele (2017) also has explained that service quality is an important variable which directly influences customer satisfaction. So, from this point of view we posit that the Garuda service quality has a positive and significant effect on customer satisfaction (H2).

Ladhari (2009) found that when customers feel that service quality is good then customers will naturally behave positively by making repeat purchases so that behavioral intention occurs. Accordingly, we might argue that service quality will also has a direct impact on behavioral intention. Saptanno (2011) has added that service quality has a direct, positive and significant influence on behavioral intention. When a customer has perceived a good service quality, it may lead to his/her behavioral intention such as repeat purchase or willing to recommend. From the discussion above, we propose a hypothesis that the service quality has a positive and significant direct effect on behavioral intention (H3).

Kuo & Tang (2013) argue that company image also has a significant relationship to customer satisfaction. Previous research which is conducted by Wu (2014) found that the company's image has a positive effect on customer satisfaction. Furthermore Tahelele (2017) in his study has explained that corporate image is an important variable that directly affects the customer satisfaction. Arguably, a company with a higher corporate image will have a more possibility to satisfy its customer. Therefore, we propose a hypothesis that company image has a positive and significant effect on customer satisfaction (H4).

The study was conducted by Wu (2014) found that the company's image is also directly related to behavioral intention. Then supported by Mukhlison et al. (2016) who stated that the company's image has a significant influence on behavioral intention. Moreover, Tahelele (2017) revealed that a good corporate image will form a positive relationship to behavioral intention. Hence, we propose the fifth Hypothesis (H5) that corporate image has a positive and significant effect on behavioral intention.

Chou & Kim (2009) explain that service quality is a fundamental driver of corporate image. Therefore, active monitoring and management of service quality needs to be made a component for the company's image. The study was conducted by Kuo & Tang (2013) found that the service quality is positively related to the company image. Finally, we posit the last hypothesis (H6) of this study that the service Quality has a positive and significant effect on Company Image.

Based on the theory and literature above, the conceptual framework for this study can be created as follow:

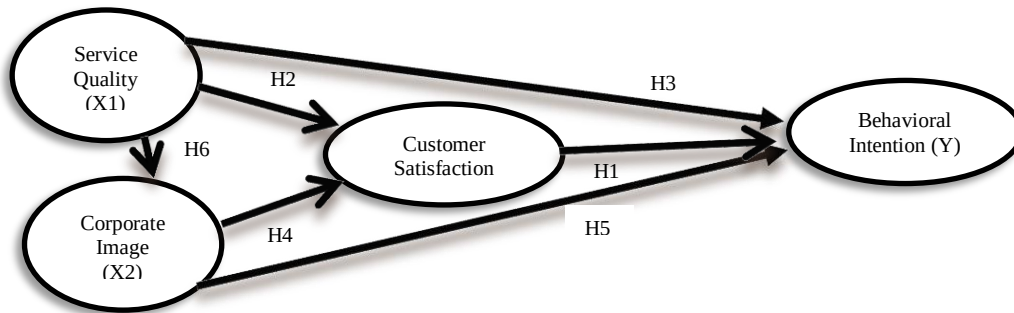


Figure 1: Research Model

H1 = Customer satisfaction has a positive and significant effect on behavioral intention.

H2 = service quality has a positive and significant effect on customer satisfaction.

H3 = Service quality has a positive and significant effect on behavioral intention.

H4 = Company image has a positive and significant effect on customer satisfaction.

H5 = Corporate image has a positive and significant effect on behavioral intention.

H6 = Service Quality has a positive and significant effect on Corporate Image.

Research Methodology

This research is a causative research. This study explains the relationship between Service Quality, Corporate Image and Behavioral Intention. In addition, we employed the customer Satisfaction as an intervening variable. Population of this study is all passenger of PT. Garuda Indonesia (Persero) Tbk in Padang City. The amount of sample is 150 which is taken by using purposive sampling technique with criteria considered by the people in Padang City who have used Garuda airlines. We analyze the data by using the Structural Equation Model (SEM) using the Partial Least Square (PLS) and SmartPLS version 3.2.7. Furthermore, some preliminary analyses, such as outlier, validity and reliability test have been applied (Wardi, Abror, & Trinanda, 2018; Hair, Black, Babin, & Anderson, 2010).

Result And Discussion

Result

Descriptive Variable Statistics

This study has conducted descriptive statistical analysis to get some general information, such as mean value of variables and the respondent characteristics. The results can be seen as follow: Table 1. Results Of The Average Assessment Criteria

Variable	Mean
Service Quality	3.82
Corporate Image	3.96
Customer Satisfaction	3.86
Behavioral Intention	4.00

Source: Primary Data (Research findings)

Evaluation Outer Model

Convergent validity is determined by using the loading factor / outer loading value parameter and the AVE (Average Variance Extracted) value. Measurement can be categorized as having good convergent validity if the value of outer loading > 0.6 and the value of AVE > 0.5 (Ghozali & Latan, 2012). Table 2 shows the loading factors of 25 indicators which is used in this study:

Tabel 2. Outer Loading

Variable	No	Indikator	Outer loading (>,06)	Keterangan
Service Quality	1	KPT1	0,782	Valid
	2	KPT2	0,689	Valid
	3	KPT3	0,751	Valid
	4	KPEM1	0,599	Valid
	5	KPEM2	0,653	Valid
	6	KPEM3	0,673	Valid
	7	KPR1	0,642	Valid
	8	KPR2	0,673	Valid
	9	KPR3	0,580	Valid
	10	KPRES1	0,741	Valid
	11	KPRES2	0,723	Valid
	12	KPRES3	0,692	Valid
	13	KPAS1	0,684	Valid
	14	KPA2	0,710	Valid
	15	KPA3	0,539	Valid
Corporate Image	16	CP1	0,821	Valid
	17	CP2	0,830	Valid
	18	CP3	0,816	Valid
	19	CP4	0,848	Valid
Customer Satisfaction	20	KEPE1	0,860	Valid
	21	KEPE2	0,872	Valid
	22	KEPE3	0,750	Valid
Behavioral Intention	23	BI1	0,873	Valid
	24	BI2	0,844	Valid
	25	BI3	0,868	Valid

Source: Primary Data (Research Finding)

Table 2 shows 25 valid indicators. According to Hussein (2015), if there is an outer loading value below 0.6, the indicator can be omitted because it does not represent the existing construct. So that this study has no indicator which will be eliminated because all of them are valid. Therefore, the following figure shows the research model with the path diagram for all indicators:

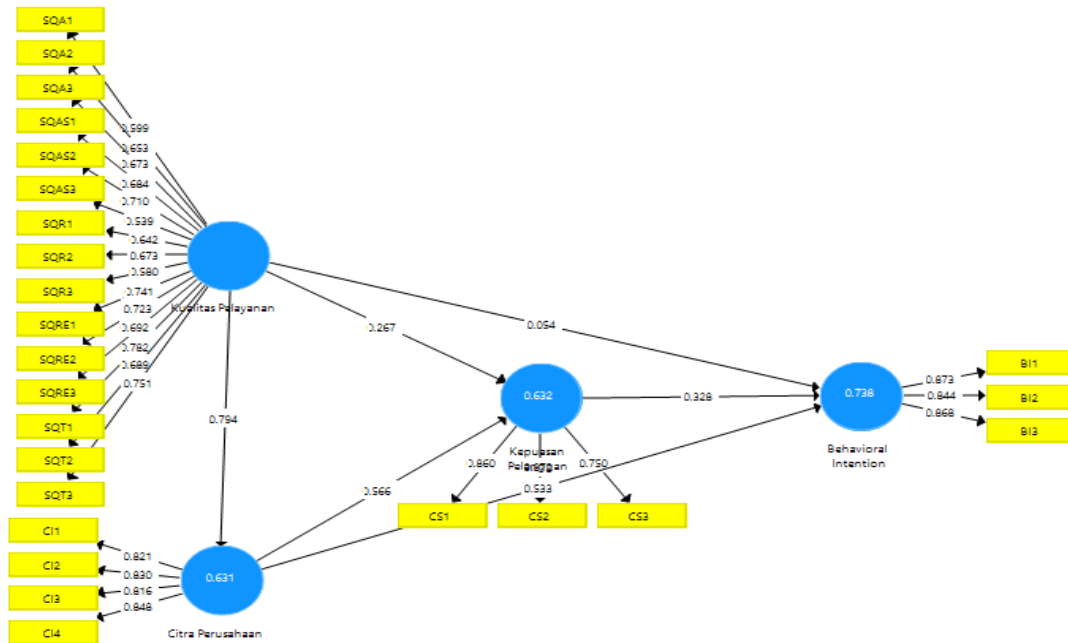


Figure 2: Research Model

Discriminant validity

We have tested the discriminant validity by using Fornell Larkers's criteria. The indicators that have been derived from different constructs should not be highly correlated (Ghozali & Latan, 2012).

Tabel 3. Discriminant Validity

Variable	BI	CI	SQ	CS
Behavioral Intention	0,862			
Company image	0,831	0,829		
Service Quality	0,781	0,778	0,829	
Customer Satisfaction	0,713	0,794	0,717	0,678

Source: Primary Data (Research Finding)

Table 3 shows that the values of square root of AVE in the diagonal are greater than the correlation values in the column. Hence, it means that all variables in this study are valid.

Average variance extracted (AVE)

The convergent validity of the measurement model is also seen from the AVE value. AVE value describes the magnitude of the diversity of the manifest/indicator variables contained in the construct. Based on Ghozali and Latan (2012), the use of AVE values is needed in convergent validity test. Furthermore, the recommended AVE value is at least 0.5 to indicate a good convergent validity.

Tabel 4. AVE value (Average Variance Extracted)

Variable	Nilai AVE (>0,5)
Service quality(X1)	0,460
Corporate Image(X2)	0,686
Customer Satisfaction (Z)	0,688
Behavioral Intention (Y)	0,743

Source: Primary Data (Research Founding)

Table 4 shows that the service quality has a lower AVE value than 0.5. It can be stated that more than half of the variants in each indicator of this study has good convergent validity.

Composite reliability

We have also examined the composite reliability value of the data. The criterion is that value should be equal or greater than 0.7. We found that all the constructs have aSo that, the variable can be said to be reliable (Hussein, 2015). The following is a results of composite reliability values:

Tabel 5. Composite Reliability value

Variable	Composite Realibity (>0,7)	Keterangan
Service quality(X1)	0,927	Reliable
Corporate Image(X2)	0,898	Reliable
Customer Satisfaction (Z)	0,869	Reliable
Behavioral Intention (Y)	0,896	Reliable

Source: Primary Data (Research Founding)

Table 5 describes each variable in this study has a good composite reliability value which is greater than 0.7. Therefore, each variable in this study have fulfilled the requirements that have a level of reliability in accordance with the specified conditions.

Inner Model Evaluation

Evaluating the inner model or structural model aims to see the direct or indirect influence between variables. Evaluation of the structural model can be started by looking at the R-square value in endogenous latent variables. According to Ghozali and Latan (2012), the R-square value of 0.75, 0.5 and 0.25 defines the model as strong, moderate and weak in explaining the effect of exogenous latent variables on endogenous latent variables.

Tabel 6. R-Square value

Variable	R-Square	information
Behavioral Intention	0,738	strong
Corporate Image	0,631	Moderate
Customer Satisfaction	0,632	Moderate

Source: Primary Data (Research Founding)

Table 6 illustrates that the value of R-Square for behavioral intention variable is 0.738, this indicates that the service quality, company image, and customer satisfaction have explained 73.8% of behavioral intention variation, whilst, the remaining 26.2% are affected by other factors. Furthermore, the value of R-Square Company Image of 0.631, hence, this indicates that the influence of service quality on corporate image is 63.1%. Finally, 63,2% of the customer satisfaction has been affected by service quality and corporate image.

Hypothesis Testing

Table 7 shows the hypotheses testing. Based on the results, we found that only one hypothesis (out of 6) is not significant. Service quality has no direct significant relationship with behavioral intention.

However, it has significant indirect relationship through customer satisfaction and corporate image as the mediator.

Tabel 7. Hypothesis Testing

	Path coefficient	T Statistic	P Value	Information
Customer Satisfaction-> Behavioral Intention	0,328	3,874	0,000	H1 accepted
Service Quality -> Customer Satisfaction	0,267	2,875	0,004	H2 accepted
Service Quality -> Behavioral Intention	0,054	0,614	0,539	H3 rejected
Corporate Image -> Customer Satisfaction	0,566	6,495	0,000	H4 accepted
Corporate Image -> Behavioral Intention	0,533	5,253	0,000	H5 accepted
Service Quality -> Corporate Image	0,794	25,624	0,000	H6 accepted

Source: Primary Data (Research Findings)

Discussion

Base on the results, it can be explained as follows:

1. A positive and significant relationship between customer satisfaction and behavioral intention in PT. Garuda Indonesia (Persero) Tbk in Padang City. The result of this study is in accordance with previous studies, such as Tahelele (2017), who has claimed that the satisfaction felt by customers has a positive impact on customer behavior intentions. Furthermore, Mukhlison et al. (2016) have explained that customer satisfaction also has a significant effect on behavioral intention. In addition, Kuo & Tang (2013) said that customer satisfaction has a direct influence on behavioral intention. And according to Wu (2014) in his research explained that customer satisfaction is related to behavioral intention. In the results of this study there is a positive relationship between customer satisfaction and behavioral intention of the customers of PT. Garuda Indonesia (Persero) Tbk. The implication is that the company has to increase customer satisfaction by listening to customer,s wishes and improving employee performance so that the creation of customer satisfaction and itself will create behavioral intention because if customers are satisfied with the performance provided by Garuda Indonesia, customers will conduct repurchase activities and use Garuda Indonesia repeatedly and customers will definitely recommend Garuda Indonesia to their closest relatives, friends and family to use Garuda Indonesia airlines.
2. This study found a positive and significant relationship between service quality and customer satisfaction of PT Garuda Indonesia (Persero) Tbk. The result of this study supports some previous studies, such as Chou & Kim (2009) who has examined a positive and significant relationship between service quality and customer satisfaction. According to Kuo & Deng (2009), service quality also has a positive impact on customer satisfaction. And Tahelele (2017) explained that service quality is an important variable that directly affects customer satisfaction. Moreover Kuo & Tang (2013) found service quality plays an important and significant role in customer satisfaction. In the results of this study there is a positive relationship between service quality and customer satisfaction in the customers of PT. Garuda Indonesia (Persero) Tbk in Padang City. The implication is that companies have to provide the best service to customers by providing full service carrier and several good facilities such as lobby lounge and Garuda Frequent Flyer for customers who are loyal to Garuda Indonesia. By offering customer based on what they likes or tastes make customers feel satisfied with the services provided by Garuda Indonesia airlines.

3. Service quality have a positive effect, however, it is not significantly influence behavioral intention of customers PT. Garuda Indonesia (Persero) Tbk, this result is inversely proportional to previous research conducted by Saptemo (2011), who has explained that service quality has an effect on behavioral intention. However, even though the service quality has no direct significant relationship to behavioral intention, it has a positive and significant indirect relationship to behavioral intention through customer satisfaction and corporate image as the mediator. This finding is in line with Tahelele (2017) who argue that service quality will lead to customer satisfaction before it has an impact on behavioral intention.
4. There is a positive and significant relationship between corporate image and customer satisfaction of PT. Garuda Indonesia (Persero) Tbk. This result is congruent with Kuo & Tang (2013) who assert that corporate image is a significant antecedent of customer satisfaction. Moreover, Mukhlison, et al (2016) have examined a significant effect of corporate image on customer satisfaction. Accordingly, a better corporate image will lead to a better customer satisfaction. Therefore, the Garuda Indonesia has to build its corporate image which is different with other airlines.
5. Corporate image also has a significant and positive impact on behavioral intention. The result of this study supports some previous studies. For example, Wu (2014) has investigated a significant and positive impact of corporate image on customer behavioral intention. Furthermore, Mukhlison, et al (2016) have also found that corporate image has a significant influence on behavioral intention. The implication is that company has to create corporate image building program, such as recruiting high competencies flight attendants. By having good management, a good corporate image will be formed. With a good corporate image will make customers believe in the company and customers who believe in the company will create loyalty so that customers themselves will recommend Garuda Indonesia to others. The image of PT. Garuda Indonesia that is currently good in the eyes of customers have to provide a customer-focused strategy by providing the best service to customers. if customers are satisfied with the services provided by Garuda Indonesia, they will automatically conducts a repurchase and travel by using Garuda Indonesia for the next.
6. There is a Positive and significant relationship between service quality and company image in PT. Garuda Indonesia (Persero) Tbk in Padang City. The results of this study are consistent with previous studies conducted by Chou & Kim (2009) explaining that service quality is a fundamental driver of corporate image. And according to Kuo & Tang (2013) said that there is a positive relationship between service quality and corporate image. While according to Wu (2014) service quality is directly related to corporate image. In the results of this study there is a positive relationship between service quality and company image in the customers of PT. Garuda Indonesia (Persero) Tbk in Padang City. The implication is that companies must actively monitor and manage service quality to improve a good corporate image. Service quality and good image of Garuda Indonesia are things that need to be considered by the company. The better quality of service provided by the company, the better the image of the company as well.

Conclusion

The conclusion of this study are:

1. There is a significant and positive influence of Customer Satisfaction on Behavioral Intention of customers PT. Garuda Indonesia (Persero).
2. There is the influence of service quality on customer satisfaction of customers PT. Garuda Indonesia (Persero) Tbk in Padang City, the hypothesis can be accepted or proven and these findings support and provide reinforcement in previous studies.
3. Variable service quality does not have a significant and positive effect on behavioral intention on customers PT. Garuda Indonesia (Persero) Tbk in Padang City, but the service quality has a significant and positive influence on behavioral intention through customer satisfaction.
4. There is the influence of corporate image on customer satisfaction of customers PT. Garuda Indonesia (Persero) Tbk in Padang City, this research hypothesis can be accepted or proven and these findings support and provide reinforcement in previous studies.
5. There is the influence of corporate image on behavioral intention of customers PT. Garuda Indonesia (Persero) Tbk in Padang City, this research hypothesis can be accepted or proven and these findings support and provide reinforcement in previous studies.
6. There is the influence of service quality on the company's image of the customers PT. Garuda Indonesia (Persero) Tbk in Padang City, this research hypothesis can be accepted or proven and these findings support and provide reinforcement in previous **studies**.

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CHALLENGES FACED BY THE ESL TEACHERS TEACHING IN A HEARING IMPAIRMENT SCHOOL IN NORTHERN PENINSULA MALAYSIA

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Abstract: *The mission of education in Malaysia is to produce a world-class education which will realise the full potentials of all Malaysians in fulfilling the national aspiration in attaining a developed country status by 2020 by excelling in English language. This Malaysian mission of education endorses the UNESCO's declaration of 'Education for All' and that 'No Child should be Left Behind' policy for the purpose of sustainable development. The implementation of these policies into the actual classroom practice presents various challenges to Malaysian ESL teachers teaching in the special education area, especially in hearing impairment schools in Malaysia. Hence, the purpose of this study is to investigate the main challenges faced by the ESL teachers teaching in a hearing impairment school in the northern region in Malaysia. In order to fulfill this purpose, a case study was designed using semi structured interview to explore and investigate the various challenges faced by five ESL primary school teachers. Data were triangulated using observation, member checking and document analysis. These data were later analysed using thematic matrix. The findings showed that these teachers faced challenges in obtaining proper financial support, implementing 21st century classroom teaching, insufficient teaching resources, lack of parental and community support and the lack of relevant in service courses to the non-optionist special education teachers teaching English. This paper further discussed on several suggestions to overcome these identified challenges. This study too highlights on the importance of the Teacher Education Institutions and local universities in playing a major role to provide sufficient in-service courses for the non-optionist special education teachers in teaching the English Language.*

Keywords: *hearing impairment, special education, in service courses, ESL teachers*

Introduction

Children with special educational needs are children with a variety of different disabilities such as health and mental health conditions that require special intervention, services or support. The Education for people with Special Educational Needs (EPSEN) Act was approved in Dublin by the Government into law in July 2004 (National Council for Special Education, 2014).

Special educational needs are defined in this act as:

“A restriction in the capacity of the person to participate in and benefit from education on account of an enduring physical, sensory, mental health or learning disability, or any other condition which results in a person's learning differently from another person without that condition” (National Council for Special Education, 2014).

Awareness of educating children with special needs in Malaysia emerged during colonial era (Lakshmi Ganeswaran, 2013). In Malaysia the mission of education is to produce a world-class education which will realise the full potentials of all Malaysians in fulfilling the national aspiration in attaining a developed country status by 2020 (Malaysian Education Blue Print, 2013). Hence, it is undeniable that the mastery of English language is important. According to Tun Dr Mahathir Mohamad, mastering the English language is crucial to progress since it is an international language that acts as the main medium

to obtain knowledge globally (Silva, 2015). Therefore the mastery of English language is given great emphasis in various aspects nationwide including in special educational.

According to the World Health Organisation (2015) around 360 million people of the world population suffer from hearing impairment, out of which 32 million are children. Ananthi Krishnasami Masitry, Mazlina Abdul Majid, Zulfahmi Toh, Sutarman and Tutut Herawan (2013) define hearing impairment as the complete loss of the ability to hear from one or both ears which can be inherited or caused conditions during birth, infectious diseases and medications. The students pursuing in the hearing impairment schools in Malaysia shares the same curriculum with other mainstream students, which includes the same syllabus, schooling system, public examination and the evaluation schemes. The only difference is the medium of communication. In the mainstream classes, teachers convey their lessons verbally, but in a hearing impairment classroom, teachers had to convey their lessons using sign language.

The Malaysian Ministry of Education has put in numerous efforts in supporting English language in special education nationwide. Special education in Malaysia provides educational opportunities for pupils with special needs such as those with hearing impairment through the “Hearing Impaired Students’ Program”. Therefore, teachers were trained nationwide in Teacher Education Institutions and Universities to cater the mastery of the English language according to the various needs of these special needs students.

It is undeniable that the role of the ESL teachers is very crucial in teaching the hearing impairment students. Studies done by Lakshri Ganeswaran (2013) and Gulson Begum Khalid, Mohd Hanafi Mohd Yasin and Noraini Said (2012) in Malaysia proved that the teachers teaching special needs students faced multiple great challenges. Hence, it is important to conduct a study to investigate the various challenges faced by these teachers, especially the ESL teachers teaching in a hearing impairment school.

Research Objective

The objective of this study is to investigate the challenges faced by the ESL teachers teaching in a hearing impairment school in northern region in Malaysia.

Research Questions

1. What are the challenges faced by the ESL teachers teaching in a hearing impairment school in a northern region in Malaysia?

Methodology

This case study was designed using semi structured interview to explore and investigate the various challenges faced by five ESL primary school teachers teaching in a hearing impairment school in the northern region in Malaysia. Hence, samples were selected purposively, based on the teachers options. All the samples chosen were the ESL teachers, included 2 male and 3 female teachers from Malay, Chinese and Indian ethnicity. All of these teachers had more than 3 years of teaching experiences in teaching the hearing impairment students. Data were collected using the semi-structured interview and these data were triangulated using observation, member checking and document analysis. These data were later on analysed using thematic matrix.

Findings and Discussion

The findings showed that these teachers faced challenges in obtaining proper financial support, implementing 21st century classroom teaching, insufficient teaching resources and the lack of relevant in service courses to the non-optionist special education teachers teaching English.

Obtaining Proper Financial Support

Inclusive education programs for hearing impairment students are expensive to conduct. High costing is involved in improving the infrastructures such as room modification, purchase of teaching aids and raw materials to facilitate teaching and learning. The findings revealed that all these ESL teachers faced great financial difficulties in conducting extra activities such as the “Highly Immersive Program”, “UPSR Excellency Camp” (Kem Kecemerlangan UPSR)” and “English Language Week Program”. These activities are vital in schools to strengthen the English language mastery among these students at all levels. This is due to lack of financial support from the school “Parents’ Teacher Association” or “Persatuan Ibu Bapa dan Guru”. Further investigation discovered that lack of support from parents because 50% of the parents in this school too belong to the “special needs citizen”. Hence, very limited financial support is obtained from them.

Implementing 21st Century Classroom Teaching

These ESL teachers too faced difficulties in equipping some basic school facilities such as the LCD, WIFI and books for the library. Teacher M1, F1, F2 and F3 agreed that most of the classroom is not supported with the LCD and free WIFI which act as the main hindrance in implementing 21st century classroom teaching. Teacher M2 said that most of the English books in the library are old, not interesting and less suitable for these students. The findings obtained in this study is similar with the study done by Mohd Hanafi Mohd Yasin, Hasnah Toran, Mohd Mokhtar Tahar and Safani Bari (2010), where poor facilities act as the main constraint in implementing the 21st century classroom teaching for special needs students in Malaysia.

Insufficient Teaching Resources

The observation on the “Teaching Aids Room” proved that these teachers too were facing great challenges in producing proper teaching aids for almost every single lesson throughout the whole year. According to Teacher M1, M2, F1 and F3, “it is difficult to cater the level of understanding of the students without the support of proper teaching resources or teaching aids”. They also claimed that they were incapable of subscribing online teaching material due to financial constraint. Teacher M1, M2, F2 and F3 shared that they faced difficulties to locate teaching materials that matches with the students’ impairing factors, learning abilities besides catering the students’ comprehension level.

Lack of parental and community support

Comprehensive education programs require parental support for their success. Parental support is minimal and sporadic in most cases. According to Teacher F1, M1 and M2, “about 80% of the parents here also suffer from various impairments. Hence, they are not capable to give much support in most of the school programs.” This makes integration in learning difficult. In addition, programme implementation is hampered by poor parental and community support.

Lack of Relevant In-Service Courses

Inclusive education programs for these hearing impairment students require dedicated, committed and competent teachers to conduct seminars and workshops. Teachers trained to teach mainstream students and teachers trained to teach special needs students must work hand in hand to increase success for students with disabilities (Crozier & Sileo, 2005).

This study brought to light that ESL teachers trained and posted to the special need schools were actually only trained to teach the mainstream students and not the special need students. These teachers were lacking in the mastery of the sign language. Whereas, teachers trained to teach special need students were not specialised in teaching English. Hence, it is evident here that there is a mismatch between the teachers’ options according to the subject and the needs of the students in the special education area. Therefore, it is vital to prepare and provide relevant in service courses to the ESL

teachers on the sign language. In addition, Teacher M2, F2 and F3 agreed that they need “ideas on various teaching approaches” that matches with students impairing factor in preparing the students for the public examination.

This study too discovered that these teachers need courses in locating online teaching materials and resources that matches with the students impairing factor. Teacher F1, F2 and F3 expressed that, “I think we need courses on designing online effective teaching materials and also upload it to be shared globally”. Training ESL teachers to design as well as upload creative, relevant and practical teaching materials online would enable them to share teaching materials globally. This would save time and reduce financial constraint in purchasing new teaching aids.

Conclusion

This study brought to light that the ESL teachers teaching in the hearing impairment school in the northern region in Malaysia faced challenges in obtaining proper financial support, implementing 21st century classroom teaching, insufficient teaching resources and lack of relevant in service courses to the non-optionist special education ESL teachers teaching the hearing impairment students.

Therefore, it would be helpful if the Ministry of Education with the help of the Curriculum Development Centre could prepare an “Online Manual Guide” with a list of the relevant URLs arranged according to themes, topic, skills, examination tips and marking schemes. This would save the time searching for the relevant teaching online materials which matches with the special needs of these hearing impairment students. This would be a great guide in aiding teachers in preparing students for their public examinations in Malaysia instead of heavily depending on the teachers’ own online literacy skills and effort to search and locate these useful websites.

Teachers’ Education Institutions too should train the special Education pre-service teachers with latest technical skills to create digital public examination materials that would match the needs of these hearing impairment students as well. In addition, these pre-service teachers should be trained to create creative interactive online teaching materials and upload it on the Internet be shared globally.

In conclusion, education for hearing impairment students should be given great importance. This can be done by rectifying the challenges faced by the ESL teachers in teaching the English Language. In other words, these students should be given equal rights to a quality education that will allow them to maximise their potential and contribute productively to the society.

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THE EFFECTS OF COLLABORATIVE TEXT RECONSTRUCTION ON FORM 4 SARAWAK RURAL PUPILS' NARRATIVE WRITING

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Abstract: Pupils' writing are reflected through the pupils' achievements in each occasional test and semester examination. However, Malaysian pupils exhibit low competence in writing. Narrative essay is one of the most chosen genre by the Malaysian pupils to write during school examination. Text reconstruction has proven to improve writing skill among overseas adult learners. By integrating collaborative learning, which is an important skill in the 21st century education, this case study aimed to explore the effects of collaborative text reconstruction on rural secondary pupils' narrative writing. The research instruments were document analysis, focus group interview, and field notes. The participants were six low English proficiency Form 4 pupils in a rural school located in Sarawak. The data were analysed by applying thematic analysis. The main findings are: collaborative text reconstruction enhances the participants' grammar, vocabulary, and content in narrative writing. Participants found that collaborative text reconstruction as one of the most interesting activity to learn narrative writing. It is hoped that this study offers insights to rural schools' educators in integrating collaborative text reconstruction in their English writing lessons.

Keywords: (Collaborative, Text Reconstruction, Narrative Writing, Rural Secondary School Pupils, English Language)

Introduction

Pupils' writing are reflected through the pupils' achievements in each occasional test and semester examination. Form 4 pupils from a rural school in Song, Sarawak are found to have challenges in achieving good grades in their writing. Pupils are found to be weak in narrative writing. In this study, the researcher employed 21st century classroom approach to promote collaborative learning in which collaborative text reconstruction will be used with the objective - to help the pupils' narrative writing. Therefore, this study was embarked to obtain in depth information on the effects of collaborative text construction on Form 4 Sarawak Rural Pupils' Narrative Writing.

Background of Study

Significant emphasis on the 21st century skills can be seen in the National Education Blueprint (2013-2025) and Blueprint for Higher Institution (2015-2025) which were launched by the Ministry of Education (MOE). As Kay (2010) claimed that competency in 21st century skills enables individuals to continue learning and adapting to any changes. Without these skills, people are relegated to low-wage, low-skills jobs, MOE approach will help to ensure graduates to possess the 21st century skills in order to meet global market demands. Self-direction, creativity, collaboration and innovation are among the 21st century skills that pupils have to possess (Rotherham & Willingham, 2010). Creativity, Communication, Critical Thinking, and Collaboration (4Cs) are the 21st Century Skills. (SBAC, 2015: p. 5) Collaboration is known as "super skills" for the 21st Century.

In relation to this study, the researcher focused on collaboration skills in order to prepare pupils for their narrative writing skills. Writing a narrative essay without pictorial aid and guided words is one

of the writing skills in SPM English 1119. A study conducted by Annamalai et al. (2016) claims that it is easy to write narrative essay because the writer needs to be creative whereas writing a factual essay needs the input of true facts for an outstanding essay. Yahya et al. (2012) on the other hand, revealed that most Malaysian students had errors in articles, singular/plural subjects, prepositions, tenses and word choice, with the most errors committed on the use of tenses. Researcher's rural Form 4 pupils in Song, located in rural part of Sarawak which is only accessible by express boats along a river, has similar issues in narrative essay.

As Shin et al. (2016) revealed that collaborative text reconstruction tasks such as dictogloss benefited lower-level proficiency university pupils. For the pupils, their collaboration is seen when they work together in constructing sentences and some may correct others' sentences by providing the accurate vocabulary or grammatically correct sentences. Therefore, based on the discussion above, the integration of 21st century skills of collaboration in daily teaching and learning are given heavy emphasis so as to address the issues of the pupils and also to achieve the aims of the Writing module in the National Curriculum.

Hence, this study intended to investigate the effects of using collaborative text reconstruction on the content, vocabulary and grammar of the rural Form 4 pupils' narrative writing as well as exploring the pupils' perceptions towards the use of collaborative text reconstruction in narrative writing.

Statement of the Problem

In order to do well academically and to have more career opportunities, it is essential for pupils to be good in writing (Graham and Perin, 2007; Chow, 2007; Tribble, 1996). A fundamental agenda of the latest Malaysia Education Blueprint (2013 – 2025) is integrated education to enhance mastery of 4R (Reading, wRiting, aRithmetic and Reasoning) with added elements of creativity, innovation, and entrepreneurship. Shabir (2016) investigated the result of implementing 5W1H concept in enhancing pupils' ability in writing composition especially the narrative type. The study indicated that implementing the journalistic concept helps the pupils to develop their ideas in writing.

Researches surrounding the topic of narrative writing have been quite vast. Nonetheless, there are a few gaps that could be explored in this study. Although numerous methods that was investigated had showed positive potential in improving writing for overseas university pupils, few studies have been conducted by focusing on collaboration between pupils and also focusing on local rural secondary school level. Thus, this topic may have a potential to be studied further particularly among the low proficiency rural pupils.

Hence, this study aims to incorporate collaborative learning with text reconstruction on improving the pupils' narrative writing. In general, this study aims to explore the effects of six low English proficiency pupils in using collaborative text reconstruction in a rural secondary school and to investigate how does collaborative text reconstruction help to enhance Form 4 pupils' narrative writing skills.

Research Purpose

To study the effects on the usage of collaborative text reconstruction in teaching narrative writing to rural Form 4 secondary school pupils.

Research Objective

Researcher intends to find out the effects of collaborative text reconstruction on the content, vocabulary and grammar of rural pupils' narrative writing. Researcher also hopes to find out how does collaborative text reconstruction help to enhance rural Form 4 pupils' narrative writing skills.

Research Question

1. What are the effects of collaborative text reconstruction on the content, vocabulary and grammar of the rural Form 4 pupils' narrative writing?
2. How does collaborative text reconstruction help to enhance rural Form 4 pupils' narrative writing skills?

Conceptual Framework of the Study

One of the advantages of using text reconstruction in teaching and learning is that it is particularly helpful in promoting accuracy in second language acquisition (Shokouhi and Alishahi, 2009). Pupils would focus on the linguistic items concerned and make elaborated engagement and deliberate in making choices regarding to that aspect. Mohamed (2004) investigated the perspective of learners on the use of collaborative writing tasks. He reported that consciousness-raising tasks are easy for learners to understand.

Collaborative writing tasks provide useful opportunity to learn new language and collaborate with friends. Learners could work out rules without the intervention of teachers and analyse typical mistakes made by other learners. From here, we can observe that using text reconstruction in the teaching and learning activity is underlain by the social constructivist learning theory which aims for improvement in social interactions among pupils and also knowledge construction and knowledge sharing (Vygotsky, 1978).

It is deemed that having access to learning resources regardless place, time, or format will assist learners in enhancing their deep learning and construct their own knowledge. Duhaney (2001) believed that knowledge is not simply transmitted from the teachers to learners but it guides learners in constructing their own meaning during learning. Learners construct their knowledge through social interaction with others (Kim, 2001; Abaido & El-Messiry, 2016) which in this research is the interaction between teacher and learners and learners with learners. Kim (2001) also emphasised that when learners are involved in social activities, consequential learning happens.

For instance, learners should be engaged in an activity which encourages them to reconstruct a text with missing phrases. In this study, the learners in pairs were asked to reconstruct a text with missing phrases. Learners can always demonstrate their understanding by comparing their text with their friends and their teacher to gain feedback or vice versa. Through these, learners can construct their own understanding towards narrative writing by getting feedback from their peers through peer reviewing.

Through collaborative text reconstruction activities, learners' motivation in learning to write narrative essay is affected. This is underlain by the Krashen Affective Filter of the Krashen's learning theory which seeks to motivate pupils to learn, motivate pupils to participate during lesson and reduce pupils' apprehension level.

Literature Review

Constructivist Learning Theory

By completing the narrative writing using text reconstruction as intervention, the pupils are actively involved in their own learning process. This corresponds with constructivist advocates' view, Tobias, & Duffy (2009). They believe that when pupils take charge and monitor their own learning process is active learning. Jordan et al. (2008), who is also a constructivist proponent, is convinced that better learning performance is a result of active learning. Constructivists also support that knowledge can be built by the learner instead of entirely passed on from teacher to pupil (Vygotsky, 1978).

Collaborative text reconstruction was used as the intervention in teaching narrative writing because it allows learners to construct their own cognitive and social understanding through the discussion about narrative writing with their partner. This allows immediate feedback response received from the teacher and peers.

Zone of Proximal Development (ZPD)

Vygotsky (1962) stated that consciousness in learning is moulded through interaction strategy with the world. Vygotsky stressed that social interactions are essential for development from the very beginnings of any process of learning.

In this study, Zone Proximal Development was inculcated as pupils did the text reconstruction task collaboratively. Pupils worked together in pairs to complete tasks which were related to each other. Every new task was related to previous tasks as pupils need to utilise phrases and sentences that they had learned previously. The teacher's role was to guide and control the steps of the learning scaffolds. The teacher does not need to explain the entire thing in class. The teacher only needed to help with the scaffolding activities with the developing zone.

Krashen Affective Filter Hypothesis

Krashen Affective Filter's Hypothesis is seen in this study whereby collaborative text reconstruction is utilised in teaching narrative writing to ensure pupils are in a positive learning environment, broad discussion with their partners, unrestricted imaginations on narrative plot which is different from the typical chalk and talk lesson. Pupils in this study should not experience any uncomfortable feeling towards their partners during discussion, as they are friends of the same class since the beginning of their secondary school life.

Collaborative Text Reconstruction

Text reconstruction is a consciousness-raising (C-R) task that effectively promotes improvements in grammar. Storch (1998) asserts that it successfully pushed learners in production of accurate text or passage, reflection upon linguistic choices and provide feedback. The omission of linguistic items draws learners' attention and forces them to make decisions on text editing. Most of the elicited language-related episodes (LRE) dealt with grammatical items in the task, which implied the available "opportunity to verbalise and deliberate about language" for cooperating learners (Storch, 2008). Thornbury (1997) suggested the benefit of 'matching' of learner's product with the original text, providing "positive evidence of yet-to-be-acquired language features" (p. 330), which then converts input to intake.

Shin et al. (2016) researched on collaborative text reconstruction tasks where one of them is dictogloss on 7-level Intensive English Program (IEP) in a Midwestern university in the USA. Through dictogloss, pupils assist each other in pairs. This results in them remembering more correct idea units from the texts and eliminating irrelevant information in their rewrites. However, there was little influence on improvement in idea-unit recall for the L2 proficiency differences in pairs. It seems that lower-level proficiency pupils tend to gain more from collaboration, but with significant difference.

Although text reconstruction has shown positive potential in writing for overseas university pupils, none of the studies has been conducted at local rural secondary school level. Thus, this topic may have a potential to be studied further particularly among the low proficiency rural pupils.

Related Past Studies

Shabir (2016) conducted a quasi-experiment research investigating the result of implementing 5W1H concept in enhancing students' ability in writing narrative essay. The study involved 35 senior high students Al-Ijtihad Islamic Boarding School in Bogor. The study indicated that the 5W1H concept were able to enhance students' ability in extending their ideas in writing which is useful for inexperienced writers such as students to be more conscious about their thinking process during writing by implementing the journalistic concept.

Gutiérrez et al. (2015) conducted an experimental research to reinforce EFL learners' narrative writing by using pictures series technique. They involved 20 ninth graders in A2 English level of language proficiency (CEFR) with an average age of 14 evenly distributed in a 50% female and 50%

male team from Institución Educativa Simón Araujo in an urban area of Sincelejo, Colombia. The conclusion is that the intervention using Picture series technique helped to improve the genral growth of writing skills, especially in the areas of Transition or logical sequence and Ideas exposure.

In the context of Malaysia English language teaching, Siti et al. (2016) conducted a qualitative research in identifying students' experiences in using Storybird , which is a digital storytelling tool in writing English as a Second Language (ESL) narrative text. The study involved 15 diploma students of mixed proficiency levels from Communication English course in a private university in Malaysia. The study concluded that the respondents showed positive experiences in using Storybird in writing ESL narrative text. The researchers also revealed that respondents preferred working collaboratively as they shared their feelings and thoughts with their friends in gaining more ideas to write and choosing suitable vocabulary.

Since research about intervention on improving narrative writing of the rural low proficiency secondary school students is not found, the researcher aims to fill the gap. Improving narrative writing of rural low proficiency secondary school students through collaborative learning is the focus of this study.

Methodology

Research Design

The current study employed a qualitative research approach particularly a case study. As Babbie (2014) explained that a researcher needs to adapt a qualitative research approach as to enable researchers to observe social life in its natural habitat in order to produce a richer understanding of many social phenomena that can be achieved through other observational methods. For this reason, the qualitative inquiry was chosen rather than a quantitative. Through a case study, the researcher is able to seek the effects of using collaborative text reconstruction on rural low-proficiency pupils in a more in-depth insight.

Participants and Settings

This case study was conducted in a secondary school located in Song, a rural town of Sarawak, Malaysia which is only accessible by express boats along a river. Six Form Four students (16 years old) from a rural secondary school in Song, Sarawak were selected to participate in this study through purposive sampling due to their averagely low English language proficiency level. The six Form Four students obtained 50 to 55 marks, Grade D in their Form Three Assessment (PT3) written examination. These pupils experienced difficulty in producing grammatically correct simple sentences. Table 1 shows profile of the six participants of this study.

Table 1: Participants' Demographic Profile

Participant/ Pseudonyms Given	Age	Race	Socioeconomic Status	English Proficiency	Language Spoken at Home
1/P1	16	Iban	Low	Low	Iban
2/P2	16	Iban	Low	Low	Iban
3/P3	16	Iban	Low	Low	Iban
4/P4	16	Iban	Low	Low	Iban
5/P5	16	Iban	Low	Low	Iban
6/P6	16	Iban	Low	Low	Iban

Research Instrument

Research instruments used for research question one are pre-test and post-test, document analysis and semi-structured focus group interview (FGI). Pre-test and post-test was carried out before and after intervention respectively for comparison of marks. The writing scripts of the participants in both pre-test and post-test were collected for document analysis. Interview was carried out after post-test to get the pupils' thought on the effects of collaborative text reconstruction.

Research question two employed field notes and semi-structured focus group interview. The interview was used to explore the perceptions of the participants of using collaborative text reconstruction in learning narrative writing. Observation were carried out to observe the facial expressions, reactions and participations of the participants during the use of collaborative text reconstruction. The observation were recorded as field notes as Babbie (2014) stated recording observation is regarded as the greatest advantage in the qualitative field research.

Procedures

The intervention of five collaborative text reconstruction tasks were administered to the six Form 4 pupils after the pre-test. Each task consisted a text of 120 – 125 words which were constructed for topics relating to the learners' current syllabus materials. The tasks were conducted for five consecutive weeks, with each task per week. One hour was allocated for each task. Intervention was conducted over five consecutive weeks in order to have sufficient time to measure changes in the participants' narrative writing when data was collected repeatedly. For each task, the researcher reads out instructions from a script, which allowed pupils to understand what to do during the collaborative text reconstruction tasks. Researcher then briefly introduced any potentially unfamiliar vocabulary words, and reminded students of the tenses used. This allowed students to focus on the tasks rather than affected by other challenges.

Pupils were then grouped into pairs by the researcher because less proficient learners gain more benefit if the more proficient learners guide them in expert-novice relationships. The recording was played once while pupils listened without taking notes. This allowed pupil to focus on the narration in the text. Next, the researcher distributed worksheets and pens, and played the recording again, allowing pupils to take notes. Then, pupils were given 20 minutes to reconstruct text by using the notes they had written down, and were asked to reproduce as many ideas as they could from the original text. This allowed the pupils to brainstorm collaboratively for ideas to write.

Pupils completed the tasks by comparing their text among themselves and also to the researcher's text. Pupils working in pair were engaged in the text reconstruction. However, the final draft was written by only one of the partners, which was a common practice in a collaborative writing task in an L2 classroom (Storch, 2005; Wigglesworth & Storch, 2009).

Data Analysis

The research data was analysed using deductive approach. Data transcription was done for the interview and observation. The data obtained from interviews, field notes of observations and document analysis were categorised into themes by using thematic data analysis. The process of data analysis involves three main phases - data transcribing, data coding and data analysis. The whole process of encoding the data was carried out manually. Themes across data were compared for triangulation purposes.

Validity and reliability

Qualitative rigour were established to ensure the validity and reliability of the research. Methodological strategies such member checks when coding, categorizing, or confirming results with participants, peer debriefing, and structural collaboration were carried out as suggested by Morse et al. (2002).

The data summary form, code thematic form and thematic summaries were adapted from Bloomberg and Volpe (2012). After transcribing the interview, the transcripts were returned to the

participants for confirmation. This was to ensure that the information was accurately interpreted by the researcher. The participants then validated and verified the data by putting their initials at the end of the transcribed and entries. Furthermore, inter-rater reliability was also used in this study to assess the level of consistent estimates made by different raters or observers. The raters identified for this study were the Head of English Panel and the Senior Assistant of Administration. They were from the same school where the study were conducted.

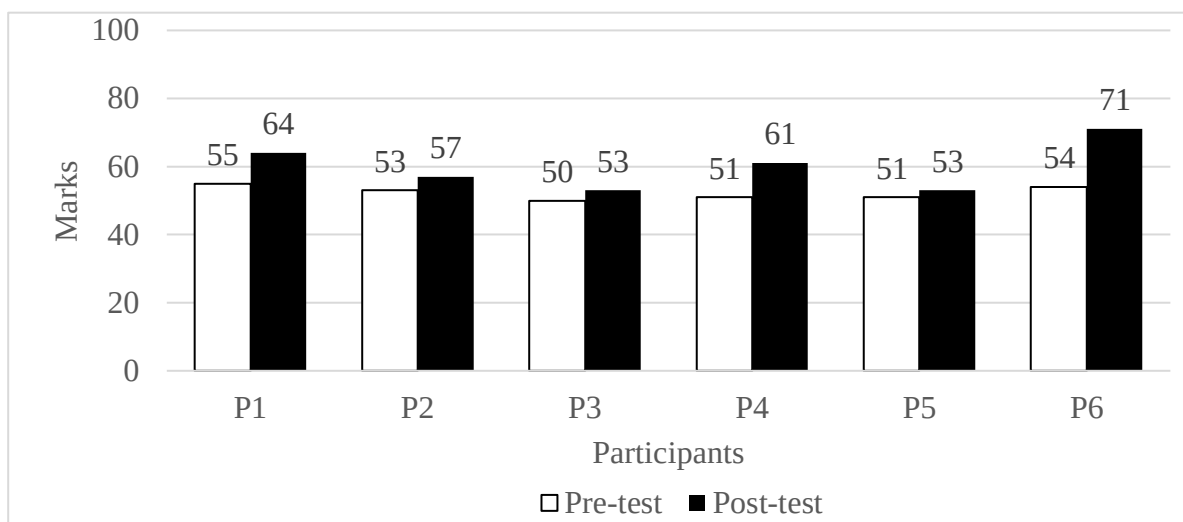
Findings and Discussions

The findings are shown based on the two research questions (RQ) of the study, which are:

1. What are the effects of collaborative text reconstruction on the content, vocabulary and grammar of the rural Form 4 pupils' narrative writing?
2. How does collaborative text reconstruction help to enhance rural Form 4 pupils' narrative writing skills?

Data from pre-test and post-test, document analysis and focus groups semi-structured interview were analysed for RQ1. The result from the pre-test and post-test were shown in Figure 1.

Figure 1: Result of Pre-test and Post-test



Pre-test and post-test were carried out to investigate the effects of collaborative text reconstruction on Form 4 pupils' narrative writing. All participants showed overall improvement in the post-test. From the results, P6 had the most significant increase in marks, which is 17 marks followed by an increase of P4 and P1 who had an increase of 10 marks (51 to 61) and 9 marks (55 to 64) respectively. The rest had slight improvement of a few marks which are 4 marks for P2, 3 marks for P3 and 2 marks for P5. Table 2 showed the difference in marks obtained by the participants.

Table 2: Difference in Marks Obtained by Participants

Participant	Pre-Test (100%)	Post-Test (100%)	Difference in Marks
P1	55	64	+9
P2	53	57	+4
P3	50	53	+3
P4	51	61	+10
P5	51	53	+2
P6	54	71	+17

The difference in marks showed overall improvement of participants in the test. The data had revealed that collaborative text reconstruction had a positive effect on the rural Form 4 pupils' narrative writing. Thematic analysis of the data obtained from document analysis and focus groups semi-structured interview were categorised into three main themes (a) improvement in writing proficiency; (b) improvement in contents in writing; and (c) improve usage of word choice.

Improvement in Writing Proficiency

Based on the interview responses, interview responses showed that during writing, participants were particularly focused on English language structure, especially in producing grammatically correct simple sentences. Most significant responses were using the correct tense when writing their narrative essay.

"My friends check my grammar and I check my friend's grammar. I remember to write '-ing' and when to put '-s'." (P1, FGI)

"I listen to '-ed', past tense and present tense in the recording. I be careful when I write my essay. We correct each other grammar." (P4, FGI)

"I can teach my friend about past tense." (P6, FGI)

Participants' responses indicated their awareness on the English grammar were increased after the text reconstruction task. This is in accordance with Storch (1998) who claimed that text reconstruction successfully pushed learners in production of accurate text or passage because text reconstruction is a consciousness-raising (C-R) task that effectively promotes improvements in grammar. The participants were force to pay close attention to their grammar and sentences while reconstructing the text with only the notes that they had written down. This was due to the participants who wanted to reconstruct the text as similar to the original text. Document analysis showed decrease in simple past tense mistake when comparing pre-test with post-test.

Improvement in Contents

"I learn new ideas from my friends and I can discuss with him." (P2, FGI)

"I got the idea from the task we did that day." (P4, FGI)

"We have more ideas to write because we exchange ideas together." (P5, FGI)

"We got some different and some extra ideas to write after discussing." (P6, FGI)

Participants claimed that by completing the text reconstruction tasks, they were able to discuss ideas in writing with their friends. This showed that participants were actively involved in their own learning process. This is in line with Tobias, & Duffy (2009) who believed that active learning means pupils take charge and monitor their own learning process. Response from participant 6 is parallel to Vygotsky (1978) who claimed that knowledge is not solely transmitted from a teacher to a pupil but constructed by the learner himself. As participants were required to brainstorm in pairs for ideas in the

tasks, they were actively involved in their own learning process and knowledge were transmitted between participants. Data showed that Participant 4 utilised idea from previous task to complete a new task. Document analysis also showed similar ideas that were used on previous task, appeared in the new text reconstruction task. As every new text reconstruction task was related to previous tasks pupils were able to recall and use ideas that they had learned previously. Pupils work together in pairs as the teacher give guidance and control steps of learning scaffolds. This is parallel to Vgotsky's Zone of Proximal Development and Krashen's $i+1$.

Improvement in Word Choice

"I can improve my vocabulary. I can learn some vocabulary from my friend that I don't know." (P1, FGI)

"My friend helps me to get my spelling correctly changed to - I think got, because I very bad in spelling, my friend helps me to get my spelling correctly. If not usually I don't know." (P2, FGI)

"I think very good when can work together. I always forgot to use the word. Participant 1 tell me to use this word." (P5, FGI)

"I always forgot to use the word. Participant 4 tell me to use this word." (P6, FGI)

Participants' responses showed that they were actively involved in their own learning process. They were able to understand the task given and discuss with their partner in order to use the correct vocabulary. Collaboration can be seen when participants helped each other in using the correct words for their tasks. Document analysis showed better usage of vocabulary in their narrative writing.

RQ 2 employed thematic analysis of the data obtained from the field notes and focus groups semi-structured interview. Thematic analysis of the data obtained from field note and focus groups semi-structured interview were categorised into three main themes (a) collaborative learning; (b) increase in motivation; and (c) socioeconomic status.

Collaborative Learning

Data from the field note indicated that participants mostly rely on their partners to complete the tasks given. Interview data suggested that cooperation and teamwork played an important role during their tasks. This is parallel to constructivist learning theory that learners to construct their own cognitive and social understanding through the discussion about narrative writing with their partner. As shown by P1, the collaborative text reconstruction allowed immediate feedback response from the partner.

"During the pre-test I still struggle when want to write words that fit the story essay, I always forgot to use the word until teacher conduct the activity then P2 told me to use this word." (P1, FGI)

"It was challenging to listen and remember, but it is the teamwork that made everything easier. (P2, FGI)

"Yes, because I can learn to cooperate with my friends when doing this task. If we cooperate, we can get things done faster. (P4, FGI)

"Yes because I learn to work with people not working alone. If I work with people I can get more things, can know more things." (P6, FGI)

Increase in Motivation

Field note indicated that in this study, participants' affective filter was prompted by motivation. Interview showed that participants were mostly motivated by their peers. The findings showed that collaborative text reconstruction provided a positive learning environment, allowing broad discussion with other participants, and provide opportunity for unrestricted imaginations on narrative plot. Data indicated that participants in this study, especially P2, did not experience any uncomfortable feeling

towards their partners during discussion, as they were friends of the same class since the beginning of their secondary school life.

“Uh... I feel that I get more ideas because of my experience during the activity. I get some ideas from my friends during the activity. So, it was easier for me to write.” (P3, FGI)

“I can focus and remember some written words or experiences that can be used in writing narrative essay. It is because the activity made me and my friend discuss and joke about many things, so I can remember.” (P4, FGI)

“Maybe. If got more activities like this then I will write more, even in SPM I will choose narrative essay. Because this activity help me see that narrative essay is easy to write. Just need imagination and experience.” (P4, FGI)

“Yes. It’s so fun and easy to catch. Usually teacher talk only I don’t understand. Now I can understand more and know more words I can use them to write my future narrative essays with less problems. (P6, FGI)

Socioeconomic Status

P3 and P5 showed slight improvement in their post-test. The interview data revealed that due to the family background and socioeconomic status of the family. P3 mentioned that she was interested in doing the collaborative tasks reconstruction in school. However, family complication at home affected her performance during post-test. P5 explained that the environment around her at home affected her learning in writing. She explained that her family was poor and it was difficult to get reference materials in order to learn writing. She mentioned that she was required to work in order to help her family which limited her time to visit the library and study.

“I’m poor. No reference books. Problems in family that day. The tasks, I like listening to the stories.” (P3, FGI)

“Err... Environment. My family quite poor, difficult to buy books. I need to work to help my family get money. I got no time and go library.” (P5, FGI)

In conclusion, collaboration among the participants in completing the text reconstruction had resulted in more ideas generated to write a narrative essay. Pair work adopted in this research had showed similar results to Wigglesworth and Storch (2009) who claimed the usefulness of collaborative effort in improving language performance in terms of writing. The teacher had played a vital role in facilitating the interaction between the pair work in order to avoid limited engagement whereby the less active participant would not benefit much, especially when learners pool their knowledge together in discussions as suggested by Storch (2008).

Implications

From the findings, it can be concluded collaborative text reconstruction has positive effect on rural low proficiency pupils’ narrative writing. Collaborative text reconstruction was an effective way of improving the contents and the usage of grammatical items in writing tasks. Pupils should be encouraged to work together in assisting one another in language learning such as giving and receiving feedback. Teachers could include broader categories of fun collaborative learning. Administrators in rural schools that lack of ICT facility could also put more emphasis on collaborative tasks without using ICT.

Considerations on suitability of pair work are necessary. This study showed that collaborative text reconstruction works on narrative writing. Other researches had studied on its effect upon other genre essay writing and other grammar consciousness-raising tasks. Educators should refer more existing studies to determine which tasks are feasible for collaborative text reconstruction. Educators

could also refer to their past lessons and their current pupils' level to determine the best practice for collaborative text reconstruction.

Text reconstruction task could serve in understanding grammar usage but not language acquisition. It could be used by educators in teaching writing to enable students understand the importance of the grammar component in writing. Teacher could also use this task to demonstrate the use of certain grammatical items intended to address in students' writing in class. If the focus is on grammar itself, teachers could also use this task to show the forms of the language in a written context like a holiday plan for future tense. Schools could use it as remedial task in grammar lessons to help students to understand the usage. Advanced students would benefit further in understanding grammar usage from text reconstruction.

Recommendations for Future Research

This study focuses on rural low-proficiency Form 4 pupils. More studies with longer period are needed on this set of pupils to determine their suitability for collaborative text reconstruction in improving writing. Most of the available studies on collaborative writing and text reconstruction had been conducted on overseas adult learners, undergraduates of ESL or EFL background and higher secondary students. The lack of diversity of local educational levels has to be addressed. More samples are needed to be included into this study as well. Future researches should have more numbers of the similar set of pupils to prove or disprove the result of this study.

More similar studies could also be conducted quantitatively and conducted in other various type of school such as rural primary schools. More writing genres like argumentative and descriptive writing should be researched on. This study deals only with narrative writing. Existing researches have dealt with academic writing and expository writing, particularly in the tertiary level for undergraduates and adult learners. It is recommended that researches on collaborative writing tasks should be carried out onto other genres to investigate the tasks' benefits. This study hopes to contribute the findings of the effectiveness of collaborative text reconstruction in improving pupils' writing into existing literatures.

Conclusion

This study has revealed that collaborative text reconstruction has positive effects on low English proficiency students' narrative writing. Participants showed positive emotion, increased in motivation, more focus on grammar items and increase in ideas to write narrative essay. It is thus important to consider the use collaborative text reconstruction among low English proficiency students, especially in rural school.

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THE EFFECTIVENESS OF USING VIDEO PHONEMES ROUTINE TO ENHANCE NA1 LINUS PUPILS TO RECOGNIZE THE SOUND OF LETTERS.

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Abstract:- *The usage of video routine in teaching the sounds of letters in an ESL primary school classroom can be an innovative and engaging tool compared to the conventional teaching of phonemes using pictures and non-native English speakers in introducing new phonemes. Teaching year one weak pupils might need this kind of teaching, and it is more alarming if the majority of the pupils in the class are the LINUS Non-Achiever Level 1 (NA1) pupils who did not recognize the sounds of the letters. To resolve this, the Video Phonemes Routine was chosen as an alternative tool to introduce phonemes to the weak (NA1) students. This method uses the technology tools such as LCD projector, audio speaker and any suitable phonemes video as a daily routine in the classroom. The usage of the video phonemes as a routine managed to allow two-way interactions of sights and sounds for the non-native speakers to identify the phonemes of letters. This study uses the quasi-experimental research. The participants of this study consist of 20 pupils from a school in Jalan Kuchai Lama, Kuala Lumpur. This research uses two instruments: using test and giving questionnaire to the pupils. It is proper to report when students were taught using the Video Phonemes Routine, as there was a significant increase in student's ability to recognize the phonemes of the letters.*

Keywords: Video, Phonemes, Routine, LINUS, Non-Achiever Level 1 (NA1)

Introduction

According to Lialikhova (2014), the life of 21st century pupils in today's world is saturated with technology. Therefore, it seems important that teachers nowadays should know how to use digital equipment in teaching and learning. The use of standardized and content-controlled video in an ESL primary school classroom can be an innovative and engaging tool in introducing new phonemes. In this current situation, the usage of the video phoneme as a routine had fulfilled the needs of the current generation's way of learning. Besides that, Seery (2015, as cited in Hofstad) mentioned that studies conducted on the usage of videos in teaching and learning have shown that they potentially can be more efficient in conveying information to students than the traditional lecture counterpart. In the teaching of English language as a second language, the role of video phoneme routine is even more essential. This is because the pupil at this age is not suitable to learn everything overtly due to their level of mind. Moreover, this situation is more alarming if most of the pupils in the class were the LINUS Non-Achiever Level 1 (NA1) pupils who did not recognize the sounds of the letters. Shalaway (1998, Activity Works, 2012), as the usage of routine make the teaching and learning in classroom becomes easier by helping teachers to save valuable classroom time and said that the usage of routines had become the backbone of daily classroom life. Thus, implementing it in the classroom will help to provide various advantages to the pupils. When the video phonemes routine is taken into account in teaching and learning, it acts as one if the catalyst to attract the pupils to learn the sound of the letters in an interesting

way. According to Hayes (2001), by using routine in the classroom, it ensures the pupils to get effective direct instructional as well as inserting the element of excitement throughout the lesson. Besides that, Harper (2015) stated that routines are a kind of teacher directed part in schools that act as the backbone of the teaching practice of any school today. The pupils can learn the phonemes unconsciously while singing and dancing happily in the classroom. It creates a positive learning atmosphere where the pupils can learn the phonemes without any pressure, rather than by using traditional way by forcing them to drill and memorizing the sounds without considering the pupils feelings and interest to learn.

Statement of the problem

In past years, the performance of year one pupils in the LINUS program was quite unpredictable. This is because it depends on the English language competence of the pupils to enter the school as a year one student. Besides the lack of English language skills, there is also the issue when some of the pupils who did not know how to read and even worse some of them do not even recognize the letters shown by teacher. This could be happen due to the ignorance of the parents, the inefficient of the kindergarten or the pupils had forgotten what they had learnt. In order to overcome this issue the usage of the video phoneme routine was implemented during the teaching and learning process. Therefore, there is a need to present the data of using the video phoneme routine in order to show the changes that happened to the NA1 pupils' phonemes recognition.

Significance of the study

This research will prove that the video phoneme routine will help to improve NA1 LINUS pupils to recognize the phonemes. I am positive that the usage of the video phoneme routine would help the pupils to know the sound for each letters. In this study, the investigation to know whether the method of using video phoneme routine is capable to improve NA1 LINUS pupils to recognize the sound of letters. Besides that, the implementation of the video phoneme routine in the classroom can be further improved by letting the pupils to learn through video shown in the class. This research indirectly show the way to the educators to make the quality of their teaching practices in the classroom. It allows allow teachers to have new insights in teaching narrative writing effectively. Looking at this point, this study allows me to reflect on the current situation which is specifically Malaysian primary ESL classroom and strive to mend the flaws for the betterment of education.

Literature Review

The fulfilment of the PPIMI program in the Malaysia education system is one of the greatest examples that can be shown to point out the seriousness level of having English as the second language in Malaysia. Looking through at this point, the effort to enhancing English as the second language must be concomitant with the vast growing of the usage of the modern technology in Malaysia. For that, the usage of ICT tools such as internet and video are eagerly been promoted to be used by the Malaysian academicians in order to obtain a better learning process for the pupils.

1) Reading skills

One of the prominent skills that one must have is the skill of reading. It is understood that reading is actually one of the four important skills which is one of the essential competence of a person in the process of learning English (Bharathi Naidu, Marshal Briewin & Mohamed Amin Embi, 2013). Indeed reading is one of the processes of uplifting one level of knowledge, but it is known that if readers always try to understand all information in a text, they tend to get their mind to become confused. According to Rice (2009; as cited in Bharathi Naidu , Marshal Briewin & Mohamed Amin Embi, 2013), reading is actually a process of interaction between the reader with the reading materials in order for that particular reader to get the meaning of the reading text. Besides that, according to Hassan (2005; as cited in Melor Md Yunus et. al, 2013) reading can be understand as the intention of building meaning by a

person. If it is known that, without that criterion, that manner cannot be called as an act of reading. Furthermore, during reading process takes place, one will try to pick up as many as information as one can get continuously. Thus, in order to connect all that gathered input, one must try to remember only the important things in the mind, adjust the funds of the knowledge for the purpose of incorporating new ideas or interpret them in other way. Besides that, reading the text in between the lines is known to be one of the ways to get at a deeper understanding and evaluate the information and the gained ideas.

2) Phoneme of letters

Phonemes of letters or the sounds of each of the alphabet can be understood as the smallest unit of sound. Moreover, in schools, to learn phonemes is one of the listed to do by teachers in the content standard. In fact, phonemes are taught to pupils at least once in every week in their classroom (SchoolRun.com, n.d). Besides that, the ability to recognize phonemes of letters can help to improve fluency of text reading. This can be seen from the past research converge that had been done by the researcher. That is why; it can be declared that the phonemic awareness is one of the fundamental contributors to the early decoding and the recognition of words (Melby-Lervåg, Lyster, & Hulme, 2012).

3) LINUS program in primary schools

According to Chew (2015), LINUS is a program that has been implemented by the Ministry of Education in every primary school in Malaysia. This program has the vision to improve the level of literacy and numeracy competence of the pupils in year 1, year 2 and year 3 since the year 2010. According to the feedbacks and response from the pupils, this program was to be said as a program that can give positive improvements for the pupils. Therefore, most of the respondent said that LINUS program should be continued with full support from other party as well such as the parents and the community around the school. This is said to be so because of the effectiveness of the program that the pupils saw that need to be continued in order to produce young generation who is effective in their reading competence.

4) Videos as a teaching tool

Indeed, teachers' nowadays must quickly try to adapt with the current needs of the pupils in this new millennium generation in schools. Today's pupils in school are keen to learn via advanced way of teaching in the classroom. That is the reasons why most of research that had been conducted had found that it is effective to use the ICT tools such as video in order to teach the pupils in class. By using video teachers can help increase the pupils to improve their knowledge better. Other than that, pupils should also be encouraged to take part in the attainment of need knowledge by using the video as learning tools (Kashi & Doost, 2015).

Besides that, according to Vidal (2014), the usage of videos for teaching and learning were motivating for the pupils. It promotes the use of ICTs to the pupils and act as a source that brought real life situations into the classroom. Moreover, according to Hay (2017), by using video in teaching and learning, it would give the pupils to experience an authentic and best way of learning when it came to learning such as grammar and pronunciation and that way it would deliver more information for the pupils.

5) Classroom Routine usage

In the class, must-do-things that had been repeated every day before the teacher start the learning process in the classroom such as reading the classroom rules aloud or doing several exercise are well known by everyone to be called as a classroom routine. According to Shalaway (1998, Activity Works, 2012), the usage of routines had become one of the important things-to-do daily in the classroom because it helped teachers to run the process of teaching and learning in classroom by helping teachers to save valuable classroom time and make the pupils to learn easier and achieve. Other than that, it gives the teachers to

pace the practice and gives rapid feedback on the performance to all the pupils in the classroom. Then, according to Hayes (2001), by using the routine in the classroom, it can ensure the pupils to get effective direct instructional as well as inserting the element of excitement throughout the lesson. Besides that, Harper (2015) stated that routines are a kind of teacher directed part in schools that act as the backbone of the teaching practice of any school today. Hence, it portrays the intention of this study where it manifests on the usage of a video phoneme as a daily routine for the year 1 weak pupil. had learnt from the program, must be nurtured and continued.

2) NA1 reading competence **Table 1:** *NA1 LINUS pupil's test results.*

No.	Pupils	Pre-test	Post-test	Score difference
1.	A	0	4	4
2.	B	0	4	4
3.	C	0	3	3
4.	D	1	4	3
5.	E	0	4	4
6.	F	1	4	3
7.	G	2	4	2
8.	H	1	4	3
9.	I	1	3	2
10.	J	0	4	4
11.	K	1	4	3
12.	L	2	4	2
13.	M	1	4	3
14.	N	1	4	3
15.	O	1	4	3
16.	P	1	4	3
17.	Q	2	4	2
18.	R	2	4	2
19.	S	2	4	2
20.	T	2	4	2

Source: Results from the pre-test and post-test.

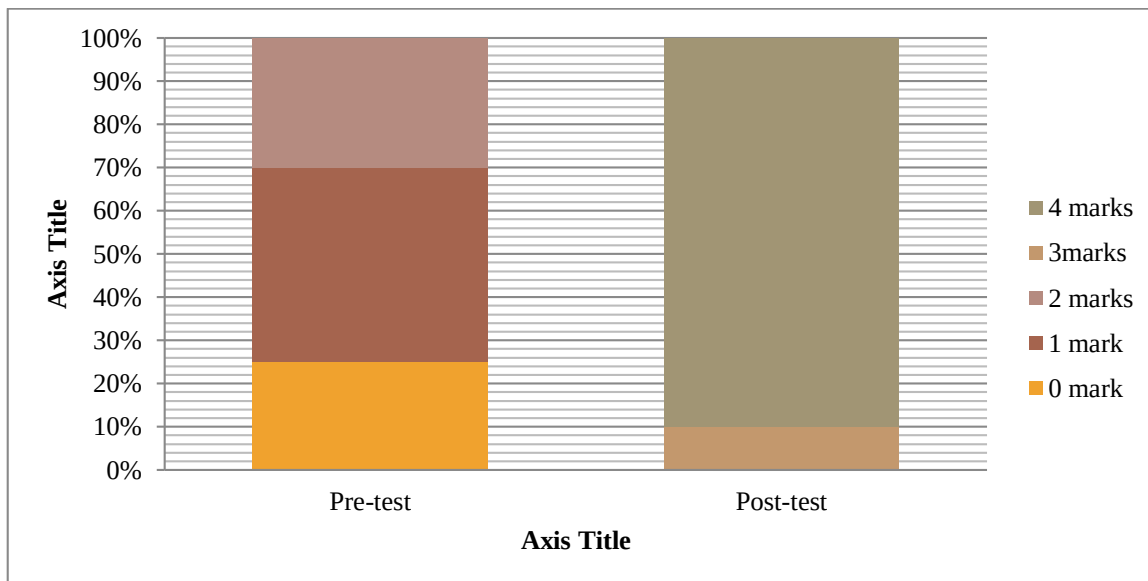


Figure 1: NA1 LINUS pupil's tests results.

Source: Results from the pre-test and post-test

Discussion

1) The LINUS program

LINUS is a program that has been implemented by the Ministry of Education in every primary school in Malaysia (Chew, 2015). This program had given to most of the involved pupils with many positive results. However, according Fardy Bunga (2018) had reported in Berita Harian on 30th November 2018, that the LINUS program that had been implemented since 2009 was announced recently by the government not to be continued anymore starting from the year 2019. The schools will operate their own program in improving pupil's competence in learning. This announcement had shocked many people including the teachers and the parents because it was thought by many that LINUS program was relevant and should be continued as it had gained the understanding and support from everyone. But it does not change the reality that the LINUS program will be no more starting in 2019. Although the program will no longer executed, the problems that the NA1 pupils are facing still need to be solved and nurtured by the teachers in schools. Regardless what kind of new program that might replace the previous one, teachers need to be well prepared and stay focus in handling the situation. The NA1 pupils were the group of pupils who needed help in recognizing phonemes of letters. As the pupils had been exposed with the video phoneme routine, they managed to show some progress. From the result of the test, it shows that the pupils were doing great. There were 5 pupils that got 0 marks for the pre-test. But, after the intervention had been implemented there were no pupils that got 0 marks. In fact, there were 18 participants that manage to score full marks. While the other 2 pupils just got only one question incorrect. From here, it shows that, although the LINUS program were no longer be continued in schools, but the culture of innovation and problem solving that the teachers

It is true that reading processes can help to improve the cognitive skills of a person, however in the case of the NA1 LINUS pupils, it is a known fact that the pupils need more guidance and attention from the teachers as had tried their best to improve their reading skills. According Bharathi Naidu, Marshal Briewin & Mohamed Amin Embi (2013), one of the important skills that one must acquire is the reading ability. This is because reading is known to be one of the important knowledge the must good at in order to learn the English language. The NA1 pupils were the group of pupils who need help in recognizing the lowest level of the reading competence which is the recognition of the sounds of letters. According to the findings, the results of the post-test had shown that the pupils had managed to improve themselves as they had been exposed to the video routine in learning phonemes. From this occurrence, it give the hope for many people to see that the effort that had been given to the pupils were effective in helping

the reading ability of the pupils. When the pupils had the chance to improve their reading, it might help them to reach more improvement in their cognitive development. According to Rice (2009; as cited in Bharathi Naidu , Marshal Briewin & Mohamed Amin Embi, 2013), reading is actually a moment of linking between the mind of a person who is reading, with the input that he or she is reading.

3) Video usage in teaching and learning

Nowadays, teachers were encouraged to teach the pupils in the classroom using an advance teaching materials. An advance teaching materials here are meant teaching by using teaching aids such as educational games, computers and videos. The usage of videos in teaching the pupils the sounds of letters were the main focus of this paper. Apart from using video as a teaching tool to teach the pupils phonemes, its way of implementation had been improvised to be used as a routine in the classroom. According to Vidal (2014), the usage of videos in the classroom for teaching and learning were able to motivate for the pupils in the process. Besides that, it brings more positive returns as the usage of the technology such as laptops, LCD projectors, speaker and others had exposed the ICTs to the pupils and act as a source that brought real life situations into the classroom. Moreover, Hay (2017) had mentioned that, by using video in the classroom, it would give the pupils to learn better as it would deliver more information for the pupils. Furthermore, the pupils should also be encouraged to take part in the attainment of need knowledge by using the video as learning tools (Kashi & Doost, 2015). That was the reason why the pupils were so energetic and happily dancing as the usage of the video had been utilized when teaching the phonemes. According to the findings, most of the pupils had given a full score when they were asked whether they had enjoyed the lesson. Through the responses from the pupils it is clear the usage of the video in the teaching and learning process was relevant as it can boosts the efficiency of the learning process.

4) Use routine to teach phonemes

Phonemes is one of the crucial part of reading that had been always been taken seriously by the teachers based on the content standard. An addition, one of the suggestions that had been put into was to ensure that the sounds of letters are taught once to pupils in the classroom for every week (SchoolRun.com, n.d). By looking this matter in the same perspective, a step to teach phonemes by using routine was inspired in this research. The usage of routines managed to help teachers to save time in their teaching and make the pupils to learn easier and fun to go through the process of learning in classroom. Hence, it had become one of the important things-to-do daily in the classroom by most teachers (Shalaway, 1998; Activity Works, 2012). In this research, it can be said that the usage of routine in teaching the pupils phonemes had been an effective tool to be used. According to the findings, the mark of the pupils in the post-test was better compared to the marks before the intervention. Moreover, through the questionnaire responses, it can be said that the pupils had shown their confidence in answering the question in the test after the intervention was exposed to them. During the lesson by using routine, it managed to make the atmosphere of the class to be alive and awaited as the pupils had been expect to do something fun. As the pupils waited for the routine to happen, this had made the pupils mind to be more focused and active. It brings the chance for new input to be learned by the pupils. This is in line with Hayes (2001), as he said that by using the routine in the classroom, it can enables the pupils to obtain effective direct instructional as well as inserting the element of excitement throughout the lesson. Thus, making routines to be a kind of teacher's helpful teaching method in schools that act as the backbone of the teaching practice of any school today (Harper, 2015).

Conclusion

Through this study, the usage of the video phoneme as a daily routine had made it possible for teachers to help the NA1 pupils in their ability to know and memorize the phonemes of the letters during the teaching-learning process. It is a well-known fact that the usage of video is not a new thing in today's

classroom, it had been a big struggle for the teachers to apply this teaching tool in the classroom, due to the technical limitation that a particular school have. But as a teacher, one must try their best in putting the effort in teaching the pupils. Moreover, teacher nowadays must realize the importance of using the correct routine in their teaching in order to get the expected result to happen. A good understanding of the usage of the right routine is needed in today's teaching and learning. According to Wilson and Wallace (2000; Fatma Ahmed, 2014), as they had stated that the usage of videos in the classroom can increase the pupils interest to learn. Moreover they also said that it can create a learning pleasure to the pupils to be more focus during the learning process. Moreover, according to Hay (2017), by using video in the weak pupils the phonemes of letters, it would let the pupils to feel the authenticity and the best version of learning knowledge.

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THE SUCCESSFUL FACTORS OF GOVERNMENT FINANCIAL MANAGEMENT INFORMATION SYSTEM (GFMIS) IN JORDAN PUBLIC SECTOR: A PROPOSED FRAMEWORK

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Abstract : *GFMIS was initiated by the Government of Jordan (GoJ) in 2010 to replace a ‘closed’ financial management system that was previously used by the government and its agencies. Yet, GFMIS has several users-related issues in which if the issues are not addressed properly, it will ultimately affect use behavior, intention to use, continuous usage, the level of satisfaction of the system users, and consequently the success of GFMIS. In addressing these issues, the present study investigates the factors that are responsible for the success of GFMIS implementation from the perspective of public employees in Jordan using Delone and McLean’s IS success model, which is regarded as the most cited model to explain IS success that links use behavior, user satisfaction, and the net benefit. Via far-reaching literature survey, this paper presented an empirically-based conceptual discussion to address the identified GFMIS research problems. The model theorises that information quality, system quality, service quality, user resistance, training, and user involvement are the factors that can enhance net benefits of GFMIS in Jordan’s public sector, and consequently guarantee success of the GFMIS. Thus, the study’s finding is expected to extend the present body of knowledge in IS implementation where issues relating to theoretical and practical aspects of GFMIS research will be explicated. In addition, it is hoped that the study will assist stakeholders and policy makers in any developing nation on how they can ensure GFMIS success. However, the proposed model in this work can be empirically solidified further via collection and analysis of relevant data.*

Keywords: *GFMIS, IS Success Model, Net Benefits, GoJ.*

Introduction

In 2009, the Jordanian government commenced the implementation of its second fiscal reform project (FRP II), which was an offshoot of the USAID project. This initiative was operated in six components, in which one of the projects was government financial management information system (GFMIS). GFMIS consolidates accounting and financial information from all ministries, departments and agencies (MDAs) under one network (server) controlled and managed by Ministry of Finance (MoF) (USAID, 2014; Youssef & Alsharari, 2017). In addition, GFMIS was designed to completely automate budget preparation, budget execution, and financial reporting (Dener, Watkins, & Dorotinsky, 2011; Shannak, 2015; USAID, 2012). Therefore, the adoption of GFMIS has tremendously improved government’s and employees’ performance (Shannak, 2015).

Nevertheless, GFMIS faces several users-related issues that need immediate attention (USAID, 2014). These issues, if not handled properly, would adversely affect use behavior, intention to use,

continuous use, and ultimately user satisfaction of the system (Petter, DeLone, & McLean, 2013). Among the challenges faced by GFMIS users in Jordan include inadequate incentives, lack of support, resistance to change, lack of awareness, education level of the system users, and inadequate provision of system's training (Shannak, 2015; USAID, 2014; USAID, 2013). Moreover, increased number of users over time placed greater burden to the GFMIS system. Thus, the system needs further hardware upgrade to correspond to the increased number of users (USAID, 2014a).

These challenges ultimately affect use and user satisfaction of the e-government system. This corresponds to the claim that the use and user satisfaction remain to be the two most important criteria in determining IS success in an organisation (DeLone & McLean, 2003). As Alryalat, Dwivedi, and Williams (2013) further emphasised, an organisation's IS will not produce positive outcomes unless the end-users accept, adopt, and ultimately use the system.

Although there are extant studies on GFMIS in Jordan (e.g., Sawalha & Abu-Shanab, 2015; Shannak, 2015; Youssef & Alsharari, 2017), researchers have yet to study the effects of technological factors (i.e., information quality, system quality, and service quality) on the GFMIS use, user satisfaction, and ultimately the net benefit. Therefore, to extend the existing literature, the present study aims to examine the interrelationship among the technological factors, GFMIS use, user satisfaction, and net benefit. It is expected that the findings of the present study would be useful, because it aims to understand the factors that determine user behavior and user satisfaction, especially from the individual level perspective.

In achieving the objective of the current study, an updated IS success model by DeLone and McLean's (2003) is adopted and expanded. The model is regarded as the most cited model to explain IS success by linking use behavior, user satisfaction, and the net benefit (Petter, DeLone & McLean, 2008, 2013; Urbach & Muller, 2012). The model has attracted considerable revisions and extensions ever since it was created (DeLone & McLean, 2003, 2016; Petter & McLean, 2009; Petter et al., 2008, 2013; Urbach & Muller, 2012).

Despite the fact that some prior studies have examined various factors (e.g., information quality, system quality, service quality, training, user involvement, and user resistance) that potentially influence IS usage, no known research has incorporated these factors in a single model. Hence, the present study intends to incorporate these factors in a single model to assess the intricate relationships among those factors and the net benefits of GFMIS as perceived by the employees in Jordanian public sector.

More specifically, this study expands the updated IS success model by incorporating three relevant variables (i.e., training, user involvement, and user resistance). This study anticipates training as a viable moderator to explain (i) the relationship between GFMIS use and net benefit, and (ii) the relationship between user satisfaction and net benefit. To expand the model further, this study proposes user involvement as a moderating factor between user satisfaction and net benefit. This present study then examines the direct relationship between user resistance and GFMIS user satisfaction.

This paper is divided into four interlinking sections. The discussion in this section has signified vital issues relating to the GFMIS success that are leading to the research objective. The subsequent sections elaborate on relevant literature review. The third section illustrates the research framework while the final section provides the conclusion of the study.

Literature Review

Considering the discerned issues in the introductory section of this study, this current section reviews the extant literature to substantiate the raised issues, and then addresses them. Thus, the section will be arranged in the following order:

DeLone & McLean's IS Success Model.

Key Determinants of Successful GFMIS Using IS Success Model.

DeLone & McLean's IS Success Model

IS success model (DeLone & McLean, 1992) was introduced to provide a comprehensive and extended definition of IS success. Chiu, Chao, Kao, Pu, and Huang (2016), Petter and McLean (2009), and Urbach and Müller (2012) posited that this phenomenon was invoked from 1981-1987 which led to the creation of IS success classification by DeLone and McLean (1992). Despite various models have been proposed to measure IS success, the Delone and McLean IS Success Model is regarded as one of the preferred models, particularly due to the fact that the model provides a well-established guideline and comprehensive framework (Bossen, Jensen, & Udsen, 2013).

Later, DeLone and McLean (2003) proposed a revised IS Success model in responses to the strengths, weaknesses, and criticisms reported in the earlier model (e.g., Pitt, Watson, & Kavan, 1995; Seddon, 1997; Seddon, Staples, Patnayakuni, & Bowtell, 1999). The primary difference between the original and the updated model is the inclusion of service quality which represents the significance of service and support in a given successful e-commerce system (Urbach & Müller, 2012). In addition, intention to use has been made to measure use, while individual impact and organisational impact are collapsed into a more parsimonious net benefits construct. Wang and Liao (2008) suggested that a research based on e-Government system (IS applications) can be done using the updated IS success model. Thus, it is imperative to conduct a research on the success of IS in the developing nations, like Jordan, by adopting and expanding the updated IS success model to explain the variations in end-user satisfaction and success towards using GFMIS in the context of Jordan.

Key Determinants of Successful GFMIS Using IS Success Model

Relationship between Information Quality and Use

Information quality constitutes the desirable characteristics of an IS output (Petter et al., 2008). It involves the quality of the information produced by the system and the usefulness of such information to the user (Urbach & Müller, 2012). Information quality is an important construct in IS success model since it has a positive effect on usage (Wang & Wang, 2009) and has a significant impact on organisational performance (Petter et al., 2013).

Considerable number of studies (e.g., Laumer, Maier, & Weitzel, 2017; Stefanovic, Marjanovic, Delić, Culibrk, & Lalic, 2016) reported positive effect of information quality on the use of web-based learning systems. In the Jordanian context, Al-Shibly (2014) argued that to increase the net benefit of the system, organisations need to develop an IS with better information quality, system quality, and service quality, which, in turn, will influence user system usage behavior and satisfaction evaluation, and the corresponding perceived net benefit. Owing to the above discussion, the present study proposes that:

- H1 : There is a positive relationship between information quality and use of GFMIS in Jordanian public sector.

Relationship between Information Quality and User Satisfaction

Petter et al. (2008) and Wang and Yang (2016) have indicated a positive relationship between information quality and user satisfaction. The quality of the IS information strengthens users' confidence and assists them in using the IS towards achieving organisational benefits (Bradford & Florin, 2003). Furthermore, the fundamental core of IS is to manage information and to provide employees with the information they need (Petter, DeLone, & McLean, 2012). Moreover, information quality represents an important factor that enhances user satisfaction and information relevance (DeLone & McLean, 2016). Given the above explication, the present study postulates that:

- H2 : There is a positive relationship between information quality and user satisfaction of GFMIS in Jordanian public sector.

Relationship between System Quality and Use

To ensure the the success of an e-Government system, authorities involved need to guarantee better usability and user-friendliness (Stefanovic et al., 2016). When IS applications meet the users' needs, the level of satisfaction of such users will increase and promote greater use of IS usage (Ghobakhloo & Tang, 2015). As a result, a higher system quality leads to a greater use of the system (DeLone & McLean, 2016). Hence, this study proposes that:

- H3 : There is a positive relationship between system quality and use of GFMIS in Jordanian public sector.

Relationship between System Quality and User Satisfaction

DeLone and McLean (1992; 2003) posited that when an IS has quality features, such as timeliness, accurate, and efficient, users will be satisfied and will continue using the IS. System quality guarantees ease of use, system reliability, and system flexibility (DeLone & McLean, 2016; Petter et al., 2013), as well as enhances user satisfaction at an individual level (Laumer et al., 2017; Tam & Oliveira, 2017). Existing studies (see, for example, Wang, Zhang, Song, & Ren, 2014) discovered a positive effect of system quality on user satisfaction. In a similar vein, Petter and Mclean (2009) suggested that quality system is expected to improve its usage and ultimately increases user satisfaction. Given the above discussion, the present study postulates that:

- H4 : There is a positive relationship between system quality and user satisfaction of GFMIS in Jordanian public sector.

Relationship between Service Quality and Use

Service quality refers to the quality of support that users receive from IS department and IT support personnel (Urbach & Müller, 2012). As DeLone and McLean (2003) argued, service quality is important as it has to do with customer satisfaction. Thus, lack of service quality and poor user support could lead to loss of customers and decrease in sales. In addition, Chiu et al. (2016) found that system's guide service and replies to users questions have a positive influence on intention to use and user satisfaction. Specifically, in the context of mandatory systems, the positive interactions with IS personnel promotes more satisfactory experiences in using the system (Gorla, Somers, & Wong, 2010). This is because users may feel encourage to learn and try more of the available functions of the implemented system (Hsu, Yen, & Chung, 2015). Responding to the preceeding discussions, the present study postulates that:

- H5 : There is a positive relationship between service quality and use of GFMIS in Jordanian public sector.

Relationship between Service Quality and User Satisfaction

Floropoulos, Spathis, Halvatzis, and Tsipouridou (2010) noted that IS that is characterised with service quality is an essential tool that can improve work effectiveness and the quality of services, simplify and standardise functions, as well as improve decision-making processes. Subsequently, with high level of the service quality, IS usage will be enhanced. The positive effect of service quality on user satisfaction was discovered by several IS studies (see, for example, Gorla & Somers, 2014; Mohammadi, 2015; Wang & Wang, 2009). Mohammadi (2015), for instance, in his study of e-learning, found the importance of service quality on user satisfaction. Owing to the above discussion, the present study proposes that:

- H6 : There is a positive relationship between service quality and user satisfaction of GFMIS in Jordanian public sector.

Relationship between User Resistance and User Satisfaction

In a closed system, people tend to think of being inhibited by the system, which unavoidably lead to resistance of the system (Zhang, Lee, Huang, Zhang, & Huang, 2005). Hence, user resistance in IS becomes an adversative reaction or the disapproval of users to perceived change resulted from the implementation of a new IS (Kim & Kankanhalli, 2009). User resistance is a crucial factor to deal with due to the variations in technical and social systems outcomes (Haddara & Moenb, 2017). Users whom resist to the new IS potentially cause budget overruns, extension of project duration, and underutilisation of the new system, which subsequently affect user satisfaction (Adeleke, 2016; Haddara & Moen, 2017). In a similar respect, Jiang, Muhanna, and Klein (2000) found that user resistance has a negative effect on strategies promoting acceptance across system types. Likewise, Choi, Yun, Kim, and Park (2014), in their study of the impact of doctors' resistance on the success of the Drug Utilisation Review system, reported a negative association between doctors' resistance and user satisfaction. Following these studies, the present study postulates that:

- H7 : There is a negative relationship between user resistance and user satisfaction of GFMIS in Jordanian public sector.

Relationship between Use and User Satisfaction

In DeLone and McLean Model, "use" and "user satisfaction" are closely interrelated (DeLone & McLean, 2003). Petter et al. (2008) found that higher levels of user satisfaction resulted in greater use. Positive experience with IS use will, therefore, lead to greater user satisfaction in a causal sense. Similarly, increased "user satisfaction" will lead to increased "intention to use," and, thus, "use" (DeLone & McLean, 2003). Stefanovic et al. (2016) demonstrated that the use of the system, through a direct effect on user satisfaction, can affect the success of this system. The use of the system directly increases the benefits of the system by making it more effective (Stefanovic et al., 2016). Conversely, poor-quality system usage would cause more dissatisfaction and negative net benefits (DeLone & McLean, 2003). Evidence from the past studies have shown that the model of intention to use/usage was beneficial in finding a positive influence on user satisfaction (e.g., Wang & Liao, 2008; Wang & Wang, 2009). Thus, the present study hypothesises that:

- H8 : There is a positive relationship between use and user satisfaction on the use of GFMIS in Jordanian public sector.

Relationship between Use and Net Benefit

System usage is commonly acknowledged as a useful proxy measure of system success (Doll & Torkzadeh, 1988). While system use is an outcome of better information quality, system quality, and service quality, system usage behavior is an important predictor of net benefit in the organisation. DeLone and McLean (2003) argued that increased IS use yields greater benefits. Hence, the following hypothesis is proposed:

- H9 : There is a positive relationship between use and net benefit on the use of GFMIS in Jordanian public sector.

Relationship between User Satisfaction and Net Benefit

User satisfaction refers to the satisfaction of the user with the results of their experience of use. User satisfaction means the difference between the actual and expected benefits (Chiu et al., 2016). When the difference is small, or satisfaction exceeds expectations, users' satisfaction increases and has a positive effect on the recognition of the benefits of use and intention to use it. Hence, user satisfaction is influenced by system use (information, service, and system quality) and actual benefits.

In the present study, net benefit indicates the level to which IS is contributing to the successful performance of an individual (Gable, Sedera, & Chan, 2008), such as time saving, increased productivity, improved job performance, jobs get easier (Urbach, Smolnik, & Riempp, 2010). Several studies (see, for example, Balaban, Mu, & Divjak, 2013; Petter et al., 2008; Stefanovic et al., 2016; Wang & Liao, 2009) remarked a strong support of user satisfaction on net benefit. Satisfied IS employees are more likely to be productive, especially where the use of such system is mandatory (Holsapple, Wang, & Wu, 2005; Hsu et al., 2015).

Following prior studies, the present study predicts that user satisfaction could generate certain net benefits. The more satisfied the IS users are, the more direct will be the impact on its net benefits (Stefanovic et al., 2016). As the employees become more satisfied with the e-government system, so does the benefits from the system increases. Hence, it is hypothesised that:

- H10 : There is a positive relationship between user satisfaction and net benefit on the use of GFMIS in Jordanian public sector.

Moderating Effect of Training on the Relationship between Use/User Satisfaction and Net Benefit

Floropoulos et al. (2010) posited that despite its potential benefits, e-Government programs are not well-accepted unless adequate training is provided to its users. An effective training programs on a system is expected to improve its usage and user satisfaction (El-Hoby & Ibrahim, 2017). Adequate training equips users with the necessary procedural knowledge to properly operate the system (Igbaria & Tan, 1997). When users know how to use the system properly, there may be increased in system use, and subsequently transforms into net benefit. Norfazlina, Akma, Adrina, and Noorizan (2016) suggested that training program should be provided by organisation to mitigate the problem associated with the complexity of IS and high task demands that exceed the users' attention, so that it would not adversely affect users' satisfaction and the consequent net benefit.

Review of existing literature also underscores the moderating role of training in the IS research field. Ahearnea, Jelinekb, and Rapp (2005) signified that the use of Sales Force Automation tools could enhance salesperson efficiency and effectiveness under conditions of adequate user training. Rouibah, Hamdy, and Al-Enezi (2009), on the other hand, found that the availability of training has an indirect effect on user satisfaction. Norfazlina et al. (2016) found that the IS user satisfaction could enhance net benefit (as measured by task productivity) under conditions of user training. Therefore, this study proposes that:

- H11 : Training moderates the relationship between use and net benefit of GFMIS in Jordanian public sector.

- H12 : Training moderates the relationship between user satisfaction and net benefit of GFMIS in Jordanian public sector.

Moderating Effect of User Involvement on the Relationship between User Satisfaction and Net Benefit

Existing literature have indicated that system use can be improved through a higher level of user involvement in IS development and deployment (Ghobakhloo & Tang, 2015). User involvement has been used in prior studies related to input and output design (Zaied, 2012) and system testing and evaluation (Sappri, Baharudin, & Raman, 2016). Several studies had reported the influence of user involvement on IS usage (Rouibah et al., 2009; Sappri et al., 2016). Meanwhile, El-Hoby and Ibrahim (2017) discovered that user involvement is positively associated with the effective utilisation of ICT resources and capabilities. Sappri and Baharudin (2016) argued that users who involve in IS will develop positive attitude and perception of its usefulness, thereby increasing their satisfaction towards the system. On another study, Sappri et al. (2016) found that user involvement moderates positively on the relationship between user satisfaction and net benefit. Following Sappri et al. (2016), the present study proposes that:

- H13 : User involvement moderates the relationship between user satisfaction and net benefit of GFMIS in Jordanian public sector.

Proposed Research Framework

Based on the exposition in the preceding sections, this work proposes a conceptual model that incorporates all factors affecting net benefit in a single research model. Figure 1 illustrates the proposed conceptual research framework.

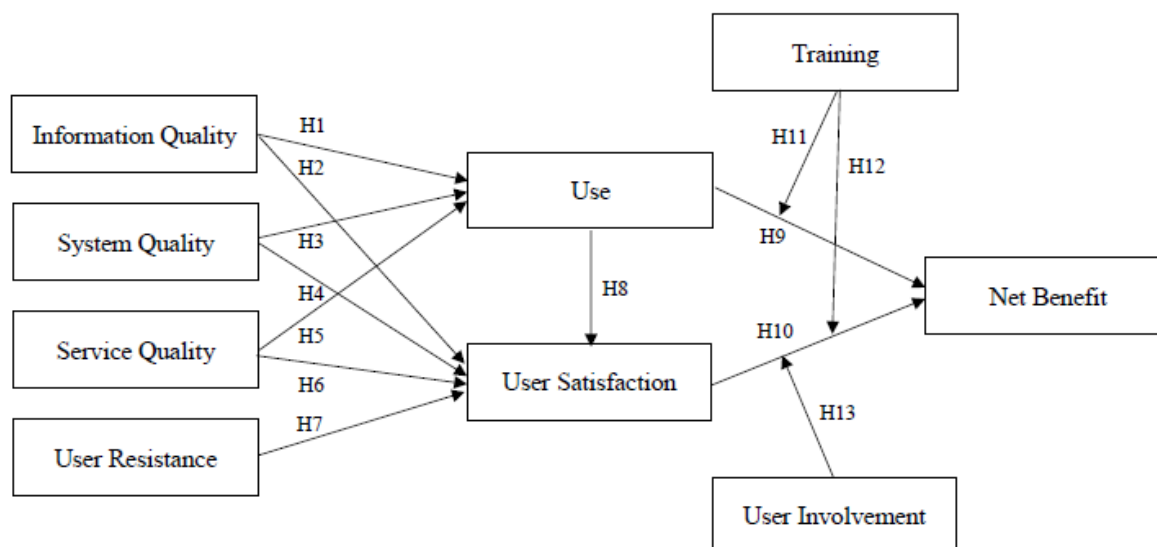


Figure 1: Proposed Conceptual Research Framework

Conclusion

The model proposed in this work is theorised based on the far-reaching survey of the extant literature. The model theorises that information quality, system quality, service quality, user resistance, training, and user involvement are the factors that potentially enhance use, user satisfaction, and net benefits of GFMIS in Jordan's public sector, and ultimately guarantee success of GFMIS. Thus, this study will extend the current body of knowledge on IS implementation and success. In this work, issues relating to theoretical and practical aspects of GFMIS research were explicated. Overall, it has been theoretically established that information quality, system quality, service quality, user resistance, training, and user involvement are the factors responsible for GFMIS success in Jordan Public Sector. On the practical aspect, this work will become a useful guide for various stakeholders and policy makers in a developing nation on how they can ensure GFMIS success. Nevertheless, since the current study is a conceptual

work, the proposed model can be empirically solidified further via collection and analysis of relevant data.

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EXPLORING TRENDS OF PUBLICATIONS ON ACCOUNTING INFORMATION SYSTEMS (AIS) RESEARCH: A BIBLIOMETRICS ANALYSIS

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Abstract: *In line with growing importance of information technology (IT) in business organisations nowadays, its impact on accounting function in the organisations could not be refuted. The advancement of IT and how it is shaping today's accounting functions has attracted considerable research over the years. Such investigation usually demands for a well blend between the perspective of accounting as well as IT (referred as Accounting Information Systems or AIS) to better understand the issues concerned. Therefore, this paper examines scholarly works published in two prominent AIS journals; International Journal of Accounting Information Systems (IJ AIS) and Journal of Information Systems (JIS) based on selected bibliometric characteristics as to reflect the trends of previous works on AIS. Authors extracted details of 591 articles published from 1991 to 2018 from Scopus online database for further analysis. This article reports in terms of; subject area, authorship and affiliation, as well as citations and keywords analysis. Research on business, management and accounting is the most common subject area of the articles examined and followed by decision science. Meanwhile, authors from United States (US) contributes considerably as authors/co-authors on both journals. The most cited articles were reported as well. Finally, among the most used keywords over the years are Enterprise Resource Planning (ERP), Extended Business Reporting Language (XBRL), continuous audit and internal control, which correspond quite well to the emerging technologies affecting accounting function in the last few years. The finding of the paper is expected to offer useful insight on the current trend and potential way forward of AIS-related works, particularly to accounting scholars and graduate students.*

Keywords: Accounting Information Systems (AIS), Bibliometric Analysis, Scopus Online Database

Introduction

Rapid evolution on information technology (IT) has transformed the way events or transactions data are being captured, processed, stored and communicated. Similarly, drastic changes on digital technology in the mid-20th century and followed by the internet revolution in the late 20th and early 21st centuries have even empowered greater capability for business to process and communicate larger amounts of data in the fastest speed (Badua & Watkins, 2011). In more recent years, an enterprise system seamlessly connects all business functions together. All these IT evolutions ultimately give widespread impact IT to business, in general and to accounting and auditing function, in particular (Sutton, 2006). Enterprise system, such as Enterprise Resource Planning (ERP) demands for greater roles of accountants to report both financial and non-financial information, revamps approach of auditing computer-based system and managerial control measures, and to some extent creates new forms of consulting services to business

organisations (Grabski, Leech & Schmidt, 2011). The era of big data promises even greater capability for business to process larger amount of data in diverse formats. Accounting could have been possibly the best function to deal with the big data within an organisation (Bhimani & Willcocks, 2014). Thus, accountants are expected to embrace such changes in delivering their duties.

Constant evolution of IT and its penetration into business operation has attracted considerable research to better understand its implementation issues and perceived impacts to accounting functions. Considering the fact that both accounting and IT scholars view the issues from different angle, it is therefore reasonable to anticipate the blend between accounting and IT research perspective in investigating those issues (Efendi, Mulig, & Smith, 2006). Thus, in such a globally connected economy, it is interesting to examine how accounting functions adapt to changes imposed by IT revolution. Examining literature focusing on the intersection of accounting and IT domain could possibly shed some light on the development of the AIS research domain. Literature review analysis promotes meaningful insights of the AIS research trends over the years apart from making ways for the direction of future research work. In response to this, this paper conducts bibliographic analysis of scholarly works on AIS. However, this study narrows down the focus to the scholar works published in two leading AIS journals, namely International Journal of Accounting Information Systems (IJ AIS) and Journal of Information Systems (JIS).

This study provides evidence on the changing trend of AIS-related studies based on the overview of the research published to date. This is particularly essential as technological change in business environment promotes great research opportunities for interdisciplinary research area such as AIS (Wu, Hao, & Yao, 2009). For AIS to quickly adapt to the rapid changes in IT, continuous refinement and evaluation of the IT artefacts affecting accounting roles is highly needed (Geerts, Graham, Mauldin, McCarthy, & Richardson, 2013). The impact of a recent technology change such as mobile and cloud computing, big data, internet of things and artificial intelligence are expected to be revealed through the analysis. In addition, by examining what previous works have been focusing on would enable authors to offer possible insight and clearer perspective for researchers to project future research directions. As Sutton (2010) states that AIS topics of interest are likely to prosper over time in line with IT innovations. Finally, the research findings should be of interest for prospective postgraduate students to have better perspective on the trends of prior works in AIS.

This paper is organised in five major sections. The next section describes the concept surrounding AIS and prior works on AIS literature review analysis. The third section elaborates method being employed while section four presents the results and discussion of the collected data. The paper ends with conclusion, limitations and future directions.

Literature Review

Classification of Accounting Information System Research

Having clear understanding what does AIS concerns about and how does AIS connects accounting and IT domain first need to be established. Accounting broadly concerns on processes of providing information for economic decision making for various stakeholders. Thus, it encompasses external and internal reporting, tax, and assurance services, among the major fields of inquiry within accounting functions (Murthy & Wiggins, 1986). On the other hand, IT by its broad definition focuses on the “design, implementation, use and management of an information system” (Murthy & Wiggins, 1986). This so called core IT field emphasises mainly on the issues pertaining to IT as well as how individuals and organisations interact with the IT (Murthy, 2016).

Having considered AIS as an intersection between the two domains of accounting and IT, what qualifies a research to be in AIS category then? Despite the fact that specifying the boundary distinguishing AIS with other research domains is one of the greatest challenges (Arnold & Sutton, 2002), how accounting domain overlaps with its parent’s domain i.e. management information systems (MIS) domain is clear (Poston et al., 2000). Earliest attempts to define the AIS research suggest that

AIS research is closely related to its "parent domains of MIS and accounting," however, the core distinguishing aspect is that AIS focuses dominantly on the issues related to "transaction processing for accountability purposes of an organisation" (McCarthy, 1990, p. vi). Similarly, Hunton (2002) further stresses that while both accounting and IT concern on similar business issues, accounting emphasises more on optimising business value via the IT deployment and ensuring appropriate internal control measures whereas IT core value resides on the technical matters of such deployment. This corresponds to Murthy and Wiggins (1986) argument that while both accounting and IT focuses on information as the core, the former concerns most on the information itself while the latter concentrates on the structure of the system that produces those information.

Murthy and Wiggins (1986) further suggest that research concentrating on any aspect of information-related activities i.e. collection, process and communication of information via computer-based system potentially belongs to the mainstream AIS research. Meanwhile, any research investigating system-related issues and its impact to the system output (information) may also be classified under AIS research domain. As more recent work suggests, AIS research must, "in one part, address some aspects of IT including but not limited to the design, use, control and audit of systems. Meanwhile, the other part of the research should also address the accounting functions, i.e. auditing, managerial accounting, financial accounting, taxation and not-for-profit accounting" (Murthy, 2016, p. 165). In sum, AIS researchers must be aware that research focusing on AIS needs to acknowledge the interwoven of accounting and IT domain as highly crucial to understand the role of AIS in business.

Earlier Works on AIS Literature Analysis

Earlier work on literature analysis on AIS research either focuses on AIS in general (Efendi et al., 2006; Ferguson & Seow, 2011; Hutchison, White, & Daigle, 2004; Ismail, 2009a; Murthy, 2016) or on specific application of AIS such as management accounting integrated system (Rom & Rohde, 2007), impact of data visualization on accounting (Dilla et al., 2010) and ERP and accounting (Grabski et al., 2011). While examining AIS research in general facilitates researchers to establish research trend over time, narrowing the focus on specific AIS domain offers in-depth understanding of the issues concern.

Reviewing prior literature of AIS have been carried out either on multiple related journals or specific journal. Several studies widen the focus by identifying AIS works as published in the top ranked contemporary accounting journals (Efendi et al., 2006; Stone, 2002) or combination of journals of relevant disciplines, i.e. AIS, IT and Accounting (Ferguson & Seow, 2011; Poston et al., 2000). Such approach enables comparison on nature and focus of AIS research as published in core accounting journals, AIS focused journals or IT focused journals. For example, Efendi et al. (2006) whom analysed 482 articles published on seven top ranked accounting journals demonstrated that AIS scholarly works appear more extensively on the top accounting trade journals as compared to the academic journals. Poston et al. (2000), however, examined 17 top journals of Accounting, AIS, MIS and Computer Science. They reported domination of computer science theories in most AIS works.

Several other scholars investigated AIS published works on specific journal. The most common reference for AIS research review were IJAIS (Hutchison et al., 2004; Ismail, 2009b; Poston et al., 2000) or JIS (Badua & Watkins, 2011; Moffitt, Richardson, Snow, Weisner & Wood, 2016; Samuels & Steinbart, 2002; Weber, 2016). To illustrate, Samuels & Steinbart (2002) review of 159 articles published over 15 years in JIS has concluded that all works equally incorporate the element of accounting and MIS while the cited works are also being derived from both knowledge domains. A more recent work (Guffey & Harp, 2014) had conducted more extensive review works published in JIS for over 25 years. Generally, the results indicate consistent improvement on the journal impact factor. Most recently, Weber (2016) provided a review on 30-year publications of JIS. They specifically focused on analysing the keywords and citation. As for IJAIS, earlier work by Hutchison et al. (2004) had examined 99 articles published in the first ten volumes of the journal. The results demonstrated bright prospect of the journal to shape the AIS body of knowledge with greater diversity of topics as

well as research methods. Ismail (2009b) also reported similar outcomes with commending progress in AIS research, particularly in the aspect of theoretical development. Applying a bibliometrics approach, Muehlmann, Chiu and Liu (2015) had examined 64 articles published in the first decade publications of Journal of Emerging Technologies in Accounting (JETA). Meanwhile, Ardianto and Anridho (2018) conducted bibliometric and content analysis on emerging AIS journal, International Journal of Digital Accounting Research (IJДАР). The 15 years scholar works review found that AIS is the most dominant accounting area with authors from US, Spain and Australia as the main contributors of the scholarly works. Setting wider scope of the review, Chiu, Liu, Muehlmann and Baldwin (2018), reported review on six selected AIS journals from 2004 to 2016. Review of 677 articles reported that most journals have no specific focus in publishing articles related to AIS. There are also varying percentage of focus on emerging technologies across journals while the most linked accounting research areas to AIS are auditing and financial accounting.

While previous studies cover extensively on content analysis of the AIS scholarly works, thus limiting the time frame, this current paper examines all articles currently available on the Scopus database. Although the analysis is rather surface rather than in-depth, automation of the data available enables authors to carry out analysis on all articles available on the Scopus database.

Research Method

This paper employed a bibliometric approach in providing analysis of prior studies on AIS. The Bibliometrics approach employs mathematical/statistical tools in evaluating quantity and quality of the published materials in order to observe trends or pattern of a specific research area (Sweileh et al., 2017). In addition, a more extensive bibliometrics analysis facilitates forecast of the research growth rate in a particular research domain (Cherng, Malim & Singh, 2015).

This study, however, limits the scope to two most leading journals for AIS-related research, namely JIS and IJAIS (formerly known as Accounting, Management and Information Technologies-AMIT). We extracted details of all articles published in both journals from Scopus online database as of 29 November 2018 into 'csv' file. Only research articles were considered for analysis. Table 1 presents distribution of final articles by journal names for analysis.

Table 1: Coverage of Articles

Journal Name	No. of articles	Publication years covered*
AMIT	118	1991- 2000
IJAIS	320	2000 - 2018
JIS	153	2009 - 2018
Total number of articles	591	

*As available in Scopus database

Results, Analysis and Discussion

As Table 2 indicates, despite the blend between accounting and IT, prior AIS research are predominantly classified either as Business, Management and Accounting or Decision Science. About 60% of the articles are classified in these categories (34% and 27% respectively) while about 15% are classified under Computer Science category. The data may suggest that articles published in these journals view AIS issues mainly from accounting perspective rather than IT perspective.

Table 2: Classification of Articles by Subject Area*

Subject area**	Total	%
Business, Management and Accounting	588	34.0%
Decision Sciences	473	27.3%
Economics, Econometrics and Finance	283	16.4%
Computer Science	268	15.5%
Social Sciences	115	6.6%
Undefined	3	0.2%
	1730	100.0%

*As produced by Scopus

**Each article may be classified into more than one area.

With respect to the country/territory, slightly more than half (57%) of all the articles published are from United States (US), followed by Australia (8%) and Canada (7%), which is somewhat consistent with Ardianto and Anridho (2018). Comparison across journals (Table 3) further indicates domination of authors from US are somewhat higher for articles published in JIS (67%) as compared to IJAIS (51%). With respect to authors affiliation, the results seem consistent as most of the affiliations of the first author are located in the US except several institutions in Australia. The highest authors' affiliations include University of Central Florida (25 authors), University of Queensland (23) and followed by Iowa State University, University of Waterloo and The California State University, with 18 authors respectively.

Table 3: Top Five Articles Contribution (Country)

	1999-2018		2009 - 2018			
	No.	%	IJAIS		JIS	
			No.	%	No.	%
United States	414	57.0%	119	50.9%	126	67.7%
Australia	60	8.3%	24	10.3%	15	8.1%
Canada	49	6.7%	17	7.3%	18	9.7%
United Kingdom	40	5.5%	7	3.0%	5	2.7%
Netherlands	18	2.5%	-	-	-	-
China	-	-	6	2.6%	-	-
Belgium	-	-	-	-	4	2.2%
Others	145	20%	61	26.1%	18	9.7%
	726	100%	234	100%	186	100%

Next analysis focuses on frequency of citations and citations/year. Citation analysis helps authors to assess the degree of impact of the published work on existing research domain (Ardianto & Anridho, 2018). In many instances, IJAIS reported relatively higher average citations/year than JIS, specifically for year 2011, 2012 and 2014 (Table 4). Issues raised by the respective journal during a particular year may be one of the possible factors affecting citations of the articles published of that particular year (s). Nevertheless, having more inclusive sources other than Scopus may provide greater confirmation on the citation analysis as the citations reported varies across different databases (Muehlmann, Chiu & Liu, 2015). This paper, however, is restricted to the Scopus citation data reported for each article.

Table 4: Average Citations/Year (2009 – 2018)

Year	Total citations		Average citation/year**	
	IJAIS	JIS	IJAIS	JIS
2009	318	201	31.80	20.10
2010	378	407	42.00	45.22
2011	533	247	66.63	30.88
2012	432	251	61.71	35.86
2013	276	330	46.00	55.00
2014	219	140	43.80	28.00
2015	84	175	21.00	43.75
2016	70	80	23.33	26.67
2017	36	46	18.00	23.00
2018	4	2	4.00	2.00
	2,350	1,879		

***Calculated based on total citations of the year/no. of years counted from the publication year to the current year (Ardianto & Anridho, 2018)*

Table 5 lists down three articles with the highest total citations. Looking at average citation/year, the top article is contributed by Bradford and Florin (2003) with 339 citations (24 citations annually). All articles focused on issues related to ERP, one of the emerging technologies in the past few years. Scopus also calculates Field-weighted Citation Impact (FWCI) index for each article in the database to reflect on the citation score. The index takes into account the year of publication, document type and discipline associated with its source. The FWCI index indicates how well this document is cited when compared to similar documents. A value greater than 1.00 means the document is more cited than expected. As the results suggest, all articles receive above average citations. Article by Bradford and Florin (2003) obtained the highest FWCI score followed by Hunton, Lippincott and Reck (2003) and Poston and Grabski (2001).

Table 5: Most Cited Articles

Author	Title	Source	No. of citations	Average citations/year*	FWCI**
Bradford & Florin (2003)	Examining the role of innovation diffusion factors on the implementation success of enterprise resource planning systems	IJAIS	339	24.2	4.18
Poston & Grabski (2001)	Financial impacts of enterprise resource planning implementations	IJAIS	254	15.9	2.93
Hunton et al. (2003)	Enterprise resource planning systems:	IJAIS	232	16.6	3.56

Comparing firm performance of adopters and nonadopters

*Estimated based on total no. of citations/no. of years since its first publication.

**Field-Weighted Citation Impact from Scopus Online Database

We then conducted analysis on the author's keywords supplied for each article. Some modifications were made on the keywords being supplied, i.e. to remove common phrases such as accounting or accounting information systems and to standardise between full phrases and short form (e.g. enterprise resource planning vs. ERP). Using Wordle, we produced a map of top 100 keywords most commonly used in all articles examined. Wordle produces cloud word map based on the occurrences of each keyword as reflected on the keyword's font size. As Figure 1 indicates, among the most frequently used keywords include; ERP, XBRL, business intelligence, enterprise systems, and internal audit. Some of the keywords reflect the emerging technologies currently affecting business and accounting. This result could be consistent with observation by other studies (Chiu et al., 2018; Muehlmann et al., 2015).

Finally, this paper extends the keywords analysis by examining the strength of the relationship between keywords using VOSviewer (Figure 2). The diagram employs colour, circle size, font size, and thickness of the connecting lines to demonstrate the presence and strength of the relationship between one keyword to another. However, to ease the analysis, only keywords with minimum of five (5) occurrences were included for analysis thus retaining only 47 keywords. The keywords were divided into eight clusters based on the strength of their association. As presented, fraud, data analytic, big data, data mining, auditing and assurance are closely linked together. This is particularly true as the emergence of big data in recent years do give certain implications to auditing and fraud detection procedures. Similarly, XBRL, financial reporting, continuous audit and e-commerce are commonly tied with one another very closely. The introduction of Internet, particularly XBRL technology has reported considerable effect on corporate reporting practice. That is why, these keywords co-occur together, in most cases. Meanwhile, continuous auditing, internal control, enterprise risk management, information security and ERP are commonly associated together. This is consistent with the fact that ERP brings considerable transformation of how business operates, which opens up greater risk exposures to an organisation. Hence, issues surrounding the impacts of ERP to accounting are currently a growing research area (Sardo & Alves, 2018). These, to some extent, influence the roles of accountants in an organisation, particularly in the aspect of controls, risk management and auditing technique.



Figure 1: Most Frequently Used Keywords



Figure 2: Network Visualization Map

Conclusion

This paper provides an overview on selected bibliometric characteristics of scholarly works on AIS as published in two leading AIS journals from 1991 to 2018 as obtained from Scopus online database. Despite a blend of accounting and IS/IT domain, majority of the scholarly works are classified as business, management and accounting as well as decision science with merely about 15% are classified under computer science. Analysis by country shows that between 50% and 60% articles published in both journals are contributed by scholars in the US. With respect to citations analysis, despite somewhat higher number of citations recorded for IJAIS, the average citation/year reported are somewhat similar across journals. The result further shows that among the articles with the highest citations are related to an emerging technology i.e. ERP impact to accounting. Finally, Worlde and Vosviewer output reveal that issues involving enterprise system, big data, data analytic, continuous auditing and digital reporting (XBRL) receive considerable attention by many researchers. Nevertheless, going in-depth on the keywords used would help to reveal possible transformation of the research focus over the years (Muehlmann, Chiu & Liu (2015).

Despite richer insight offered by this article, several limitations and further extensions of the paper deserve special consideration. Despite the fact that JIS publication has started since 1991, this paper is only restricted to the articles details from year 2009 onwards that are available on the Scopus database. Having access to the earlier publication profiles obviously provide more comparable and comprehensive analysis. As for potential extension, more advanced bibliometric analysis may be conducted to unleash even more meaningful perspective on the patterns of AIS research, particularly on the citation and keywords analysis. More importantly, in-depth analysis or article-level analysis (e.g. Ferguson & Seow, 2011; Poston, 2000) on more recent AIS works published promised even more attention-grabbing facts for analysis. In conclusion, in view of the unique aspect of AIS research that blends the two distinct subject areas of accounting and IT, effort to establish AIS to stand as an independent research domain is very much needed. Thus, examining profile of research in this research domain should be very much welcomed as a building block for development on its research framework.

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THE EFFECTIVENESS OF USING COLORING TEMPLATE TO HELP MALAYSIAN YOUNG LARNERS TO IMPROVE THEIR SPELLING SKILLS

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Abstract: *Poor spelling skills have been a common problem among Malayaian language learners despite the fact that English Language is taught to all Malaysian learners as a second language. The research aimed to study the extent to which using coloring template kit is effective in improving the spelling among young Malayisan English Language Learner. The research participants comprised 10 low achievers Year 3 (8 years old) pupils from primary school located in Sepang, Malaysia. The study involved the use of two different teaching methods, which were the traditional method and Coloring Template kit. The instruments for the study consisted of Test 1 and Test 2, an interview schedule as well as journal entries. The results of the study showed that the coloring template kit was effective in helping pupils develop their spelling skill. Therefore, teachers that encounter similar issues can apply this kit in their lesson as a learning aid to assist teaching and learning process.*

Keywords: *Norbert Schmitt's theory of vocabulary learning, writing problem, second language learner, spelling skill.*

Introduction

The Malaysian Government English Language Policy is explicit; English is to be taught in schools as an effective second language. John Dewey believes that art is essential where the integration of the arts in educational systems can improve the quality of education by motivating students and teachers; introducing active learning methods in the classroom; and making curricula more relevant to students' interests and needs. In addition, the arts enable successful learning in diverse educational environments (UNESCO. 2005).

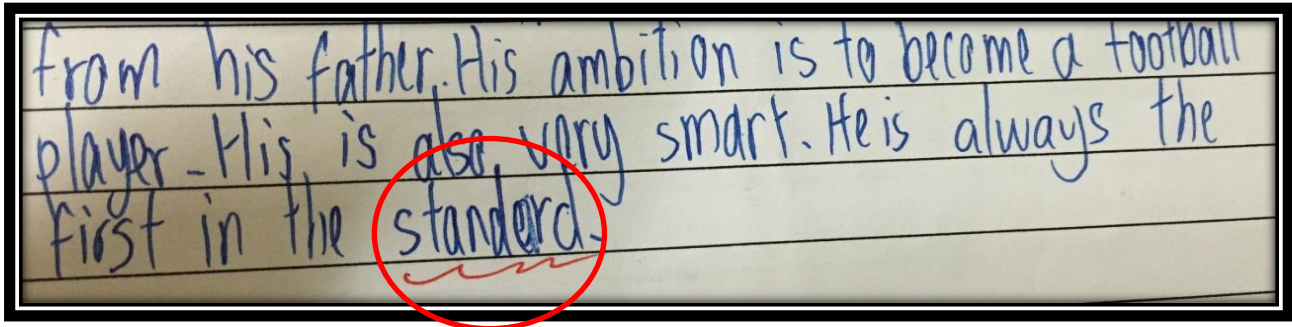
This action research shall combine and immerse the concept of art and language acquisition. The aim of integrated content and language learning is twofold: learning subject matter together with learning a language (Zurida & Hashimah, 2004). It is as suggested by the Malaysia Education Blueprint where there is a need of integration of subjects across curriculum.

Spelling

The minute I set eyes on an animal I know what it is. I don't have to reflect a moment; the right name comes out instantly. I seem to know just by the shape of the creature and the way it acts what animal it. I just spoke up in a quite natural way and said "Well, I do declare if there isn't the dodo!" (Twain, 1906, p. 8). The idea of spelling can be generalized as word recognition and comprehension. Spelling refers to terms that have one or many meanings in everyday language but which have a precise and sometimes different meaning in scientific context (Cassels & Johnstone, 1985, as cited in Zurida, 2004). Norbert Schmitt has developed and designed a Spelling Learning Strategy to aid teachers in teaching spelling. The major problem among the respondents were the lack of spelling acquisition. Regardless weak or

good pupils, the pupils had difficulties in using the correct spelling in their writing. For instance an example of a good pupil with English family background,

Figure 6. Usage of inappropriate spelling among high performance pupil



The pupil was unable to use the accurate spelling even though the researcher understand his meaning. The pupil were asked regarding the usage of 'standard' in his writing. However the pupil's mental image was that if he was studying in 'standard three' and if he was the best amongst all of his friends that was in the same age; it was equivalent for him to be the best in the 'standard'. When a more appropriate word '**batch**' were suggested, the pupil argued that he is not '**in a batch**'. That showed that the pupil has already developed and fossilized his own concept in the language. As Vygotsky (1962) had stated, when a child uses words he or she is helped to develop concepts. It is because language development and conceptual development are inextricably linked (Zurida, 2004).

Similar issue happens among pupils who do not have a lot of exposure in English. Instead of having their own English language concept and grammar like their high performance counterparts; these children have very limited understanding of the concept of the English language therefore, issues such as pronunciation in relation to spelling becomes an issue.

The spelling issue needs to be rectified. It impedes the pupils' ability to learn English language effectively and affects their writing skills. A good pupil with a wider range of spelling might use redundant words in his or her essay; while a weak pupil with low spelling horizon has no word to use in a sentence altogether. Sequentially, this can further hamper the pupils' ability to perform in examinations as well as their confidence in speaking.

Research Objective.

The purpose of this research is to examine the usage of spelling in colouring templates among Malaysian Young Language Learners.

My Research Participant

This study was carried out on 10 Year 3 participants of Sungai Rawang National Primary School. The school is located in Sepang, Malaysia. The school's current enrolment is 370 pupils and the percentage is 60% local Javanese and 40% Malays. Based on an interview with the class teacher and the English Language teacher, in regards to socioeconomic class, they are mostly of the middle class to lower middle class; some of them are even from the lower class. According from the data, the pupils' parents are mostly cleaners or stay-home parents. Bahasa Malaysia is the main language used to teach all subject except English.

Majority of the pupils were among mixed ability class ranging from average to low proficiency. The class consists of 26 pupils with variety learning styles and abilities. Some of the pupils are able to conduct a Basic English conversation while the rest mostly communicate using key words. The pupils have difficulties in understanding instructions, word recognition as well as spelling. The target group for this research was among 10 Year 3 pupils who were weak in English Language.

Furthermore, the pupils' monthly test result analysis were studied. Harlen (2007) claimed that, summative test results can successfully indicate pupils' past achievements. Based on the analysis, the pupils were among the low and the average achievers in the class. Their result is as below.

Table 5

<i>Participant's English Summative Test Results</i>				
Pupil	Summative test 1	Grade	Summative test 2	Grade
A	59	C	55	C
B	59	C	57	C
C	61	B	59	C
D	55	C	60	B
E	50	C	58	C
F	60	B	57	C
G	46	C	50	C
H	30	D	40	C
I	50	C	48	C
J	45	C	50	C

The Instruments

Data collection during action research is often idiosyncratic, fuelled by desire to understand one's practice and to collect data that are appropriate and accessible (Gay, Mills & Airasian, 2009). Hence this paper applied triangulation approach to gather data. "Triangulation" is a process of verification that increases the validity by incorporating several viewpoints and methods (Sabrina & Khan, 2012). By having several points of view, a more accurate outcome can be collected. Thus, three instruments were chosen to conduct the research; Journal entries, tests and interview.

Journal Entries

Journal entries were incorporated because it provides the researchers the insights based on their own experience as well as observation. Holly (1989) as cited in Ferrell (2004) believes that reflective journal entries can give teachers time to think about their work "long enough to reflect on it and to begin to understand it". Through journal entries, the researcher would write down their feelings and opinions regarding the lesson created, the pupils and things that had happened at school. Then reflection of the actions and rethink could be done to get a clearer view and understanding of the research.

Tests

The pupil's spelling level analysis was collected through tests. A test is thus one of the assessment instruments (Measurement and Evaluation in Education, n.d). It is used in getting quantitative data. Test 1 and test 2 was created. I had made sure that both tests are of the same level of difficulty and format. In order to ensure the validity and reliability of the test I had ensured that the pupils try to write the answer and to avoid guessing.

The test was designed in accordance with the KSSR syllabus of Year 3 under the Unit 9 Care for the Sea. However, as tests do not necessarily possess validity, therefore interviews was included in the collection of data.

Interview

An interview is a conversation for gathering information. Driscoll (2011) had defined interview as asking participants questions in a one-on-one or small group setting. A research interview involves an interviewer, who coordinates the process of the conversation and asks questions, and an interviewee, who responds to those questions. (Easwaramoorthy & Zarinpoush, 2006). For this paper, a semi-structural interview were conducted in order to allow the pupils to speak out what they feel and to understand what the pupils think of the lesson conducted. Doyle (2015) had stated that a semi structured interview is a flexible interview which the interviewer does not follow a formalized list of questions. Furthermore, a semi-structured interview is a little more than a casual conversation that allows the qualitative researcher to inquire into something at the research setting (Gay et al., 2009). The questions were worded in simple words and the conversation short because the respondents were children. Yet due to the pupils' lack of proficiency the interviews were conducted more than twice.

The Procedure

For this paper, two English lessons for Year Three on Unit 7 (From the Sea) based on the theme of World of Knowledge were conducted. The lesson plan was designed to address the Writing Module. The first lesson was conducted in a traditional and teacher-centred manner. For the first lesson, the teaching aids were task sheet and picture cards. On the other hand, the second lesson was implemented using the Coloring template kit method.

First Lesson (Traditional Method)

The first lesson was conducted in a teacher centred way. The objective for the lesson was to identify and spell 5 out of 6 of the names of the sea creatures correctly.

The lesson started off with the hangman game in order to gain pupils' attention for the day's lesson. It also functions as a reboot step to get the pupils prepared to what the researcher have to deliver in the next step of the lesson. Next, I had introduced and applied rules in order to play the game. The first rule was 'NO NOISE'. This rule was created in order to ensure that the class does not render into chaos during the game. The second rule was, 'GIVE ONE LETTER ONLY'. This is because some of the pupils might have figured out the answer and might end up shouting the answer before others had the chance. Therefore, to ensure that everyone have the chance to guess and a fair opportunity in this game, the third rule which was "DO NOT OPEN YOUR MOUTH UNLESS YOUR NAME IS BEING PICKED FROM THE JAR." was implemented. Surprisingly there were good responses from the pupils for this game. It is as described in the journal entry below;

The pupils were very participative during the set induction today. I almost couldn't believe it. They managed to adhere to the rules and were very well behaved. I suppose if the rules are explicit and simple enough they should be able to obey.

(Journal entry no. 70, 14th May 2018)

During the presentation stage, pictures were used to describe the sea creatures and to label the name of the sea creatures and the body parts. Each word were explained and the image related to it. For example, Fish has fins, Octopus has tentacles. Questions were asked to pupils to access their understanding and to see if they were paying attention.

Then, during practice stage the pupils were given tasks to match the correct spelling of the sea creature with the correct image. For example, in the answer options, the instructor would place the correct spelling "fish" and the wrong "fsih". Then the pupils have to match the correct spelling with the image. Then they have to re-write the name of the sea creature in a column. This was when the pupils were starting to get off task.

For production task, another task sheet were distributed where the pupils were to listen to me naming the sea creatures while the pupils had spelt the name of the sea creature. The task sheet was a

template where the pupils are to write the name of the sea creature, and then the pupils have to draw the sea creature in the space given in the task sheet. However more pupils were getting off task during this stage.

The pupils were off task during the practice and production stage. When pupil J were why he was walking around, Pupil J just answers that he needs an eraser from his friend when he could easily ask from the person next to him,

(Journal entry No.50 18 May 2018)

For test one, all pupils were properly seated. Then a spelling test were conducted where a template were distributed to each pupil and say a list of words where the pupils wrote on the correct name of the animal with correct spelling. The test went on for 15 minutes. The teacher walked around the class and say the name of the animals while the pupils write the correct spelling in their test paper. Finally, an interview were conducted to gather the pupils' insights regarding the lesson.

Second Lesson (Coloring template kit method)

The second lesson also started off the lesson with the hangman game as a set induction. This lesson content standard was sea creatures. The traditional method does inculcate art in the lesson by drawing the sea creatures that they have learnt, yet the researcher find that the pupils will be more focused drawing the animals instead of learning the names and spelling itself. Thus, the intervention strives to avoid that problem.

This method was conducted among the same group in the class. However several changes have been made in the intervention lesson to ensure that the content lesson does not overlap with the traditional lesson. Therefore for the intervention method, another set of sea creatures were introduced to the pupils. Yet the intervention lesson was still present with similar level of difficulty compared to the traditional lesson.

The intervention started during the presentation stage. That was the time where I presented the pupils with two A3 sized coloring template. One is the empty version while another was the one was completed as a sample. At this stage, the pupils were shown the coloured version of the sea creatures for the lesson. Then the Coloring template kit was pasted on the board and started writing on the picture the spelling that of the words. During this stage a smaller version of the Coloring template was distributed to the pupils so that they can spell the words and label them with as a group. Nash and Snowling (2006) as cited in the National Reading Technical Assistance Center (2010) found that using a contextual approach to instruction produced greater spelling gains than lessons that emphasized learning word definitions. Therefore by giving them the visual aid as such the coloring template, the pupils are able to relate the image of the object with its spelling as well as its meaning. During this stage the pupils filled in the space of the sea creatures with the spelling related to ensure that they manage to memorize the spelling as well as the image.

Throughout practice stage a normal task sheet were given where the pupils have to fill in the name of the sea creatures and its body parts. This lesson encourage the pupils to use pencil colour during tasks. The reason for this is to give a small authority to the pupils as well as motivate them to do the task. This practice stage is a platform for me to monitor if the big Coloring template kit is effective in helping the pupils recognize the name of the animal with the correct image. As in the journal jottings below:

A pupil was helping his friend, the boy pointed to his friend's work, (translated to English) "That colour is wrong. Seaweed is green. The corals are the colourful ones. You should write seaweed in green colour". I know now that the pupils are able to understand the lesson today.
(Journal entry No 30, 18th June 2018)

Based on the journal jottings it is concluded that the big Coloring template kit method is effective in instilling image recognition on sea creatures among the pupils. Right after they had completed the task sheet, during the production stage the Coloring template kit method were fully applied. Each pupil had received an A4 sized of the Coloring template kit and each pupil has to fill in the pictures with the name of the sea creatures using the correct usage of colour.. Most of the pupils were on task and they do it in a much focused manner. Through observation, it was discovered that this method requires a lot of concentration from the pupils.

Throughout the process, there were difference in behaviour among the pupils between the traditional method as compared to the intervention method. In the journal write up it was explained that the pupils were on task.

It was a pleasant surprise for my part when I see the pupils were focused while completing the coloring template. They are also able to spell the words that I have taught. Pupil X asked me what is the correct spelling for octopus, but before I could answer, one of the passive pupils, J answered confidently "O-C-T-O-P-U-S". I couldn't be more proud.

(Journal Entry No. 77, 20th June 2018)

Through this pupils do benefit from rote learning, provided that, it was designed to match with their maturity. And the fact that the pupils were able to spell a three syllable words after applying the Coloring template kit method. The pupils are capable to handle new spelling and are able to spell, recognize and use the word in conversations. This is because in another journal jotting there was a recorded conversation between another pupils.

I heard a pupil said to her friend. "There are so many words to write. Wouldn't it be great if I am an octopus? I can write so many at one time."

(Journal entry No. 77, 20 June 2018)

From that conversation it could be deduce that the pupils are able to spell the words, visualize and relate the content of the lesson in their own context of daily life. Below is the sample of pupil's work using the coloring template.

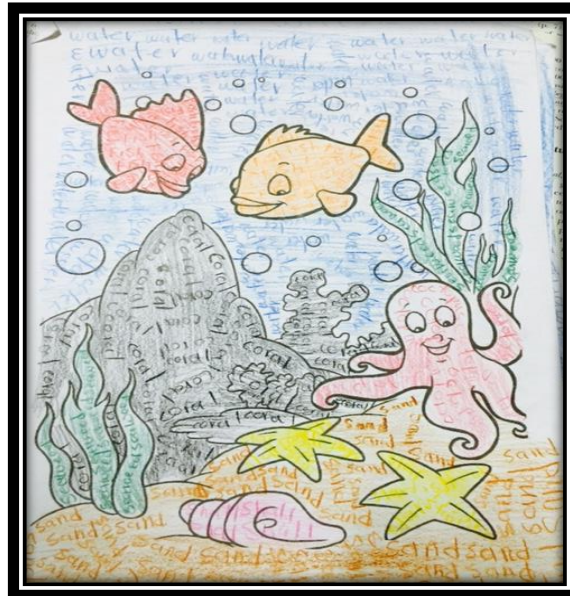


Figure 11. Sample of

pupil's work

Next Test 2 was carried out. The pupils were informed that no assistance or guidance will be given. The pupils were not allowed to share the answers with their friends. A form of picture template similar to the spelling test were distributed. The teacher said the words while the pupils wrote the words at the correct image in the picture template. It was discovered that the pupil manages to spell the spelling as well as label the correct image. Peters (1992) as cited in Mukoroli (2011) suggested that the memorization of chunks of language might be productive and powerful. Throughout the test, no one asked any questions and the pupils were able to follow through the duration of 15 minutes to complete the test. The pupils were on task and thus classroom management was easy for my part. Finally, several interviews were conducted before the lesson was consolidated.

The Data

Regarding on the tests data, the scores for each pupil were collected and tabulated. Table 9 shows how the scores presented. The scores for each pupil were compared between the traditional and Coloring template kit methods, that is between Test 1 and Test 2. The overall mean score for the participants between the two teaching methods were compared.

Table 8

Comparison of Scores between the Traditional and Coloring Template Kit Method

Pupils	Method		Differences in marks
	Traditional (Test 1) (%)	PLaCab (Test 2) (%)	
A	80	100	20
B	90	90	0
C	30	50	20
D	70	90	20
E	70	90	20
F	50	80	30
G	80	100	20
H	60	70	10
I	90	90	0
J	70	80	10
Total score	690	840	150
Mean	69	84	15

According to the table above, pupil F has the highest score difference in Test 2 compared to Test 1. They were 50 and 80, this shows that participant F has performed better in Test 2 compared to Test 1. The results also shows that eight pupils had performed better in Test 2 compared to Test 1. Pupil B and Pupil I however had shown no improvement. However they also did not indicate declination in their performance. Table 8 reveals that eight out of ten pupils achieved better results on Test 2 compared to Test 1. The results suggest that the performance of the participants was significantly better in Test 2 compared to Test 1.

The findings from my tests are supported with journals and interviews. For this research, four interview sessions were conducted; two sessions before both lessons and another two after the lessons. Due to their lack of proficiency in English, the interview was carried on using Malay Language. The data of the interviews were taken from all the research participant. The interview was transcribed and the excerpts were used to support the findings.

Table 12

Emerging themes from the interview data

No.	Themes	Frequency	Percentage (%)
1	Writing the same word	21.0	21.9
2	Can remember the words	19.0	19.8
3	Can spell the words	19.0	19.8
4	It was fun	20.0	20.8
5	Hangman was fun	17.0	17.7
	Total	96	100

For this research, initially four interview sessions were conducted; two sessions before both lessons and another two after the lessons. Due to lack of proficiency in English, the interview was carried on using Malay Language. However it was discovered that the pupils were nervous during the first few sessions, thus another two sessions were conducted to ensure that the pupils are fully relaxed and prepared to answer my questions. The data of the interviews were taken from all the research participant. The transcriptions and excerpts from the interviews help to support the findings. The questions asked were; Do you think that you are able to spell the words you've learnt today? Can you list down the words you remember? Which activities do you like the most? Do you like the first lesson or the second lesson? Below are the interview data and journal entries that support the use of Coloring template kit in teaching spelling.

Table 10

Question: do you like the first lesson or the second lesson? Why?

Pupil	Responses
A	Kelas yang nombor dua. Sebab main warna (The second class. Because we play with color.)
B	Kelas hari ni. Sebab best. (Today's class. Because it is fun)
C	Hari ni. Sebab faham. (Today. Because I understand.)
G	Kelas nombor dua. Sebab tak boring. (The second class. Because it's not boring.)
I	Kelas nombor dua. Sebab harini kita "color" gamba. (The second class. Because today we color a picture.)
F	Kelas hari ni. Sebeb bes. Tak boring, Lagi pun tak bising. (Today's class. Because it was fun. It's not boring. Besides, it's not noisy.)

The pupil was on task and was capable to handle the lesson well. Therefore, less disruptive noise was present when pupils were doing the task. This had created a calm atmosphere for some pupils who could not handle too much noise. The journals were analyzed to gain more insights regarding the intervention and based on the researcher's point of view. Furthermore, I had jotted down the incidents that had happened in the class. The journal entry is as below.

The pupils were supportive and on task. They managed to complete the Coloring template kit and a few pupils were even managed to correct their own mistakes.

(Journal Entry No.18 (a), 10 March 2018)

The pupils were very well-behaved and they were focused while completing their task. I saw Pupil J, I and, H doing their task and was not talking during the whole class. Some others were more daring and were brave to explore with colors as they complete the task. They are quite creative after all.

(Journal Entry No.18 (b), 10 March 2018)

Based on the interview data and the journal entries it is clear that most pupils were having fun during the intervention lesson and were participative in class. Furthermore, instead of the traditional repetitive writing in notebook, Coloring template kit is a form of art therapy for the pupils.

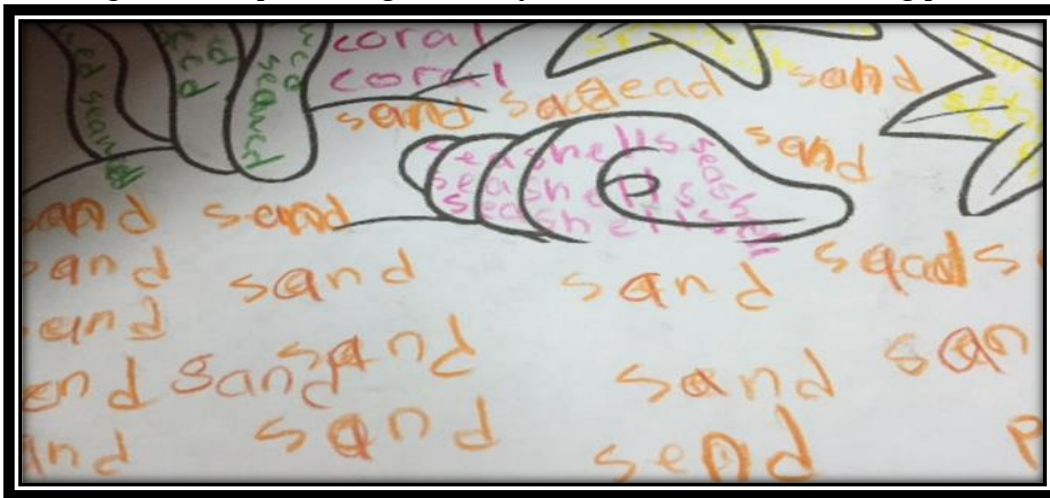
However, the usage of Coloring template kit requires tremendous concentration and extra work from the pupils. This intervention was an alternate version of rote learning and memorization. Even though the pupils were writing the same words again and again, the word count that the pupils wrote in the Coloring template kit was significantly more compared to their usual tasks. Therefore, some pupils with weaker soft skills will experience the strain from the application of this method. In conclusion, the test results, interview data, and the journal entries has reaffirm that belief that Coloring template method is effective in helping pupils in learning spelling. Although they experience some strain, the pupils were able to understand the word better and the visual form that associates with it.

Findings

The research finds that pupils are capable in correcting their mistakes. During while using coloring template, it was observed that one of the pupils was re-writing one of the words in the template. It was discovered that the pupil was correcting his own mistake. Hence this method are able to develop memory retention and understanding thus the pupils are capable of rectifying their mistake provided that the rote learning technique was done effectively.

The figure below shows that the pupil had understood the different forms between the words “send” and “sand”. The pupil was inquired to explain the meaning of both words; the pupil could not explain the word “send”. However he could explain to the meaning for “sand”. The pupil confidently answered my question with the Malay translation “pasir”. This correlates with Charles Read’s claim that the children are not necessarily misspelling the words; instead they have their own concept or system based on his or her understanding of spelling system. Therefore, normal pupils will make the same spelling errors. Thus it is up to the teacher to change the pupils understanding to which matches with the language system. Thus, once error was corrected to the socially ‘correct’ way to spell, the pupil will be able to adapt to it.

Figure 16. Pupils manage to rectify their own mistake after using picture template



Based on this study, on the next cycle the researcher is more concerned to know how the usage of colours affects pupils’ learning. There was also the question if there is any difference in the pupil’s performance if the task was conducted using one colour or will the understanding be better if the correct colour was used for each image.

Additionally, there is a possibility that this intervention could help pupils to improve their writing skills. Furthermore, Abdul Rashid et al. (2006) had stated that the teaching of English at the

early stage in the elementary schools was supposed to play a decisive role and to enable pupils to listen, speak, read and write English well in the later year.

In conclusion, this research believe that teachers must practice lifelong learning. Skinner (1968:254) as cited in Abdul Rashid, Sabariah Morad, & Shaik Mohamed (2006) asserts that “experience would assist teachers to better achieve a wide range of goals deriving from a wide range of conditions”. Based on the findings, the intervention had proven to be effective. However, there is a vital need for the researcher to continue reflect and seek new technique in teaching English for primary school in order to cater to the current need of the country as well as the society. This is because a higher standard of English is the key to maintain the country’s competitive edge in the industrial and technical fields and in the global market place (Ong, 2004).

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SHAPING THE FOURTH INDUSTRIAL REVOLUTION: SUGGESTED SKILLS AGENDA FOR SUSTAINABLE DEVELOPMENT IN QATAR

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Abstract: *Humanity stands on the brink of a technological revolution that will fundamentally alter the way we live, work, and relate to each other. The expected transformations will be unlike anything humankind has experienced before in its scale, scope, and complexity. The response to such transformations must involve all stakeholders, from the public and private sectors to academia and civil society in an integrated and comprehensive manner. However, the academic sector especially higher education looks to be the first field that should take the initiative towards the world of fourth industrial revolution. However, education and training systems have largely remained static for decades. Skills currently introduced by higher education system are not keeping pace with the required shifts. Accordingly, current study tries to set skills agenda to be incorporated as a core component in the higher education system.*

The findings, conclusions and recommendations in this paper are based on structured interviews with a sample of 123 students randomly selected from Qatar University, the national institution of higher education the State of Qatar. The study starts looking for various skills needed to thrive in the future in the context of the fourth industrial revolution. A vast founded list of skills was then shortened into five most important ones. Creativity and harnessing ideas occupies the top skill list, followed by the skill of complex problem solving. The third ranked skill is communication and coordinating with others, then critical thinking in the fourth rank. Making insightful decisions comes as the fifth skill needed to thrive in the future.

The study then shifts to explore the linkages between the defined agenda of skills and the seventeen sustainable development goals. The skills of creativity and harnessing ideas as well as critical thinking look too important to accomplish Quality Education; the fourth sustainable development goal. Complex problem solving skill is the most important skill for Ending Hunger as the first sustainable development goal. End Hunger as the second development goal requires more the two remaining skills of making insightful decisions, and communication and coordinating with others.

Keywords: *Disruptive Technology, Fourth Industrial Revolution, Sustainable Development Goals, Qatar*

Introduction

The tsunami of the Fourth Industrial Revolution is inevitable, said Professor Klaus Schwab, president and founder of the World Economic Forum. Such a prospective industrial revolution will fundamentally alter the way we live, work, and relate to one another (Schwab, 2017). The prospective new reality of the Fourth Industrial Revolution requires new disciplines and new structured approaches to skills, values and ethics. Global stakeholders, from the public and private sectors to academia and civil society have to re-contextualize immediately the norms and regulations, and even the thinking about the ethical and moral challenges necessary to shape the world of the Fourth Industrial Revolution. At the heart of such stakeholders comes the educational system either pre-university or tertiary education. Consistent but clear educational requirements have yet to incorporate. The current study sheds the light on some

required transformations needed for higher education sector in Qatar to be in line with the Fourth Industrial Revolution.

Education is motivated to improve future citizens and professionals through the provision of several skills, values and ethics. They are conformed to the way skills, values and ethics education can support intangible benefits for societies. Among different components of higher education as a system, comes the component of skills, which is often ignored or left to chance.

The present paper builds upon the assumption that there is considerable dissatisfaction among Qatari employers with respect to the skills of university graduates. There is a belief that the gap between the expected skills required by the Fourth Industrial Revolution and the skills offered can be attributed mainly to conflicting values led by academics and so-called professionals of the real world. Despite some commonality of intent, the priorities set by the two sides vary greatly, and the variance has serious implications for curriculum design, education, course management, classrooms, standard setting and evaluation.

Qatar's long-term vision recognizes that it is the new generations that will move the process and that higher education has a key role to play in the future under the Fourth Industrial Revolution. Therefore, what currently needed are educational programmes that are not designed simply to enable students to fit the Fourth Industrial Revolution, but to help them create this revolution.

Literature Review

Aspects of Fourth Industrial Revolution

Throughout history, humanity has experienced quite a few industrial revolutions. In Britain, during the 18th century, the first industrial revolution took place with the discovery of steam engines and the burning of fossil fuels into power plants that replaced manual labour. The textile industry was the biggest beneficiary of this revolution. In the United States, the second industrial revolution expanded from the first one when manufacturing techniques of former revolution were applied to pioneer mass production and assembly line. The third industrial revolution or the digital age builds on the invention of the global network and seeks to connect the world through innovations in information technology. The term Fourth Industrial Revolution describes a world where individuals move between digital domains and offline reality with considerable agility, using connected technology to enable and manage their lives, as part of a wider culture shift (Forum, 2016).

As shown in figure 1, World Economic Forum, has defined ten skills one needs to thrive in the Fourth Industrial Revolution (Gray, 2016).

To Become More Humane

Before standing on the skills needed for the technologies that will accompany the Fourth Industrial Revolution, it looks important to start with the issue of becoming more humane. All of us need to begin to understand and grapple with how we want to shape these technologies," said Henry T. Greely, a Stanford University law professor (Greely, 2009). There is a reciprocal relationship between human being and technologies in general. While technologies shape people, it is argued that people shape technologies at the same time. However, human-centred approach beyond any single discipline should be taken to yield integration of the systems view of technological development with an understanding of the moral components of technologies and an inclusive process for stakeholder engagement. Therefore, any new curricula and programmes of study will have to be created and adopted for a world that requires more from advancing technologies as they envelop our environment and become integrated in our bodies (Hessels & Van Lente, 2008). What we need at the end is an industrial revolution that doesn't lose sight of the true ends of technological progress – social progress and the well-being of humanity.

Features of the Fourth Industrial Revolution: scale, scope, and complexity

There are a number of major differences between the three industrial revolutions witnessed by the world and the Fourth Industrial Revolution. This revolution is distinguished from its predecessors by its tremendous speed and the changes that will come to us will not reach us like calm waves, but as a tsunami. The second difference is that it offers us not only one achievement but several successive achievements in record time. Inventions and innovations are mutually supportive and interconnected, such as Internet stuff, artificial intelligence, and robots (Prisecaru, 2016). The third difference is that this revolution will not only bring new services and products, but new systems of work in all sectors. The Fourth Industrial Revolution will occupy the interest of many partners, from the public and private sectors to academia and civil society (Figure 1). All those stakeholders and others should respond in an integrated and comprehensive manner.

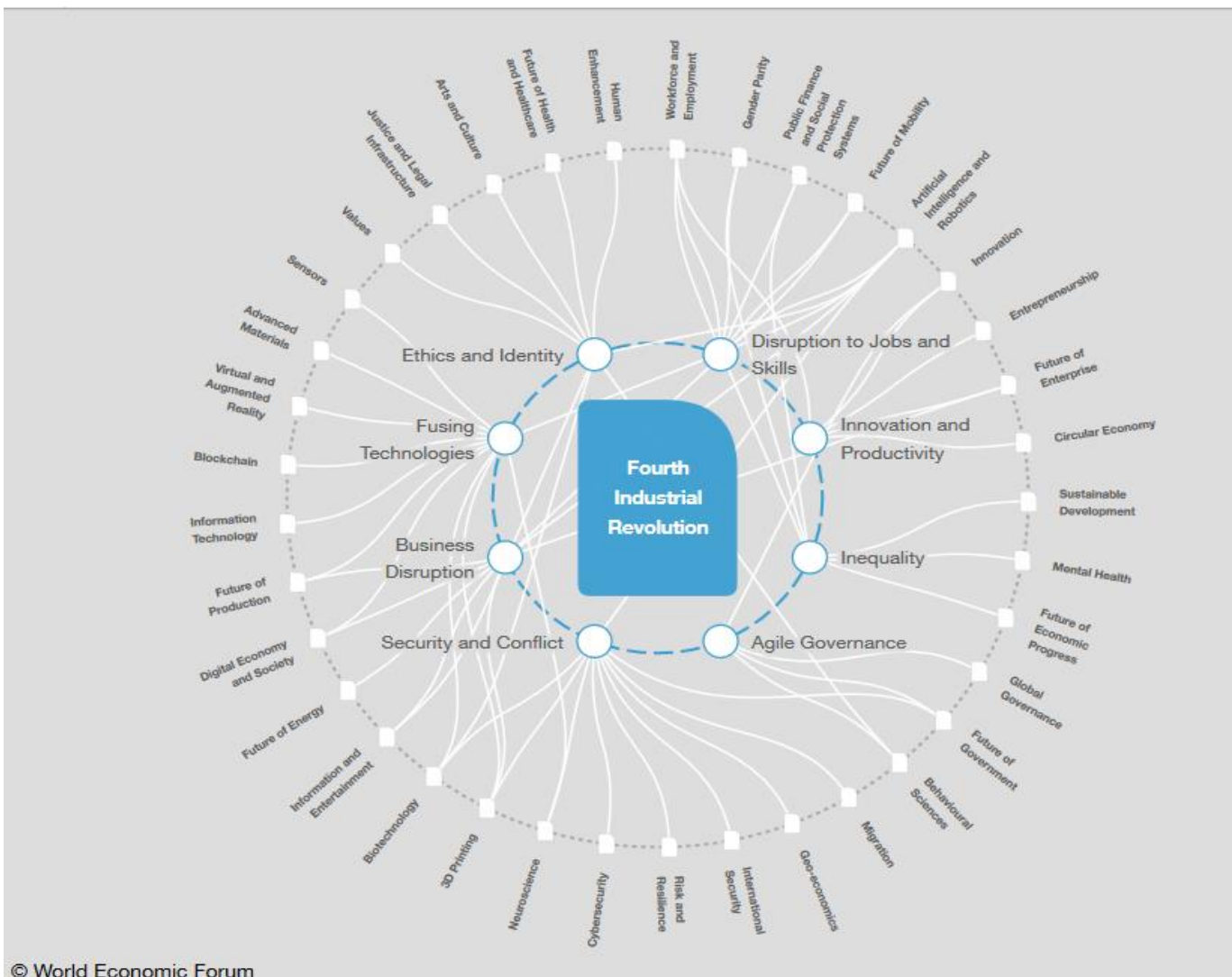


Figure 1: The Framework of the Fourth Industrial Revolution

Higher Education Institutions – Key Drivers of the Fourth Industrial Revolution

The Fourth Industrial Revolution has changed our world at an astonishing pace, especially with an unprecedented innovation that speeds us away from mechanical and analogue electronic technology and directs us towards digital electronics and the Internet of things (Bloem, 2014). The impact on educational requirements may be profound, with more than a third of the skills that are important in today's workforce expected to change by 2020. As reported in the World Economic Forum's 2017 white paper Values, Ethics and Innovation Rethinking Technological Development in the Fourth Industrial Revolution, Thomas Philbeck, Nicholas Davis and Anne M. E. Larsen argue that as institutions evolve in the Fourth Industrial Revolution, they will have to assume four key responsibilities (Penprase, 2018):

- Protect and promote responsible innovation for a sustainable and inclusive future
- Build clear and fair rules for competition and create incentives for players to perform in accordance with societal values
- Safeguard and serve vulnerable and marginalized communities
- Assess and manage systemic risks proactively that derive from the impact of technologies

Methodology Design

To achieve its objectives, the current study adopts an approach of structured interviews with a sample of 123 students randomly selected from Qatar University, the national institution of higher education the State of Qatar. The study starts looking for various skills needed to thrive in the future in the context of the fourth industrial revolution. A vast founded list of skills was then shortened into five most important ones. The investigated short list involves five skills of Creativity and harnessing ideas, Complex problem solving, Communication and coordinating with others, Critical thinking, and Making insightful decisions. Selection of these five skills is well justified for the following reasons:

Creativity is one's ability to act or think in ways that are original, new, or unusual. Therefore, the quality of randomness and the ability to build something out of ideas looks to be a skill that will pay off now and in the future.

Complex problem solving skill is highly sought after by employers as many companies rely on their employees to identify and solve problems. A lot of the work in problem solving involves understanding what the underlying issues of the problem really are - not the symptoms. Accordingly, students were asked about their viewpoints about complex problem solving skill as the developed capacity used to solve novel, ill-defined problems in complex, real-world settings.

Communication and coordinating with others is one of the main contributing factors for success in agile methods. Communication is defined as imparting or interchanging thoughts, opinions, or information by speech, writing, or signs. Effective communication and team collaboration skills will be of top demand among job candidates in any industry.

Critical thinking will be sought after as the ability to think clearly and rationally about what to do or what to believe. It includes the ability to engage in reflective and independent thinking. Someone with critical thinking skills is able to understand the logical connections between ideas; identify, construct and evaluate arguments; detect inconsistencies and common mistakes in reasoning; solve problems systematically; identify the relevance and importance of ideas; and; reflect on the justification of one's own beliefs and values.

Making insightful decisions as a skill will be useful in the age of Fourth Industrial Revolution. People can employ this ability to condense vast amount of data, with the help of data analytics, into insightful interpretations and measured decisions.

Results and Discussions

Qatar's long-term vision recognizes that it is the new generations that will move the process and that higher education has a key role to play in the future under the Fourth Industrial Revolution. The Fourth Industrial Revolution must be accompanied by educational curricula that convey knowledge and skills related to the modern paths of career that are expected to emerge. Institutions of tertiary education can spread new tools, skills and models of collaboration among stakeholders. As the world of work evolves the higher education sector faces significant disruption.

Skills Agenda to Thrive in the Future of the Fourth Industrial Revolution

Followings are the most important findings as assured by the members of research sample. Universities should reflect the curricula of commercial and governmental advisory boards in their curricula. The question is how higher education should evolve to ensure that future business needs are met in a world where artificial intelligence, robotics, big data, automated learning, and biometrics are everywhere. We really need a pattern of education that rethink future skills that will undoubtedly become necessary to be able to reconcile with the innovations that will put the upcoming revolution.

Creative problem solving, personnel management, and social intelligence are still major bottlenecks in automated learning. These "soft" skills will increase in value as artificial intelligence matured. Indeed, even when technology eliminates the need for routine work, it will also open up entirely new opportunities in industries that foster creativity and innovation. Educational systems, in whole or in part, must be explicitly designed for "soft" skills. In other words, this is a question of curricula that are often ignored or left to chance.

This fourth industrial revolution means the mating between human intelligence and artificial intelligence in new and creative ways.

Many respondents believe that human intelligence is better encouraged and developed, not by focusing on technology itself, but on critical thinking. In terms of classrooms per se, it is harmful to maintain the belief that traditional educational curricula such as lectures, where students are passive recipients of knowledge, support the development of critical and pro-active thinking in higher demand by employers. Persons with the ability to turn data into insightful interpretations will be sought after due to the complexity and interconnectedness of various fields such as computer science, engineering, and biology.

According to many respondents, creativity and harnessing ideas will be one of the best skills workers need in the future, and the ability to learn, adapt, and apply in fast courses is very important.

It is important to note that no one can teach creativity through the development of a curriculum to teach creativity, but rather that education should be done in a way that promotes critical thinking about questions or problems by requiring deep reflection and a desire to seek broader relationships between ideas that may not be clear immediately.

One of the main findings of the study is that one can easily buy technology if the means are available; however, we should never start with questions focused on technology, but instead we should think critically about the challenges to be solved.

Respondents realize that at the end of the learning process, the industry will require graduates of current and future generations to be intelligent in solving complex issues involving multidiscipline, and respects the public interest. This includes a specific effort to develop new educational tools and channels aimed at promoting multidisciplinary approaches.

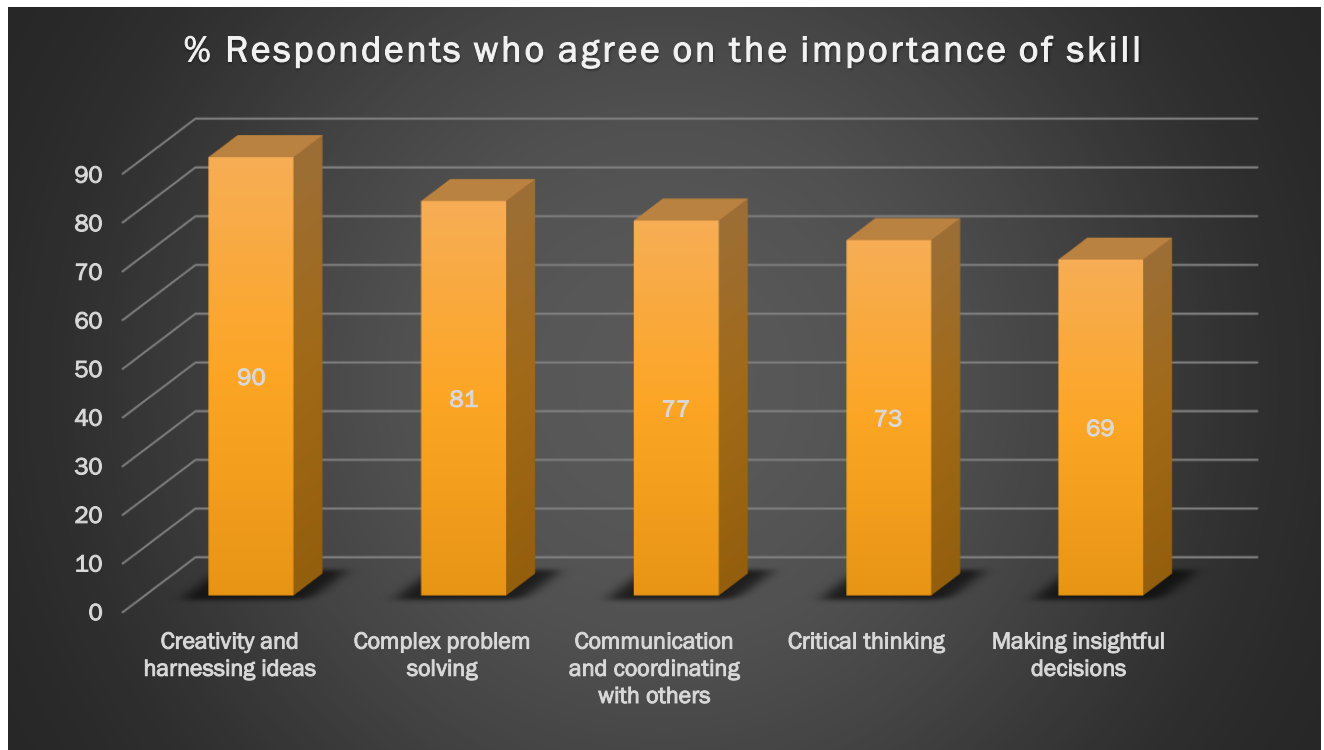


Figure 2: The Rank Order of the Five Skills Agenda for Qatar in the Fourth Industrial Revolution

However, it looks that the consensus about the skills needed to be under the focus of higher education in Qatar differs from that ones as defined by World Economic Forum (Table 1).

Table 1: Agenda of Skills Required to Thrive in the Future of the Fourth Industrial Revolution in Qatar

In Qatar	In 2020 (Intl.)*	In 2015 (Int.)*
Creativity and harnessing ideas	Complex problem solving	Complex problem solving
Complex problem solving	Critical thinking	Communication and coordinating with others
Communication and coordinating with others	Creativity and harnessing ideas	People management
Critical thinking	People management	Critical thinking
Making insightful decisions	Communication and coordinating with others	Negotiation

* Such results were extracted and adopted from World Economic Forum whitepapers

Skills Agenda to Achieve Sustainable Development Goals in Qatar

Figure 3 shows the different skills needed for achieving Sustainable Development Goals in Qatar.



Figure 3: Agenda of Skills Required to Achieve Sustainable Development Goals in Qatar

Ultimately, lessons need to reach not only at universities but beyond different institutions of tertiary education in Qatar to develop individuals' skills, so they can influence technologies through their roles as users, consumers, citizens and investors.

The combination between the liberal arts and humanities and technology, which is the mystery of pioneering change that will accompany the Fourth Industrial Revolution, is a belief that must be a driving force.

A new agenda of skills will be required for employment in the era of Fourth Industrial Revolution. Two attributes stand behind such agenda. These are the evolving of new paths of work in addition to the skills gap between the expected skills required by the Fourth Industrial Revolution and the skills currently offered by the tertiary education system.

In the end, this paper confirms that it is not with the proposal to convert universities into training institutes. Universities are homes for learning, today and tomorrow, and nothing more sacred than caring and rationalizing minds. Education is a much larger and more comprehensive activity than training. But at the same time, the paper stresses that there is no reason for universities to choose between vocational and educational education. Both can live side by side to achieve greater employer satisfaction.

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IMPROVING YEAR THREE PUPILS ABILITY TO PUNCTUATE CORRECTLY THROUGH THE USE OF ACCHANT METHOD

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Abstract: *English as a Second Language teachers in Malaysia, as in many other countries, are eager to exploit the potential of fun and innovative teaching methodologies to ensure an effective teaching and learning process in the classroom. Lately, teaching of writing on punctuation among the primary school learners became a challenge. It is important to understand the causes of the problem in the ability to punctuate correctly and teachers' decision regarding the use of total physical response approach as well as the method of using chant as an intervention. This action research aimed to study the use of Acchant (action and chant) method in helping the Year Three pupils to improve their ability to punctuate. The sample for the study consisted of Year 3 pupils in a school in Putrajaya. The instruments used for the study were interview, tests and questionnaire. It was also supported by journal entries. The study was carried out over a period of two weeks. Two lessons were conducted; one employing the traditional method and the other using the Acchant method. The results of the study showed that the Acchant method had helped the Year Three pupils to a certain extent to punctuate correctly. Therefore, the intervention of using Acchant method helped to improve the ability of punctuating among year three pupils to a certain extent as such, the study has identified some suggestions to improve the intervention method in future cycle.*

Keywords: *Action, Chant, English as a Second Language; Punctuation*

Introduction

Since 1967, English has been accorded the status of a strong second language in Malaysia (Saadiyah 2010). English language is a compulsory and useful language for the current generation to acquire, in order to survive in this global competitive world. The point that English language is the international language in this era of globalization has nudged the Malaysian Ministry of Education (MOE) to make English Language as a compulsory subject to be learned in all government schools. Based on Standard-based Primary School Curriculum, the English language teachers are to impart the language content configured in modular based (Dokumen Standard Kurikulum Sekolah Rendah [DSKSR] 2011). They are listening and speaking, reading, writing, grammar and language arts modules.

However for the context of this action research, the researcher focused on punctuation in writing. Good writing skill in English language is very important to be learned by pupils. Besides, correct grammar, punctuation and spelling are important elements of written communications that learners need to master. Williams (2005) explains that errors in grammar, punctuation and spelling will delay understanding of the messages and may also lead to misinterpretation of messages. Therefore, it is obvious that writing is the most complicated skill that put teachers in great challenge to teach.

This paper will report the results of a study that investigated the ability to improve punctuation among Year Three pupils using the Acchant method. Data were gathered through tests and semi-structured interviews with the pupils regarding: a) the ability of Acchant in improving the ability to punctuate; b) the roles of Action (Total Physical Response) in the development of Acchant and c) the

functions of chant in the development of Acchant. An overview will be provided of the general findings of the tests, supported by interviews.

Malaysian Context

In Malaysia, by 2025 all primary and secondary school pupils will be proficient in English language. The Malaysia Education Blueprint (2013-2025) beneath the 11 shifts to transform has clearly stated “to ensure every child is proficient in English language”. From the year of 2016, the Ministry of Education made the English language of *Sijil Pelajaran Malaysia* [Malaysian Certificate of Education] paper a compulsory pass and expanded the opportunities for greater exposure to the language (Ministry of Education [MOE] 2013 p.33). Therefore, the majority of English language teachers in Malaysia should be fully prepared to teach the language professionally. The pressure on teachers to be able to use the 21st century teaching and learning methodology and also to deliver the English language lesson that is in line with the sixth pedagogical principles of Standardised English Language Curriculum for Primary Schools which is “learning is fun, meaningful and purposeful” is, therefore urgent. As such, the current curriculum for Primary School English language has divided the teaching and learning of English to five different modules which are listening and speaking, reading, writing, grammar and language arts. Since writing is an important component in learning of language as mentioned by Gopala (2012) that writing skill in English language is one of the important criteria that is analysed before hiring the Malaysian graduates in the job sector. Thus, it is obvious that writing skill in English language is important to be learned as Malaysian job sector looks up to the skill. Writing skill here includes the knowledge of punctuation, spelling and sentence construction. Consequently, mastering the ability to punctuate correctly in English language learning cannot be denied. Punctuation skill in writing component of English language is making progression in schools and this is seen as an important step for Malaysian education.

Knowledge of the factors affecting the pupils’ problems in selection and placement of the correct punctuation mark in writing and the availability of adequate teaching method for improving the ability in punctuation are important considerations in the effort to incorporate fun and meaningful teaching method. Understanding attitudes towards the use of fun and meaningful teaching method and the support needed to integrate them into ESL teaching could help teachers in conducting a punctuation lesson effectively. The study identifies challenges that pupils face in their ability to punctuate correctly and the use of Acchant as an intervention method. An awareness of challenges that pupils face could lead to the development of solutions for overcoming the problems in punctuation, develop an effective teaching method and encourage the use of Acchant where the study finds them to be most effective. At the same time, it could also help the Ministry of Education to meet the needs of effective development and implementation of curriculum to the adoption of Acchant as indicated in the 2ND shift to transform in Malaysia Education Blueprint (2013 – 2025).

Learning approach and method to using Acchant in teaching punctuation

The literature review of the study focuses on teaching punctuation in ESL teaching and learning, causes of the problems in punctuation, the use of chant in ESL teaching and learning as well as the use of Total Physical Response (TPR) action in ESL teaching and learning. Neda, Mariann and Seyyed (2012) claimed that currently the theories of L2 acquisition model is the first cognitive model of writing declaring that writing is a “problem-solving, goal-directed and recursive activity”. Based on three interweaving and composing components which are the task environment, the cognitive writing process, and long-term memory, writers move from writer-based texts to reader-based texts. Ultimately, to improve the ability of punctuation the author’s information on a topic, his or her information about the readers and the writing strategies piled up in the memory shape the writers’ long term memory.

Besides that, the teaching of English language to young learners can be based on the use of songs and chants as a teaching methodology. According to the study conducted by Lazar (2004) the method

of using chants provide guidelines such as simplified versions of the grammar rules to enhance pupils' understanding. Lazar adds that the rhyme of the chant can help in retaining pupils' memory.

Above and beyond, the technique of including beat in the creation of a chant has its advantages. Based on a past study done by Peralta and Quito (2010) who mentioned that the beat and the meaningful lines make the chant stay in one's mind together with music, movement, and role play. Peralta and Quito adds that the use of chant is more meaningful and communicative. Peralta and Quito also stated that learning punctuation through chant is not a boring and painful repetition but rather a natural and communicative process. This is one of the method to make sure the learning input stays in the mind of pupils.

Furthermore, there are abundance of methods to facilitate language learning via the use kinaesthetic learning style. Total Physical Response (TPR) refers to method of language teaching whereby learners demonstrate their understanding of the language input in a physical way in which they respond to it (Berman 2005). Larsen-Freeman and Anderson (2011) stated that the TPR language teaching method is effective with young learners as their memory is activated through their experience and response.

Besides the four model or theoretical frameworks, there are several models which are related to teaching of writing components. The model that the researcher selected was eclectic approach which are related to teaching of punctuation. The researcher blended the method of using chant, beat, the approach of total physical response and long term memory derived from first cognitive model. As such the researcher came with the conceptual framework.

Factors contributing to problems in punctuation

Writing is a complex and challenging skill as it is one of the most difficult to learn among the other language skills (Lisa & Yunus 2014). One of the possible causes of pupils' problem in selection and placement of the correct punctuation mark is the language interference. This is because pupils in the primary ESL classroom are of various races like Malay, Indian and Chinese. All these races have their own language. As for the Malays they learn Arabic, Chinese learns Mandarin and the Indians learn Tamil. Each race has individual language system which poles apart from English language. The primary ESL learners are mostly confused to punctuate sentences as they do not practice in the language. This is further supported by Al-Khasawneh (2010) that several English Language learners who learns Arabic struggle with punctuation since Arabic has few limitations in the use of comma and exclamation mark. Thus, the punctuation marks were not commonly used in pupils' writings. Hence, it can be concluded that language interference causes the pupils to be placing punctuation mark at the wrong places while writing.

Another possible cause of pupils' problem in selection and placement of the correct punctuation marks is lack of practice. This is because punctuation is one of the hardest skills to learn in ESL classroom. This is identified by Mourtaga (2004) that learning the appropriate uses of punctuation is tough for people of all ages. This is because there are countless number of rules to recall. One of the major punctuation murderers is the comma (Mourtaga 2004). Comma is used in a sentence when the writer is required to pause before continuing, separate things on a list and insert a phrase that does not enclose any new subject (Angelillo 2002). It is more likely to be concluded as commas appear at the place when one thinks it is not needed and it goes missing when one thinks it should be existing there. Thus, such complicated rules need a huge amount of practice in order to improve in punctuation skill. On top of that, Hall and Robinson (2000) stated that the parents and pre-school teachers whom did not emphasise the use of punctuation marks to the pupils since young could be another reason of why pupils are lacking in practice and awareness on the use of punctuation marks based on their research findings. This is also further supported by Yunus & Chan (2016) who claimed that students face difficulty in writing due to the teaching strategies used by the teachers and lack of opportunities to practice writing. Hence, teacher and parents also play an important role in providing awareness and practice in the use of

punctuation marks. As such, this indicates that lack of practice leads to confusion and poor awareness on the appropriate use of punctuation marks among the primary ESL learners.

Low proficiency in English language could be another possible problem in selection and placement of the correct punctuation marks. This is stated by Angelillo (2002) that low level of English language proficiency is the main cause of lots of difficulties that ESL learners have in their writing tasks especially in grammar, punctuation and spelling. This is because lack of exposure in English language does not allow the pupils to be aware of punctuation skill. A study by Saad & Yunus (2015) claimed that situations and places hampered the English language learning due to certain constraints like lack of opportunities as there was not any need for English during activities where Malay was the official language. On top of that, punctuation marks are just symbols compared to spelling and grammar such as verbs and tenses. Thus, lack of exposure in English language reading materials will cause the pupils to lose focus on punctuation mark.

On the other hand, low proficiency pupils tend to speak English language without the correct tone of punctuation. For example, the tone of the sentence that ends with a question mark is different from the tone of the sentence that ends with an exclamation mark, full stop and comma. Pupils tend to be reluctant of the punctuation mark and speak in a monotonous tone. Besides that, low proficiency pupils are having difficulties in differentiating the types of sentences like interrogative, declarative and imperative. Thus, it affects their writing skill especially in punctuation as pupils write as how they speak. This is further supported by Lawler (2014) that speech influences writing as writing is the system of speech representation. Hence, the problem of low proficiency in English language leads to the problems in usage of the punctuation skill.

Research Issue

Teaching punctuation in English language is one of the important aspects of written English, and yet punctuation is one that is taken the most lightly (Angelillo 2002). Angelillo adds that it is also one of the difficult things to teach pupils who learn English as a second language. Punctuation marks are a set of symbols with specific rules for the usage of each one.

In this study, the researcher focused on punctuation of full stop, comma, question mark and exclamation mark since these are the type of punctuations that my pupils often make errors in. Furthermore, Standard-based Primary School Curriculum placed emphasis on punctuation of full stop, question mark, comma and exclamation mark for Year One, Two and Three where it is stated in Learning Standards 3.2.3 that pupils will be able to punctuate correctly the capital letters, full stop, question mark and exclamation mark (DSKSR 2011). Mateski (2014) establishes ten distinct errors with regard to punctuation. These errors include the missing commas, missing exclamation marks, missing full stops and overuse of question marks.

One of the major problems the researcher faced in teaching English was that the Year Three pupils had difficulty in punctuating. This was evident in both their spoken language as well as in their written work. There were eight types of errors found in pupils work. They were omission of full stop and comma, misuse of exclamation mark as well as excessive use of question mark. Further, they were also wrong placement of full stop, comma, question mark and exclamation mark at the right place.

As mentioned above, the pupils were also having problems in punctuation during their daily conversations like pauses and changes in tones of the voice when speaking.

The researcher discussed with the English teacher about the pupils problem in punctuating. The teacher highlighted that this is a common problem among the Year One, Two and Three pupils in this school besides other grammar problems such as prepositions, tenses and nouns. The teacher's description was consistent with the pupils' reaction towards learning punctuation marks. The pupils expressed that they were confused and felt difficult to include punctuation marks as they did not know when and where to punctuate correctly.

Research Objective

The research objective was to improve Year Three pupils ability to punctuate correctly using the Acchant method.

Research Question

1. How the implementation of Acchant method helped in improving the pupils ability to punctuate correctly?
2. How the Total Physical Response (TPR) helped in the development of Acchant method in improving the pupils ability to punctuate correctly?
3. How the method of chant helped in the development of Acchant method in improving the pupils ability to punctuate correctly?

Methodology – Research Design

The selected model of action research for this research was Kemmis and McTaggart's Action Research Spiral. According to Kemmis (1989, as cited in Pitt & Kirkwood, 2011), action research is “an approach in which the action researcher and a client collaborate in the diagnosis of the problem and in the development of a solution based on the diagnosis”. According to Kemmis (1989, as cited in Pitt & Kirkwood, 2011) action research is a participatory study consisting of spiral of following self-reflective cycles that comprises planning in order to initiate change, implementing the change (acting) and observing the process of implementation and consequences. The next cycle is reflecting on processes of change and re-planning. Finally, acting and observing as well as reflecting. The main reason why this model suits this research is because an Action Research Spiral model provides the opportunity of analysing the phenomenon in a greater depth each time, consequently resulting in greater level of understanding of the problem. It is also a study which is more specific and precise to obtain the needed data. Besides, it provides the platform to high level of practical relevance of the teaching and learning methodology research. On top of that, this design is suitable to be used with quantitative and qualitative data. Hence, the researcher believe that Action Research Spiral Model suits this research to a great extent.

Research Participants

The research was carried out at SK Putrajaya Presint 11(1), Putrajaya .The research participants were Year Three pupils. The class that was involved in this research is 3X. The pupils in 3X possess intermediate level of proficiency in English language. The researcher carried out the research on the whole class but only pupils who were present on both lessons were considered as the research participants. Throughout the two years of teaching experience, the researcher found out that majority of the pupils were weak in punctuation. The 3X class was no exception. As such, the researcher decided to conduct the study on them.

The pupils were from average and below average social economic groups. There were 7 boys and 19 girls , a total of 26 participants. Based on the pupils' background, the researcher found out that they were staying at the low-cost houses near the school. Most of the pupils walked to school or came to school by motorcycle. Some of the pupils' parents were gardeners and housemaids. Based on the pupils' description, their parents did not emphasise on education. All the pupils did not attend tuition classes for extra academic guidance.

The research participants were all Muslims. Their mother tongue was Malay language respectively. They were from non-English speaking environment and learned English language as the second language. They did not use English at home and in their social groups.

Based on the researcher's observation during the teaching-learning sessions, the majority of the pupils were kinaesthetic learners. Hence, the researcher noticed that the pupils learned effectively

through active learning. They were keen to take part during activities but they had short attention period if the researcher was merely talking and explaining.

Research Instruments

The research instruments for this study uses tests, face-to-face semi structured interviews and questionnaire. Considering the questions and the purpose of the study, the researcher found that it is most appropriate to combine quantitative and qualitative approaches in order to maximise both the breadth and the depth of the insights generated (Punch 2005, as cited in Yunus 2007). For the purpose of the tests the researcher administered test 1 and 2 to see the differences in performance of the pupils with the implementation of traditional and Acchant method, which can show the improvement in the ability to punctuate.

The aim of data collection is to learn about people or phenomenon (Mertens 2010). Hence, it is vital to take measures in order to make sure the validity and reliability of the research findings. It is through triangulation. This is because triangulation comprises the use of various sources, methods, and perspectives to validate the research problem and its results. In this study, the researcher applied triangulation to make sure the validity and reliability of the research findings by gathering data from three different instruments. The researcher used tests, interview and questionnaire of researcher to collect the data.

Tests

Firstly, the researcher used tests to gather data for the study. According to Brown, Abeywickrama and Priyanvada (2010) a test is an organised process to gather data on the pupils' knowledge, ability and performance. The researcher designed Test 1 and Test 2 for this research. There were ten questions in each test. The questions for Test 1 and Test 2 were similar in terms of the level of difficulty and format of the questions. This is to enhance validity of research instruments. The pupils read, write and punctuate using the correct punctuation marks like question mark, full stop, comma and exclamation mark. Using a more subjective data collection method produced results that were reflective of the pupils' understanding on punctuation.

The tests were constructed with reference to documents and books. The researcher referred to the KSSR English language syllabus for Year Three by the Ministry of Education (2012) to make sure that the range of coverage was within Year Three learning content. Moreover, the researcher referred to Year Three textbook because the textbook provides clear samples of content that should be taught. The researcher referred to reference books to broaden the scope on the exercise format and examples on using punctuation. To improve the internal validity of the test items, the tests were sent to the researcher's cooperating teacher, supervisors, a lecturer in English Language Department and one lecturer from the Research and Development Department. This was done to make sure that the test items were suitable to be used to collect data to answer the research questions. As a result of the validators' suggestion, there were changes made to avoid confusion and improve the quality of the tests as well as enhance their validity.

Interview

The researcher used interview as another data collection method. Lauer (2006) states interview is a data-collection method in which the researcher asks questions of individuals and records the participants' responses. Thus, the researcher designed the semi-structured interview schedule with reference to reference books and past study. To develop the schedule, the researcher referred to a past study by Lai (2014). A semi-structured interview is open-ended and eventually provides good flexibility (Burns 1999). Hence, the researcher was able to identify the pupils' personal response and beliefs which provided with the quality data and views particularly in comparison to closed questioning. Thus, the researcher used the questions as the guideline to provide the essential focus for the interview. The

schedule was also shown to the validators. Corrections were made to the interview questions in terms of language errors.

The researcher limited each interview session to about ten minutes. This was because the pupils have short attention span and the researcher felt that it would not be appropriate to lengthen the sessions. This warrants that the researcher obtained detailed information from the respondents.

Questionnaire

According to Gillham (2000), questionnaires are one of the methods of gaining information through the interactions between the researcher and the respondents in which standard instructions are given to all the participants by asking questions.

The researcher referred to several books entitled ‘Developing a Questionnaire’ by Gilham (2000) and ‘Educational Research Book on Planning, Conducting and Evaluating Quantitative and Qualitative Research’ by Creswell (2012). The main consideration for instrument design was on how the construction of the response items would lead to the kinds of data being sought (Ary, Jacobs, Razavieh & Sorensen, 2006). For example, the pupils’ response for the item “I think the teacher’s method can help me to punctuate the sentences easily” indicated that the method used was effective. This helped to answer the research question directly. Also, Burns (1999) highlighted that level of proficiency of the pupils especially for second language learners should be clear and precise. Therefore, the researcher used simple choice of words for the questionnaire.

With reference to Fisher (2010), Likert-scale was generally used to enquire people about their views and attitude. In this study, the researcher used a 5-point Likert-scale. The researcher designed six items for the questionnaire. Data collected from this type of response were easily compared and analysed. Like the tests, the questionnaire was also shown to the validators. Based on their suggestions, the researcher included two negative-stemmed items to prevent set response.

Procedures

The study was carried out over a week. The researcher conducted two lessons to teach punctuation of comma, full stop, exclamation mark and question mark. The first lesson and second lesson focused on the punctuation of comma, full stop, exclamation mark and question mark. The punctuation chosen was of equal levels of difficulty because they were selected based on Year One, Two and Three standards documents and was validated by the researcher’s lecturer in English Language Department, supervisor and senior teacher.

The researcher applied the traditional teaching method in lesson one. At the beginning of the lesson, the researcher introduced the topic by displaying a song lyric on the board. This was done based on the suggestion of Thornbury (2002) who mentioned that overt teaching is highly effective for consciousness-raising. The pupils read aloud the rules, descriptions and examples. The researcher believed that this enhanced their understanding on punctuation. After that, the researcher showed a few sentences with punctuation marks to the pupils. They read the sentences in chorus and then the researcher randomly selected some pupils to describe the use of punctuation marks based on the sentences. The researcher realised that fewer pupils participated during this activity.

The researcher carried out group work during the practice stage. They selected the correct punctuation marks stickers and pasted at the right place. At this point of time, most of them asked the researcher how to do the task. The researcher advised them to refer to punctuation chart pasted on the whiteboard. The researcher could hear some pupils discussing.

At the end of the activity, the researcher checked the answers with the pupils. The researcher randomly selected the pupils to share their answers because the pupils who volunteered often were only the smart ones in the class.

Next, the researcher administered Test 1 during the third stage of the lesson. The pupils were given 10 minutes to answer the test questions. This was to assess each pupil’s understanding towards

the lesson especially the ability to use the punctuation marks learned correctly. After that, the researcher administered the questionnaire to the pupils. The researcher explained each item to ensure that the pupils understood the items.

Next, the interview sessions were carried out. Purposive sampling was applied where five pupils from different mixed-ability categories were chosen. The pupils chosen were the ones who could give their full cooperation and who could give more information compared to the other pupils. All the responses were recorded and analysed.

After one week, the researcher conducted Lesson 2 using the Acchant method. The steps of implementing the Acchant method in the presentation stage are illustrated in Table 2. Step 1 to 3 was to provide input and guidance for the pupils but step 4 was to engage pupils actively with what they are learning. The researcher did this to ensure that the pupils concentrate on each punctuation marks taught. Through step 4, the researcher was able to assess the knowledge formed within the pupils for each punctuation mark. Although the process was tiring, but it actually helped the pupils to understand on how to punctuate correctly. The researcher found that those who were able to understand the use of punctuation mark had no difficulty in pasting the punctuation marks.

Table 2
Procedures of applying the Acchant method in the presentation stage.

Steps
First, the researcher demonstrated on how to recite the chant with beats.
Second, the researcher explained the rules of punctuation marks found in the lyrics of the chant.
Third, the researcher displayed some sentence strips to describe the punctuation marks to the pupils to strengthen the pupils' understanding
Fourth, the pupils pasted the stickers on the task sheet in groups and formed the punctuation marks chart based on the punctuation marks that were discussed.

The researcher played a memory game to summarise and evaluated the understanding of the pupils in the presentation stage. The researcher found that this game assessed pupils' understanding and memory in a fun way which the researcher believed it led to better memory retention on the punctuation marks that the pupils learned. Further, the responses to the game were very good.

During the practice stage, the researcher carried out group work. They selected the correct punctuation marks and pasted the stickers at the right place in each sentence strip. By reciting the Acchant, the pupils were able to punctuate the sentences with the help of actions to remember the symbols and rules. In this respect, the pupils practiced the knowledge learned in real context by utilising the Acchant. Thus, it was a meaningful learning which is consistent with the KSSR Pedagogical Principle of fun, meaningful and purposeful learning.

At the end of the group work, the researcher discussed the answers with the pupils. More pupils volunteered if it was compared to Lesson 1. Similar to Lesson 1, the researcher administered Test 2 during the third stage of the lesson. Next, the researcher carried out the interviews. The same pupils were interviewed. After recording and analysing the data, another four pupils were called for interview the next day. This is because the researcher believe more information could be gained. The action is done based on the suggestion of Gillham (2000) who emphasised that the size of the interview samples relies on the point at which no new information observed in the data.

For the test data, the researcher compared the pupils' scores for both Test 1 and Test 2. Table 3 shows the results of the analysis. As can be seen from Table 3, Test 1 and Test 2 scores for Pupil A were 10 and 18 respectively. The results show that Pupil A had a higher score in Test 2 as compared to Test 1, suggesting that Pupil A had performed better in Test 2. The table also shows that 20 pupils obtained better results in Test 2 as compared to Test 1, three pupils scored lower in Test 2 while three others showed no change in their performance. Table 3 also shows that the total and the mean scores for Test

1 was 240 and 9.2 respectively. For Test 2, the total score was 390 and the mean score was 15. The differences in total and mean scores were 150 and 5.8 respectively. The results show that the total and mean scores were 63.0% higher for Test 2 as compared to Test 1. The results indicate that the performance of the pupils was better in Test 2 as compared to Test 1. This finding is consistent with the researcher's journal jotting.

Table 3
Comparison of Scores between the Traditional and Acchant Teaching Methods

Comparison of Test 1 and Test 2 scores

Pupils	Test 1 (Traditional)	Test 2 (Acchant)	Difference
A	10	18	8
B	4	19	15
C	20	20	0
D	10	19	9
E	8	19	11
F	6	20	14
G	4	18	14
H	2	6	4
I	16	20	4
J	16	16	0
K	13	9	-4
L	14	18	4
M	10	19	9
N	8	18	10
O	8	16	8
P	8	13	5
Q	8	18	10
R	12	9	-3
S	14	14	0
T	2	8	6
U	4	6	2
V	8	17	9
W	13	16	3
X	12	8	-4
Y	4	8	4
Z	6	18	12
Total score	240	390	150
Mean	9.2	15	5.8

On top of that, this result is consistent with findings from the interviews. The researcher conducted the interview using English language however due to the low proficiency of pupils the researcher explained some words using Malay language. Besides, the researcher also encouraged the pupils to speak in English as much as they can without using Malay language alone. The following were the responses of the pupils to the question in the Acchant method: "Do you think the Action Chant helped you to learn on the use of punctuation?"

Pupil B : *Ya, easy to ingat rules Miss sebab ada pergerakan kan dalam chant itu.* (Yes. It helped me to remember the rules of punctuation easily because the chant has actions that made it easier for me).

Pupil G : *Chant ini best and easy because got contoh ayat terus Miss. Senangjer untuk saya faham rules punctuation Miss.* (Yes. The action chant helped me to understand the rules of punctuation easily because the chant contained examples of sentences).

(Interview, 20th April 2018, 9.40 am)

As mentioned earlier, for the questionnaire data, the researcher calculated the mean for each item in the questionnaire. The questionnaires shown in Table 4 were administered by explaining each item using Malay language as the pupils level of proficiency were low. Although, the questionnaire is in English language the researcher tried maximumly to help the pupils understand the item clearly to encourage them answer the questionnaire honestly. Table 4 shows the comparison of means for the questionnaire items between the Traditional and Acchant methods. Based on Table 4, the mean of the first item for Traditional and Acchant methods were 3.6 and 4.5 respectively. The difference in means for the item was 0.9. The results show that the mean for Acchant method was 25% higher than the mean for the Traditional method. For the other positive items, that is, items 2, 3 and 4, the means were also higher for the intervention lesson as compared to the traditional lesson. The results indicate that the Acchant method was more effective than the Traditional method in helping the pupils to answer questions on the use of punctuation mark taught.

Table 4
Comparison of item means between the Traditional and Acchant methods.

No.	Items	Means		Difference
		Traditional	Acchant	
1	The teaching method helped me to answer the questions on punctuations.	3.6	4.5	0.9
2	I can understand the use of punctuation marks taught today through the chant.	3.3	4.6	1.3
3	I can answer the questions on punctuations with confidence by reciting the chant.	2.8	4.3	1.5
4	I can place the correct punctuation marks taught today in different situations.	3.2	3.8	0.6
5	I find it difficult to understand the punctuation marks in today's lesson.	3.5	2.5	-1.0
6	I am confused over how to use the punctuation marks taught today.	3.2	2.2	-1.0

On top of that, data from the interviews were transcribed, coded and categorized to determine emerging themes (factors) to further understand why the pupils performed better under the Acchant method. From the analysis four themes emerged (refer to Table 5).

Table 5
Emerged factors from the interviews.

No.	Categories of factors	Frequency	%
1	Lesson is fun	5	16.7%
2	Easier to understand the lesson without confusion	3	10.0%
3	Rules of punctuation seems to be more easier to remember with action chant	10	33.3%
4	The actions in the chant are interesting	12	40.0%
Total		30	100.0%

As can be seen from Table 5, the factor with the highest frequency is ‘the actions in the chant are interesting’. This factor was mentioned 12 times (40.0%) during the interviews. The results indicate that the main reason for the better performance of the pupils was that the Acchant method made it easy for them to understand the punctuation. These findings were consistent with the results of items 1, 3 and 5 in the questionnaire.

Another finding of this study is that the use of actions and chant can be very helpful in teaching punctuations. This was obvious in the test results, journal entries and responses from the interview. This can be seen on the use of the stickers that the pupils pasted during the practice stage.

The researcher learned through the Acchant method that the actions helped the pupils form correct mental images that would enable them to understand the lesson. According to the theory of constructivism, learning takes place when the learners actively construct new knowledge linked to previous ones and creates mental representations (Jantmary & Yunus 2014). At this juncture, the researcher suppose the actions of punctuation marks showed to the pupils helped them in forming the mental representations. Moreover, the actions were based on bodily movements thus the pupils had an extra motivation to form the mental images. Hence, this made the comprehension of new information based on the actions was much easier for the pupils. With reference to Ormrod (2006) who mentions that learning takes place effectively when the pupils are exposed to a familiar learning environment.

On the other hand, in Lesson 1, the pupils were taught by mere descriptions and explanations of punctuation marks. The pupils had to understand the explanations in order to form the appropriate mental representations. If at all the pupils fail to understand the given explanations, the mental images would not be formed at all. Eventually, this was true as the interview data seem to point out. The pupils were queried on their opinion about the explanation of the punctuation marks. The following were some of the responses:

Pupil E: *I don’t understand Miss. Panjang sangat ayat.*

(I did not understand anything as the explanation was too long.)

Pupil G: *Susah la Miss, tak faham apa Miss terang tadi.*

(I was having difficulty to understand the explanation by Miss.)

Pupil P: *I faham a bit Miss.*

(I understand some part only.)

(Interview, 20th April 2018, 10.05 am)

Above and beyond, based on an analysis of the test results, the researcher noticed that the performance of three pupils showed a decline. Thus, the researcher interviewed them to know the reason behind their inability to perform well. The interview findings shows that these three pupils liked Lesson 2 as they were able to comprehend Lesson 2 better than Lesson 1. Nevertheless, the researcher checked the pupils’ worksheets and found that these pupils had placed the punctuation marks wrongly. Obviously the mental representations formed in their mind was not according to what was taught. Thus, the hints formed were wrong. According to Bernstein, Penner, Clarke-Steward and Roy (2012) asserted that hints formed can be either correct or incorrect. Hence, a teacher’s role is to ensure that the learners create the correct mental images needed to understand a particular concept clearly.

Despite the three cases mentioned above, generally the research findings based on the data analysis above for the tests, interviews and journal jottings suggest that using the Acchant method is effective to a large extent in improving the ability to punctuate correctly among Year Three pupils.

Discussions

Firstly, with the implementation of the Acchant method the researcher realised a teacher should create a lesson in fun and unique manner in order to attract pupils during the teaching and learning process. The Acchant method is a combination of different methods. Therefore, the researcher found it to be capable of catering to classes of heterogeneous in composition with regards to learning styles. For example, based on the interviews, the researcher found that girls prefer the Acchant method because it was presented in the form of a chant that has beats but boys like it because of the actions used.

Female

Pupil H: *Chant buatan saya ingat rules punctuation Miss. Tak pernah kami belajar chant dalam kelas BI sebelum ini.*

(Learning punctuation through chant helped me to remember the rules better. It was very new for us to learn using chants in our English lesson.)

Pupils S: *Rentak chant buat saya ingat dengan cepat Miss. Saya suka rentak macam ini. Best lah Miss.*

(I think the beats of the chant helped me to learn the rules of punctuations. I love the beats of the chant.)

Male

Pupil C: *I like today Miss because ada benda yang buat saya gerak dalam kelas waktu belajar. Sebab ada gaya senanglah Miss saya ingat apa yang Miss ajar harini.*

(The actions are the best. I can remember the rules of punctuation just by remembering the actions used for each punctuation marks.)

Pupil D: *Saya suka buat gaya. Sebab happy dapat gerak. Boringlah Miss kalau duduk selalu waktu belajar. Today is the best.*

(I prefer actions in the chant. It is fun because at least I was able to move in the class instead of sitting for the whole lesson.)

(Interview, 20th April 2018, 10.10am)

The researcher also learned the importance of preparing a unique lesson that caters towards the needs of 21st century learning strategies. Therefore, the Acchant method adheres to the 21st century teaching and learning method as it allow the pupils to learn the rules of punctuation by reciting the chant according to the beats while performing the bodily actions.

On contemplation, the researcher realised that the actions and the beats in the chant provided motivation for the pupils to engage in my lesson. The chant played an important role because it encompassed the rules of punctuation and also example of sentences. This made the pupils understand the whole concept of punctuation at one go. Also, the chant had beats that were catchy for the pupils. Thus, the beats in the chants played an important role in promoting memory retention among the pupils during the lesson. Brewer (1995) agrees that chants improve memory of content knowledge and details through beats.

Next, the researcher learned the importance of preparing fun lesson through the bodily actions that were in the chant. These actions played an important role in their active participation and involvement in learning the rules of punctuation. Shotwell (2002) agrees that reciting chant or song

together with bodily movements allows the children to be more creative and active during the lesson. At this juncture, the researcher came to realise the importance of kinaesthetic learning style which promotes pupils understanding during a lesson. Hence, it can be said that actions in the chant played an important role in promoting active involvement among the pupils and at the same time a fun lesson that can be seen through the pupils face reaction.

Besides, the researcher also learned that the Acchant method developed the pupils self-confidence by enhancing their understanding on the rules of punctuation. The pupils were seen trying their best to perform well. They looked very focused and determined. This was obvious when the researcher conducted the traffic light game using the Acchant method. The pupils were highly participative as it promoted better understanding to them on the uses of punctuation rules. Woolfolk (2010) asserts that pupils prefer to take part in activities that help them grow to be more competent instead of engaging in activities that they can possibly fail. This adheres to the theory of self-efficacy on building their self-confidence (Ormrod 2006).

However, there were several drawbacks of this method. For example, the lines in the chants were not rhyming to each other and the pupils actually took time to learn on reciting the chant. However, the researcher continued using this method because the purpose was not to develop a perfect method to teach punctuation but more to improve the teaching practice. In the process, the researcher gained better understanding and insight of teaching in general and teaching punctuation specifically.

In the following cycle, the researcher will continue using the Acchant method to teach punctuation with the necessary adaptations. The researcher would like to adapt the beats of this chant to a tune of familiar song as “Upin Ipin”. This is because through the interviews, the researcher found that most of the pupils prefer song and games. If done this way, the researcher believe the pupils would easily remember the rules and less-time consuming to teach. This is further supported by Abdul Razak & Yunus (2015) who asserted in the result of the study that the pupils enjoyed the integration of action song in teaching English language. Further, in the next cycle the researcher would like to try using an inductive teaching approach whereby the pupils change the lines that shows examples of punctuation marks in the chant. This is called “My Acchant” game. For example, the pupils need to change the line “Ouch! It is painful” to a sentence that uses exclamation mark. Perhaps, if the pupils could be more creative they can come up with their own actions for each punctuation marks. If it is implemented this way, the researcher believes the pupils would be more active to construct their own knowledge and feel the sense of ownership to the Acchant. The researcher would also intend to include drama as part of the teaching learning activity using the Acchant method. This is a follow up activity after the above mentioned game on ‘My Acchant’. The pupils need to dramatise their own Acchant. Eshelman (2015) who agrees that using drama to teach punctuation marks can help encourage learners to greater precision in writing skill. Further, by retrieving the information learned, the pupils’ memory can be enhanced. Since the use of actions and chant have been effective to a certain extent in teaching punctuation, the researcher would like to try to implement the method to teach other aspects of writing skill such as sentence construction. This is because the researcher find this method caters to pupils all level of proficiency and learning styles.

Conclusion and Implication

In conclusion, the study on the Acchant method has shown that it can help in improving Year 3 pupils ability to punctuate correctly. Through this study, the researcher learned that not only action chant can captivate the attention of pupils, perhaps they can play a vital role in improving pupils ability to punctuate correctly. Nevertheless, the use of actions and the Acchant method is not perfect. For one, the method can be improvised by placing emphasis to the lines and beats of the chant as well as the insertion of a game.

In a nutshell, the study has brought to the researcher the most invaluable experience that the researcher could not put into words to describe how much have the researcher gained from it. Although

this study has been a roller coaster ride in the researcher's life, yet the enriching knowledge and experience that the researcher gained was fruitful. Above and beyond, the study provided the researcher a room to experiment the ideas in teaching and learning. It also gave the insights to view a problem and its solutions from different perspectives. To sum up, the study has moulded the researcher to be a good reflective practitioner that encouraged to constantly reflect on the teaching and learning strategies that the researcher implements.

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FARMERS' KNOWLEDGE, ATTITUDE AND BEHAVIOR IN RESPONSE TO GOODS AND SERVICES TAX (GST)

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Abstract: Malaysia had officially replaced Sales and Services Tax (SST) to Goods and Services Tax (GST) since 1st April 2015. The changes lead to many responses but mostly are negative due to the lack of knowledge and information on GST. Agriculture output such as rice, vegetables, fruits, meats and eggs were categorized as zero-rated supply which they are free from GST. However, maintenances on the farm such as fertilizers, herbicides, ruminant feed, planting tools and others are in GST implementation. This shown the unbalance conditions by farmers as they are harvesting products which are free from GST but still pay GST in preparing them. Are the farmers suffered from such conditions? Thus, this study was undertaken to investigate on the farmers' behavior in response to GST. Primary data were collected using structured questionnaire via face to face interview with 400 respondents from Kelantan, Kedah, Johor and Selangor. Majority of the respondents did not accept GST implementation in Malaysia (45.5%) followed by 33.5% were uncertain and 21% were accepted. Most of the respondents did not receive any information about GST information (64%). The perception level of respondents towards knowledge, attitude and behavior on GST implementation were moderate M=2.358, M=2.913 and M=2.818 respectively. The results showed by the three levels are mostly negative perceptions. The farmers should be provided with a clearer tax information, trainings and finance management for their survival on any new tax levied.

Keywords: Sales and Services Tax (SST); Goods and Services Tax (GST); Knowledge; Attitude; Behavior.

Introduction

Agriculture is entitled as the third important economic activity in Malaysia after services and manufacturing sector which contributed 8.2% to Gross Domestic Product (GDP) (DOSM, 2018). The geographic position of Malaysia which located on the middle of the earth equator provides the country with masses biodiversity of flora and fauna and poses as the sources to agriculture productions. Variation of agriculture productions in Malaysia was mainly begin from palm oil and rubber industries. Then, the sector derived gradually to progressive expansion of various crops, livestock and fisheries productions. From global economic view, agriculture stands as a vital sector which involves on national revenue and export earnings by supplying food including raw products (WTO, 2017).

Total contribution from agriculture industry (including palm oil) showed a slight GDP fall from 7.3 percent in 2012 to 7.1 percent in 2013. However, agriculture subsectors (fisheries, livestock and other agriculture) have achieved national GDP rose from 3.17 percent in 2012 to 3.22 percent in 2013. The performance of each agriculture food subsectors can be observed clearly through the breakdowns of the GDP contributions. From fisheries subsector, it showed GDP decline from 1.05 percent in 2012 to 1.02 percent in 2013. Meanwhile, the contribution of livestock industry to GDP rose from 0.85 percent in 2012 to 0.88 percent in 2013. For crops subsectors, the GDP also achieved increment from 1.26

percent in 2012 to 1.3 percent in 2013 (ETP, 2014). In conjunction, these shows that agriculture sector involves in various contributions to the economy through its multi-functional roles and inter-sectorial bonds.

Agriculture is a global well-known sector that growth sturdy by its multiple subsectors, allowing numerous taxation access. Taxation is a collective tool for the government's taxing and spending strategies. The spending strategies are involving the expenditures of government which mainly emphasize on development of infrastructure, trade and industry, including agriculture. Government has taxed agricultural producers to generate revenues to finance government expenditure, transfer resources (agricultural surplus) to nonagricultural sectors, promote efficiency and diversification of agricultural production and redistribute incomes within the agriculture sector (Khan, 2000). Regional and rural communities, including farmers in agriculture sector are depending on an effective and decent tax system that derived tax revenue for economic growth and socio viability.

On 1st April 2015, Sales and Services Tax (SST) had replaced to Goods and Services Tax (GST) but it changed back to SST by the new government, right after they won the election in May 2018. The concept of Goods and Services Tax (GST) was first introduced by a French tax official in 1950's. To date, there are numerous strong economic countries in the world that have practiced this form of taxation including Australia, European Union and Asian countries likes Singapore and China. However, GST was implemented not only less than three years as a fiscal policy in Malaysia showing a drastic refusal from the citizens to the tax system. This study will show in narrower perspective from farmers in agriculture sector during the GST implementation.

The general objective of the study is to study level of respondents' behavior in respond to GST implementation. Meanwhile, the two specific objectives of the study are;

1. To examine the socio demographic profile of respondents.
2. To determine level of knowledge, attitude, subjective norms and behavior towards GST Implementation.

Literature Review

Definition of Good and Servie Tax

GST is a broad-based consumption tax which covers all transactions including imported goods and services except for the goods and services that are classified as zero-rated supply and exempt supply which will be exempted by the Government (Fatt, 2006). The tax is charged on every supply of taxable goods and services at all levels in the supply chain in the process of production, manufacturing, wholesale and retail. The tax is paid by customers when they purchase goods and services by claiming back form RMCD (Alapatt, 2014).

The goal of sustainable Goods and Services Tax is seen as a transformation of Tax system for restructuring the system to make it fairer, efficient and transparent. This nature of GST would help combat the tax leakages and non-compliance. It affects all consumers equally from every level of society regardless of where and how their income is derived. In other word, it affects consumers across the board including the poor and needy. According to Ayob (1994) farmers were the poorest society among community in developing countries. He stated that the poverty of farmers are hardly discard although agriculture sector had been part of economic activity since independence.

Despite the aim of GST, there are factors that need to be taken account in suitability of any tax as part of the policy. Firstly, it is important that the tax levied emphasizes collection cost effectiveness. The complexity of the tax system and degree of taxpayers' acceptance are also the factors that should be consider. Those three factors are the measurements required stated by Smith (1994) for a success of new tax system implementation.

Goods and Services in Agriculture

During the least than 3 years of GST implementation, the government and its crew are still in their way to spread out the information of GST in order to combat confusion among people. Sales and contracts are made almost every day and some of these transactions required people to pay the GST. It is an issue if people are still unaware or confuse with the tax system of GST and become worst when people ignore and boycott not to pay the tax. The focus here are to know either farmers are well prepared with the understanding about the procedures, chances, opportunity, and effects in participating themselves in GST. A research carried out by Imam (2015), knowledge has positive and significant effect on tax amenability. A deeper and wider understanding on taxation knowledge will have positive influence by the farmers.

By following the Order 2014, Zero Rated Supplies such as vegetables, rice, fresh spices and fresh potatoes is exceptional from implementation of GST. Meanwhile, other agriculture products such as fertilizers, pesticides, agriculture maintenance equipment and others, those have not been stated in Order 2014 are implemented with 6% GST (RMCD, 2014). Basically, most of the farmers need to buy the implemented GST agriculture products for their farm requirement progress. Therefore, they will have no optional to not involve in paying the tax and at the same time there will be no tax for their sales. The matter of how they behave to this situation are important in order to survive and sustain in agriculture sector.

During April 2015 until May 2018, the taxation replacement (SST to GST) has nevertheless emerged effects throughout the nation by economically and socially in agriculture sector. In addition, clearly stated by Jaffer et. al. (2006), modification in tax regulations, monetary services, price level and subsidies can alter significantly the farming profit. Former Agriculture and Agro-based Industry Minister, Datuk Seri Ismail Sabri Yaakob stated that there is slight increase in agricultural products and equipment due to the levied tax. Those are good evidences that the new changes of tax regulations from SST to GST may influence farmers' intuitional risk to the farmers and lead to the flexibility of farmers to sustain in agriculture sector.

Methodology

The primary data collected directly from the questionnaire filled up by the 400 number of farmers as respondents for the study. The survey questions designed according to the objectives of the study. The respondents are mainly from four regions of Malaysia which is Kelantan, Kedah, Johor and Selangor where most of them has high farmers community who their main occupation and income are from agriculture sector. The surveys questions structured into several parts such as demographic characteristic, farm profile, acceptance on GST implementation and level of respondents' knowledge, attitude and behaviour on GST implementation. Descriptive analysis was used to analyse the data which include the percentage and frequency. Frequency analysis was done to obtain information such as gender, age, education level, year of experience in farming, farm area, income of farmers and level of knowledge, attitude and behaviour of respondents on GST implementation.

Result and Discussion

Table 1: Demographics of the Respondents

Variables	Parameter	Frequency	(%)
Gender	Male	310	77.5
	Female	90	22.5
Age	<25	13	3.3
	26-35	68	17.0
	36-45	67	16.8
	46-55	110	27.5
	>56	142	35.5
Education level	No education	91	22.8
	Primary	85	21.3
	Secondary	180	45.0
	Higher education	44	11.0
Year of experience in farming	1-10 years	176	44.0
	11-20 years	67	16.8
	21-30 years	94	23.5
	31-40 years	25	6.3
	41-50 years	27	6.8
	51-60 years	6	1.5
Farm area	>60 years	5	1.3
	<1 acre	24	6.0
	1-5 acres	122	30.5
	6-10 acres	223	55.8
	>10 acres	31	7.8
	<RM1000	49	12.3
Income	RM1001-RM2000	114	28.5
	RM2001-RM3000	99	24.8
	RM3001-RM4001	47	11.8
	RM4001-RM5000	17	4.3
	>RM5000	74	18.3

In this study, a higher distribution of gender is male representing 77.5%. Both men and women contribute significantly to agricultural production yet, their access to these agricultural resources differ. Despite the contribution of women to agriculture, it is evident that they do not have much access and control over agricultural resources as men. Women are lower by status in household and community resulting limitation in bargaining power and decision making (Meinzen-Dick et al., 2011). Women are mostly disowned to work on field regarding this matter.

In terms of age, majority of the respondents are more than 56 years old representing 35.5%. Base on DOSM (2017), the highest working aged is 15 to 64 years old. Due to low agricultural profitability, young people are not interested in agriculture and shift towards SME and industrial sectors, so most of elder people involves in farming activities. Most of the respondents had an education at secondary school level representing 45.0% of the total sample. In terms of working experience in farming, 44.0% of the respondents have been working between 1 to 10 years. 55.8% of respondents own farm area 6 to 10 acres. As for their income per month, it shows that majority of them earn between RM1001-RM2000 representing 28.5%. Husin & Abdullah (2012) stated that age of trees, advanced age of settlers and non-increasing land size effect income of farmers. This represents why most of respondents are low income earners.

Respondents' Acceptance

Table 5 below showed the frequency and percentage of respondents' acceptability on GST. Most of the respondents rejected GST as the highest answered by respondents are No. The frequency of not accepted GST was 182 which represented 45.5% from 400 respondents. Then, about 134 respondents were not certain in accepting GST carried out the percentage of 33.5%. The lowest showed that 84 respondents agree to accept GST which represent by 21% in total.

Table 5: Farmers' Acceptance on GST

GST acceptability	Frequency	(%)
Yes	84	21.0
Uncertain	134	33.5
No	182	45.5

Level of Knowledges on GST Implementation

Table 2a represented respondents' knowledge on GST. The statements "I know agricultural inputs for the needs of my farm are subjected to GST" shows the highest mean 4.21. Meanwhile statement "I know who to contact to get more information about GST" showed the lowest mean 2.90.

Table 2a: Respondents' Knowledge on GST implementation (n=400)

No	Knowledge on GST	Level	Mean	SD
1	I know the effects of GST on my agricultural activity	Moderate	3.02	1.290
2	I know I do not have to charge GST to buyers who bought my farm yield	Moderate	3.05	1.378
3	I know agricultural inputs for the needs of my farm are subjected to GST	High	4.21	0.869
4	I know how to plan my plantation management when the cost of input goods increased	High	3.74	1.106
5	I know the government provides assistance to reduce the burden on farmers	Moderate	3.43	1.323
6	I know authorities who distribute information about GST	Moderate	2.90	1.286
Total average mean		Moderate	3.392	

Score: 1 = strongly disagree; 2 = disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

Table 2b: Knowledge Perception Level (n=400)

Level	Mean	SD
High (3.67-5.0)		
Moderate (2.34-3.66)	2.358	0.645
Low (1-2.33)		

Table 2b showed moderate level of respondents' knowledge with the overall mean 2.358. The results show a barrier to the respondents to acknowledge more GST information, but they did not being expose to the various authorities who play the roles in giving GST information. Nurlis (2015) claimed that, service tax authorities have positive and significant relationship taxpayer performances at the Tax Office in Jabodetabek and Bandung area. The study highlighted a suggestion that the better the service tax authorities, the tax compliance rate will be higher.

Level of Attitude in Response to GST Implementation

The respondents' attitude in response to GST is shown in Table 3a which showing the highest mean with the statement *"I feel pleasure if the officer can give more information about the GST to farmers"* giving the mean of 4.43. Meanwhile the least mean 3.85 from statement, *"I still use the same farm input amount despite the price rose by GST"*.

Table 3a: Respondents' Attitude in Response to GST (n=400)

No	Attitude on GST	Level	Mean	SD
1	I still use the same farm input amount despite the price rose by GST.	High	3.85	1.083
2	I still manage my farm well even farming input prices increased.	High	4.29	0.706
3	I am sure to make my own decisions in managing the usage of agricultural inputs.	High	4.24	0.724
4	I never give up if the tax burdened me in managing the activities of the farm.	High	4.30	0.735
5	I had been prepared if the GST makes my farming activities declined.	High	4.07	0.957
6	I feel pleasure if the officer can give more information about the GST to farmers.	High	4.43	0.672
Total average mean			4.197	

Score: 1 = strongly disagree; 2 = disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

Table 3b: Attitude Perception Level (n=400)

Level	Mean	SD
High (3.67-5.0)		
Moderate (2.34-3.66)	2.913	0.300
Low (1-2.33)		

Table 3b showed moderate level of attitude with the overall mean 2.913. The results portrayed the desirable of respondents in gaining more information about GST from authorities to avoid the lacking on knowledge. From the result, the respondents admit the rose price of agriculture farm input from GST taxation. Despite on that, they still had to coop with it to sustain their farm performance from incompetency. This is compatible to Vankatesh (2014) who claimed that expansion and wise in use of agricultural inputs is most crucial for refining agriculture productivity.

Level of Attitude in Response to GST Implementation

Table 4a represented respondents' behavior in response to GST implementation. The statements *"Although the GST resulted in increased input prices, I'm still working hard to develop my farming activities."* shows the highest mean 4.28. Meanwhile statement *"Although the GST resulted in increased input prices, I still use a number the rate of input items at the same way"* showed the lowest mean 3.70.

Table 4a: Respondents' Behavior in Response to GST (n=400)

No	Behavior on GST	Level	Mean	SD
1	Although the GST resulted in increased input prices, I still use a number the rate of input items at the same way.	High	3.70	1.245
2	Although the GST resulted in increased input prices, I will still try to increase my income.	High	4.25	0.725
3	Although the GST resulted in increased input prices, I'm still working hard to develop my farming activities.	High	4.28	0.744
4	Although the GST resulted in increased input prices, I will still continue my farming activities.	High	4.27	0.674
5	Although the GST resulted in increased input prices, I would not quit my farming activities.	High	4.25	0.714
Total average mean			4.016	

Score: 1 = strongly disagree; 2 = disagree; 3 = Neutral; 4 = Agree; 5 = Strongly Agree

Table 4b: Behavior Perception Level (n=400)

Level	Mean	SD
High (3.67-5.0)		
Moderate (2.34-3.66)	2.818	0.406
Low (1-2.33)		

Table 4b showed moderate level of behavior with the overall mean 2.818. Even though the level of behavior shows a moderate score, there is a need to for further strengthen. The respondents indicate that they are aware of price burden on their input but still struggling to survive in their farming activities and maintain their productivity. Hence, assessing their level of knowledge and attitude will assist relatable agencies to make a further ado to lessen their burdens.

Conclusion

This study gives a better view on the level of knowledges on GST, attitude and behavior in response to GST implementation. The results show that the farmers' level of knowledges on GST is moderate. Farmers' attitudes and behavior in response to GST implementation also shows moderate results. By assessing their level of knowledge attitude and behavior, these indicate the requirement of relatable agencies in understanding the readiness of community including farmers towards any tax system levied. In this study, it shows that there is necessary to be strengthened to increase productivity through adequate tax information transferring, appropriate extension services in providing efficient training and financial management. Agriculture extension services, Royal Malaysian Customs Department (RMCD) and Malaysia Inland Revenue Board (MIRB) have played a role in providing fundamental knowledge and information to assist farmers to survive any new tax system implementation. Thus, it also important for parties including farmers, government and non-government agencies to unitedly involve, ensuring the survival and sustainability of any scales farmers in agriculture sector.

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TECHNOLOGICAL PEDAGOGICAL CONTENT KNOWLEDGE'S SELF-EFFICACY (TPACK-SE) ON PRE-SERVICE TEACHERS AT TEACHERS MALAYSIA EDUCATIONAL INSTITUTIONS

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Abstract: *Technological Pedagogical Content Knowledge (TPACK) is the knowledge needed by teachers to integrate technology into teaching effectively. Self-efficacy or teacher confidence and expectations on TPACK's knowledge will determine their confidence in integrating technology into their teaching. Therefore, the purpose of this study is to determine the level of self-efficacy of TPACK (TPACK-SE) among final year students at the teacher training institutes. This study was conducted through a survey on 280 final year pre-service teachers from five institutes located in the Southern region of Malaysia. Data were analysed quantitatively. The findings indicate that the TPACK-SE level of pre-service teacher was lower compared to other TPACK-SE sub-constructs except in the sub-construct of Knowledge Technology (TK-SE). It is recommended that further studies be carried out on how to improve TPACK-SE amongst teachers.*

Keywords: *TPACK, Technology Self-Efficacy, ICT Integration, Pre-service Teacher.*

Introduction

Information and Communication Technology (ICT) development affects education in various aspects, especially in teaching and learning. The use of ICT in teaching and learning has changed the way teachers teach and students learn (Schaffhauser & Nagel, 2016). The use of ICT in teaching and learning can develop students' mind, create healthy competitiveness, intellectual, physical, emotional and spiritual achievement, and enable more effective teaching of concepts (Kilic, 2017). This is in line with the Ministry of Education (MOE) effort in the 7th Malaysia Development Plan 2013-2025 (KPM, 2013) which aimed at leveraging ICT to improve the quality of learning in Malaysia (Umar & Hassan, 2015).

Technological Pedagogical Content Knowledge (TPACK) is a critical knowledge that teachers need to integrate ICT effectively into the classroom. TPACK is a complex interaction between the three knowledge domains - content, pedagogy and technology. TPACK is a theoretical framework used to determine whether teachers can effectively implement technology-assisted teaching (Mishra & Koehler, 2006). However, it remains unclear how components of knowledge in TPACK are applied by teachers as they plan for technology integration in accordance with the needs of teaching and learning in the 21st century (Koh et al., 2015).

Self-efficacy of TPACK (TPACK -SE) is a measure of teachers' level of confidence in their ability to carry out effective teaching and learning using technology or ICT to achieve learning objectives using the TPACK framework. (Tschannen-Moran & Hoy, 2001, Joo et al., 2018). There are many studies that prove the relationship between teachers' self-efficacy and the readiness to integrate technology in the classroom (Cengiz, 2015; Karatas et.al, 2017; Banas & York, 2014; Valtonen et al., 2015). Studies also show that teachers with TPACK at higher levels of self-efficacy are more likely to integrate technology in their teaching (Yerdelen-Damar et.al, (2017).

Literature Review

Technological Pedagogical Content Knowledge (TPACK) is the integration of subject matter, technology and teaching and learning. The TPACK framework represents the complex relationships and interplays between the three primary knowledge domains (content, pedagogy and technology). Three blended domains illustrating the intersection of the primary domains (pedagogical content knowledge, technological pedagogical knowledge, and technological content knowledge domain and TPACK which represents the integrated knowledge of the interaction of all three primary domains. (Figure 1)

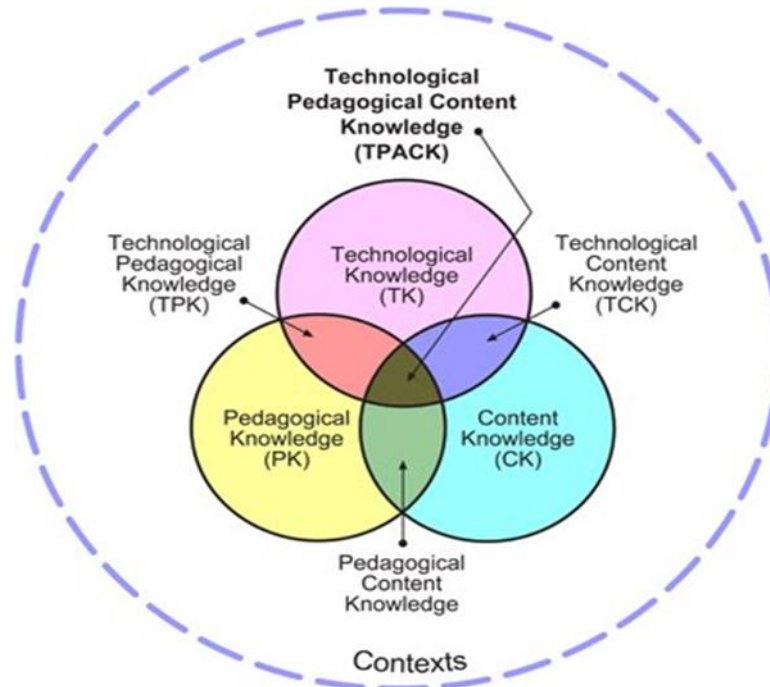


Figure 1: The Technological Pedagogical Content Knowledge Framework (Mishra dan Koehler, 2006)

Content Knowledge (CK) is a knowledge about the actual subject matter that is to be learned or taught (Mishra & Koehler, 2006). Teacher should know the content that they want to teach and the central facts that they will deliver (Shulman, 1986).

Pedagogical knowledge (PK) is a knowledge about the processes and practices or methods of teaching and learning and how it encompasses, including overall educational purposes, values and aim. It involved all issues of student learning, classroom management, lesson plan development and implementation. It includes knowledge about methods to be used in the classroom (Shulman, 1987). Teacher should use the appropriate technique or method when using technology in the classroom because the purpose of pedagogy is to optimized the use of technology (Fullan, 2017)

Technological Knowledge (TK) refer to knowledge of operating technological tools and its uses (Koehler & Mishra, 2009). Teacher should master TK because technology enable various teaching strategies that wasn't possible before. (Fullan, 2017)

Pedagogical Content Knowledge (PCK) is a knowledge of content and knowledge of the most effective pedagogies for teaching that content (Mishra & Koehler, 2006). According to Shulman (1986) pedagogical content knowledge is the ways of representing and formulating the subject that make it comprehensible to others.

Technological Content Knowledge (TCK) is knowledge of how to reconnect technology and content mutually (Koehler et. al., 2014)

TPK is the knowledge of the influence of technology on teaching and learning as well as the affordances and constraints of technology with regard to pedagogical designs and strategies (Koehler & Mishra, 2008)

TPACK is the knowledge of the complex interaction among the principle knowledge domains (content, pedagogy, technology). It is the knowledge needed by teachers to integrate technology into their teaching (Mishra & Koehler, 2006). As Koehler and Mishra (2009) propose, the concept of TPACK allow teachers, researchers, and teacher educators to move beyond oversimplified approaches that treat technology as an 'add-on' instead to focus again, and in a more ecological way, upon the connecions among technology, content, and pedagogy as they play out in classroom contexts.

There are many researches done regarding TPACK and its connection with the integration of technology in the classroom among pre-service teachers as well as in-service teachers. Among others, studies have used the TPACK framework to measure TPACK knowledge of pre-service teachers (Patahuddin et al., 2016, Drummond & Sweeney, 2017, Lim et al., 2015); the development of the training module curriculum using the TPACK framework (Lee & Kim, 2017, Mouza et al., 2017) and also studies to build an instrument to measure TPACK (Lin et al., 2013, Koh et al., 2014, Koh et al., 2015, Kartal et al., 2016, Taimalu & Luik, 2019).

There are also studies in the literature that examine the relationship between TPACK and self efficacy such as done by Joo et. al., (2018) which found that TPACK's knowledge had no direct effect on the attitude of teachers towards the use of technology. In a study by Farjon et. al., (2019) and Hsu (2016), it was found that teachers' own attitude and beliefs are among the main factors that determine whether teachers will integrate technology into their teaching. Corkin et. al., (2016) further concludes that having the knowledge of TPACK alone does not guarantee the continuation of ICT integration in teaching and learning without teachers' confidence of their ability to integrate ICT and therefore also proposed that the implementation of TPACK knowledge and teachers' confidence can be developed through practice.

Meanwhile, Banas and York (2014) suggest that effects of TPACK on preservice teachers to use technology is through its effect on self efficacy. Some researchers named TPACK as TPACK-SE or TPACK self efficacy because TPACK can not be measured using questionnaires but can be measured indirectly by measuring confidence or their self efficacy on TPACK (Kiray, 2016)

Objective

The objective of this research is to determine the level of TPACK self-efficacy (TPACK-SE) among final year students of the teacher institute of education.

Methodology

This is a quantitative reseach involving a survey conducted on 280 final year pre-service teachers from five the Institute of teacher education, in the southern region of Peninsular Malaysia. The survey used has been modified from the "Survey of Preservice Teachers' Knowledge of Teaching and Technology" developed by Schmidt et. al, (2009). The survey comprised of 28 items that measured teachers self effication with respect to which they agreed or disagreed with statement related to Technological Knowledge (TK), Technological Content Knowledge (TCK) Technological Pedagogical Knowledge (TPK) and Pedagogical Technological Content Knowledge (TPACK). Each statement was rated as a 5 point Likert-type scale with 1 – strongly disagree to 5 – strongly agree. The internal reliability of the survey was high with an overall Cronbach alpha of 0.7.

Results

The aim of this study is to survey the self-efficacy belief of the final year pre-service teachers in five the Institute of teacher education on their technological pedagogical content knowledge (TPACK).

Table 1 : Mean and Standard Deviation of TK-SE

Item	Self Efficacy of Technological Knowledge (TK-SE)	M	SD
TK 1	Using a variety of ICT application software	4.19	0.69
TK 2	Learn new software applications easily.	4.00	0.76
TK 3	Describe terms related to ICT application software.	3.50	0.80
TK 4	Solve technical issues related to ICT application software.	3.39	0.89
TK 5	Incorporating appropriate ICT application software to provide multimedia material.	3.79	0.77
TK 6	Acquire various information using ICT application software.	4.18	0.78
TK 7	Communicate using ICT application software.	4.16	0.74
	Overall	3.89	0.59

The survey consists of self efficacy belief in Technological Knowledge(TK-SE) (Table 1), self efficacy belief in Technological Content Knowledge (TCK-SE) (Table 2), self efficacy belief in Technological Pedagogical Knowledge (TPK-SE) (Table 3) and self efficacy belief in Technological Pedagogical Content Knowledge (TPACK-SE) (Table 4).

Mean of item TK 1 that is the confidence of using various ICT application is the highest (4.19) and item TK 4 – the confidence to solve technical problems related to software application being the lowest (mean: 3.39). This finding demonstrates that pre-service teachers has high self efficacy in using various ICT applications but they still need to further enhance their knowledge in technological skill especially with regard to technical problem in software application. Therefore, during their teacher training they should also be given more exposure regarding how to solve technical problems related to ICT applications as these skills are needed to increase their confidence in technology integration.

Table 2: Mean and Standard Deviation of TCK-SE

Item	Self Efficacy of Technological Content Knowledge (TCK-SE)	M	SD
TCK 1	Enhancing the delivery of my major subject using ICT application software.	4.35	0.62
TCK 2	Enhancing students' understanding the content of my major subject using ICT application software.	4.26	0.65
TCK 3	Enhancing students' mastery of the subject content using ICT application software.	4.18	0.62
TCK 4	Assessing students' understanding of the subject matter using appropriate ICT application software.	3.99	0.67
TCK 5	Incorporating appropriate ICT application software to provide multimedia materials for my major subject.	4.09	0.64
TCK 6	Acquire variety of information to understand the contents of my major subject using ICT application software.	4.19	0.64
TCK 7	Choose ICT application software that can increase students' understanding in my major subject	4.16	0.64
	Overall	4.18	0.48

The lowest mean of the TCK-SE is in evaluating the student's understanding of the subject content using appropriate ICT application (TCK 4, mean: 3.99) and the highest mean is in improving the delivery of the content using ICT application. Overall pre-service teachers are able to connect technology to content and to choose the appropriate software based on the content. However, their skills need to be enhanced in terms of the assessment using the appropriate technology in accordance with the needs of the 21st century classroom assessments.

Table 3: Mean and Standard Deviation of TPK-SE

Item	Self Efficacy of Technological Pedagogical Knowledge (TPK-SE)	M	SD
TPK 1	Improve the effectiveness of induction sets using ICT application software.	4.48	0.59
TPK 2	Control students during teaching and learning using ICT application software.	4.03	0.75
TPK 3	Involving learner in active learning using ICT application software.	4.18	0.71
TPK 4	Helping students learn independently using ICT application software	3.97	0.75
TPK 5	Incorporating appropriate multimedia element using ICT software application to attract students' attraction.	4.18	0.70
TPK 6	Adapting the use of ICT software application with classroom activities	4.16	0.66
TPK 7	Providing quality teaching and learning aids using ICT application software.	4.23	0.66
	Overall	4.17	0.50

This result shows that overall, pre-service teachers in this study have high perceived self efficacy in using the technology in accordance with the different teaching methods (overall mean: 4.17), especially in improving the effectiveness of induction sets using ICT software (TPK 1, mean: 4.48). However, comparing to other item in the TPK-SE construct pre-service teachers have lower perceived self efficacy in helping students learning independently using ICT application software (TPK 4, mean: 3.97).

Table 4: Mean and Standard Deviation of TPACK-SE

Item	Self Efficacy of Technological Pedagogical Content Knowledge (TPACK-SE)	M	SD
TPACK 1	Control students during teaching and learning as well as enhancing the delivery of my subject content using ICT application software.	4.01	0.73
TPACK 2	Improve the effectiveness of the induction set, thereby increasing the mastery of the students towards the subject content using ICT application software.	4.30	0.60
TPACK 3	Enhancing students' academic achievement in my major subject through various teaching and learning strategies using ICT application software.	4.10	0.62
TPACK 4	Adapating the use of specific ICT software application with classroom activities to achieve learning objectives in my major subjects.	4.16	0.63

Item	Self Efficacy of Technological Pedagogical Content Knowledge (TPACK-SE)	M	SD
TPACK 5	Incorporating appropriate ICT software application to produce multimedia materials that can attract students towards achieving the learning objectives the subject content.	4.16	0.66
TPACK 6	Produce an active learning using ICT software application so that students are able to recall the content of the subject.	4.12	0.67
TPACK 7	Helping students to learn independently by accessing various information to understand the subject matter using ICT software application.	3.98	0.71
	Overall	4.12	0.46

Overall, pre-service teachers have high level of perceived self efficacy to integrate technology in their teaching in any subject content with the appropriate teaching method (overall mean:4.12). Pre-service teachers perceived self efficacy to increase the effectiveness of induction set in order to improve the students' mastery of the content using the ICT software application is the highest (TPACK 2, mean: 4.30). Meanwhile, their perceived self-efficacy in helping students accessing various information to understand subject content in independent learning is comparatively low. (TPACK 7, mean 3.98)

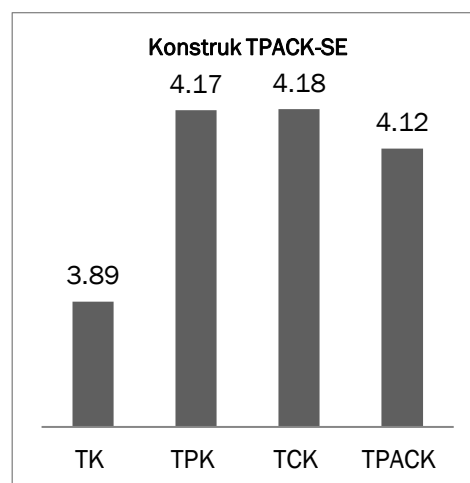


Figure 2 : Overall mean of TPACK -SE

Overall, TP perceived self efficacy on TPACK-SE construct (Figure 2) is almost the same as other sub constructs except in TK-SE (min: 3.89). This may be because pre-service teachers cannot distinguish components in TPACK (Shinas et. al., 2013). This finding indirectly responding to issues brought up by Shinaz et. al., (2013) that TPACK framework should be reviewed and similar view from Lee and Kim (2014) whether TPACK framework represents a combination of technology, content and pedagogy knowledge or the integration of the three domain knowledges.

Discussion

TPACK-SE is a measure of teachers' level of confidence in their ability to carry effective teaching and learning using technology to achieve the expected learning objectives using the TPACK framework. TPACK-SE is also refers to individual perceptions or beliefs on their ability to integrate ICT. The perceived self-efficacy in this study were measured as TK-SE, TCK-SE, TPK-SE and TPACK -SE.

In this study, the TPACK -SE level is low compare to other sub-construct except in TK-SE. This finding is in line with the findings by Shibli Naaz & Zebun Khan. (2018). They found that the TK-SE

was higher than the other sub constructs of TPACK. This finding is also parallel to the finding of Yerdelen-Damar et al., (2017) on 665 primary school teachers involving 467 women and 198 men in 7 colleges in Turkey where TPACK-SE is lower than the TPACK-SE sub-construct except TK-SE. In another study by Dong et. al (2015) among 390 pre-service teachers in China, it was also found that TPACK -SE level is low compare to the other sub-construct. The low level of perceived self efficacy pre-service teachers on TPACK may be due to the fact that the preservice teachers lack of experience in teaching at school.

Relationship between TPACK and experience were studied by Ambault and Crippen (2009). They found that compared to pre-service teachers; in-service teachers have higher TPACK -SE levels compare to other sub-construct. Similarly, Koh et. al (2010) found a weak but significant relationship between TPACK-SE with age and teaching experience. In another study, Kazu and Erten (2014) also proved that TPACK-SE increase according to the increase in teaching experience.

In this study, preservice teachers perceived self efficacy TK-SE was the lowest compare to the other sub-construct measured. This shows that TPACK-SE construct is independent of TK, TPK and TCK. This study is in line with result from Kaplon-Schilis and Aleksandra (2018) research which showed that TPACK-SE is not dependent on TK, PK and CK. Other significant finding that are worst to mention in this study is that TCK and TPK perceived self efficacy levels are almost similar. This maybe due to the fact that teachers' difficulty in distinguishing between sub-construct in TPACK framework as stated by Shinas, Yilmaz-Ozden, Mouza, Karchmer-Klein and Glutting (2013).

Conclusion

The perceived self efficacy of pre-service teachers in TK especially regarding the use of ICT application in teaching and learning should be considered by the Institute of teacher education. Although pre-service teachers are categorised as digital natives who use variety of digital tools in their daily life but they are still unsure of how to use the ICT application in helping their teaching (Brooker, 2017).

Self-efficacy of TPACK of a pre-service teacher should be optimumized so that they will be more confidence in their ability to carry out effective teaching and learning using technology once they were posted in schools. Teacher educators should be ready to train teacher trainee how to implement integration of technology in teaching and learning. This can be achieved by modelling the pre-service teachers with a teaching model based on TPACK theoretical framework (Cengiz, 2015; Karatas et al., 2017). The Institute of teacher education should emphasize on the pedagogical factors such as the implementation of inquiry approach in courses regarding ICT to enhance pre-service teachers skills in technology integration in teaching (Brown, 2017).

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THE EFFECTIVENESS OF USING WORDDAISY MODULE TO IMPROVE NUMBER OF VOCABULARY AMONG YEAR THREE PUPILS

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Abstract: *The 21st Century Learning has becoming an amazing benchmark for the education system in most country of all around the world as it promotes a new chapter of learning experiences among the learners. This new and advanced learning is believed to return more benefits to the learners as it highlights the importance of creativity, higher order thinking and reasoning skills. Not to forget, the 21st Century Learning demands an integration of technology in the classroom so that the learning experiences will be more engaging and interesting in line with the super advanced technology that takes place in our daily life. In Malaysia, the education system is transforming to a better version. English language has been given the same highlight as an important language to be mastered by all learners. However, due to its position as the second language in this country, there are lots of learners who are still struggling to comfortably learn and use the language due to many underlying factors. One of the main factors is lack of vocabulary. Therefore, it is a must to discover the best method to help the learners widen their range of vocabulary. Therefore, this study will investigate the effectiveness of using the Wordaisy Module in expanding learner's number of vocabulary. This study was conducted with 20 pupils in a sub-urban school in Selangor. The data was collected via interviews, questionnaires and tests' scores. The findings showed that majority of the respondents agreed that the module did help them to acquire vocabulary. Therefore, it is hoped that the invention of Wordaisy Module will help to improve pupils' mastery of English vocabulary in ESL classroom.*

Keywords: 21st Century, vocabulary, language, ESL classroom

Introduction

Vocabulary is an essential element in a language. Without vocabulary, there is no way a person can talk or convey any message in any kind of forms be it in speaking or writing. In fact, listening and reading as a medium to get information will be a waste when vocabulary is not present. Ferreira (2007) wrote that vocabulary knowledge requires not only word meanings knowledge, but it requires the usage of the words in the appropriate context and in a natural way. It also includes the relationship between new words acquired and the ones already acquired. Vocabulary revolves around us all the time every day. Without vocabulary, we will be struggling with ourselves in order to pass messages or to comprehend information being delivered to us. This is also supported by Lessard-clouston (2013) who stated that vocabulary is central to English language teaching because without sufficient vocabulary students cannot understand others or express their own ideas. In addition, Wilkins (1972) wrote that “without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (pp. 111–112).

Why vocabulary matters for a student? This is because vocabulary is the foundation of the learning skills namely reading and writing. According to Pikulski & Templeton (2004), the teaching of many vocabulary words causes pupils to be better readers and writers. While Jacobs (2017) in his journal

stated that children's vocabulary knowledge influences their ability to recognize words and the ease and speed (or "fluency") with which they can "chunk" word parts into a whole word or read across meaning bearing groups of words. Therefore, lack of vocabulary will definitely affects student progress in all four basic skills namely listening, speaking, reading and writing. This statement is supported by Lessard-clouston (2013) who stated that without sufficient vocabulary, pupils cannot understand others or express their own ideas.

Problem Statements

After months of teaching 3 Orkid, the researcher realized that majority of the pupils did not perform in English as they have a very limited range of vocabulary. There are some groups of vocabulary that are not present in their memory including basic words such as things in the classroom, names of places, verbs and many more. They did not have the vocabulary that they supposed to have as a Year 3 pupil. This situation definitely distort the smoothness of the lesson as well as affect the process of their English language learning since they keep on asking for translation.

Therefore, after considering some factors such as the pupils' interest, attention span as well as their level of proficiency, the researcher decided to use Wordaisy Module which integrates simple drawing and pictures as a strategy to help the weak pupils to increase their number of English vocabulary. According to Damronghaolapan (2015), pictures could be a suitable alternative to improve students' vocabulary achievement. In this research, Damronghaolapan found that more than 85% of the students agreed or strongly agreed that the pictures were interesting and they learned the meanings of new words.

Other than that, by asking the pupils to draw an image of a daisy flower and draw out the pictures of the targeted vocabulary, the researcher believed that it is easier for her to tackle the pupils in terms of their motivation to learn English as well as their attention span. This is because the pupils will learn in a stress-free mode where they can enjoy themselves drawing the pictures based on their creativities. According to Thagard (2011), learning a foreign language can be stressful for anyone, especially young learners. Fun, simple art activity can help to create a welcoming environment.

Purpose Of The Study

The purpose of this study is to improve the Year 3 Orkid pupils' number of vocabulary using the Wordaisy Module.

Research Questions

The following research questions are formulated in order to meet the research objectives:

- a) Does the Wordaisy Module improve the number of vocabulary among Year 3 Orkid pupils?
- b) Does the Wordaisy Module helps to create a cheerful English learning environment in the 3 Orkid's classroom?

Research Design Of The Study

The researcher decided to use the quasi-experimental design for this research. Quasi -experimental research is an evaluation designed to compare groups or activities as the base line to measure the research impacts. According to Jhangiangi (2015), it is a type of evaluation which aims to determine the effectiveness of a program or intervention towards selected respondents.

Research Participants

For this research study, the researcher has chosen 20 pupils from 3 Orkid. 3 Orkid is the third class in Year 3 and majority of the pupils have poor proficiency in English. They are chosen to be the participant of this study as they got the lowest score for the Mid-Term Examination. In fact, some of

them even failed the test. Besides that, these pupils are not interested in English language. As they have limited vocabulary, they felt that English is a tough subject and therefore dislike it. Thus, it makes a good reason for the researcher to carry out this study with them in order to motivate them to learn English. Moreover, these pupils tend to be carried away with lessons that are dry and textbook based. It is really hard for them to focus in a long period of time. Therefore, the researcher believes that these pupils are the best participants for this study.

Research Instruments

There were two types of instruments used for this study namely questionnaires and tests. There will be two sets of questionnaires that will be given to the participants namely pre questionnaire and post questionnaire. In the pre-questionnaire, the pupils will be questioned about their personal details, background knowledge and their feeling towards the language. Meanwhile in the post-questionnaire, the pupils will be questioned about their feedback towards the treatment lesson. However, the researcher will guide the participants in answering the questionnaires by explaining to them what the questions want since the pupils are having difficulties in understanding sentences.

As for the tests, there will be two sets of tests namely pre-test and post-test. During the pre-test, the pupils will answer the questions without any guidance. This test will be given after the conventional lesson being carried out. Meanwhile for the post test, it will be given after the researcher completed the treatment lessons. The test will be exactly the same as pre-test. The results of both tests then will be compared to determine the effectiveness of using Wordaisy Technique to enhance the range of vocabulary among the pupils

By using all these instruments, the data will be collected in quantitative mode as every instrument contributes a result in form of numbers. Therefore, it is easier for the researcher to make a comparison between the results of before and after treatment sessions

RESEARCH FINDINGS

Descriptive analysis on Pre-Questionnaires

The data presented in this section described the pupils' perception towards English language. The findings presented are based on the pupils' responses from Question 1 to Question 6 of the pre-questionnaire.

a) Question 1 : Do you like to learn English?

The result shows that only 25% of the respondents love to learn English meanwhile the other 75% of the respondents have a negative thought towards learning English language.

b) Question 2: Do you speak English at home?

The result shows that 100% of the pupils did not use English language at all when they are at home. They use their mother tongue all the time.

c) Question 3: Do you speak English with your English Language teacher?

The result shows that none of the pupils made some effort to try to communicate in English with the teacher. The pupils did not have the courage to communicate in English due to lack of vocabulary and low confidence to speak the language.

d) Question 4: Do you speak English with your friends at school?

The result shows that all of the pupils claimed they did not speak in English with their classmates. Since the language used at home was their mother tongue, they felt more comfortable to communicate with their friends using Malay language.

e) Question 5: Do you like to draw?

The result shows that 75% of the pupils agreed that they can remember the words they have learnt better if they draw the picture of the words. However, 25% of the pupils disagree as they claimed to have poor drawing skills.

f) Question 6 : I like to learn English in a fun way. Drawing activity during English lesson must be exciting.

This figure shows that 75% of the pupils loved to learn English in a fun way. The idea of having art activity in a language lesson excites them and makes them feel more motivated. However, due to poor drawing skill, 25 % of the pupils did not share the same thought of having fun English lesson by the integration of art activity during language lesson.

Descriptive statistics on Post-Questionnaires

The data presented in this section described the pupils' perception towards the English language lesson after the intervention being introduced. The findings presented are based on the pupils' responses from Question 1 to Question 6 of the pre-questionnaire.

a) Question 1 : Did I enjoy today's lesson ?

The result shows that half of the pupils enjoyed the lesson conducted by the researcher and they were from Experimental Group. It shows that the module has helped them to understand the lesson better. Meanwhile, the other half of the pupils did not enjoy the lesson because they could not understand the lesson due to lack of vocabulary.

b) Statement 2 : I can understand today's lesson better.

The result illustrates that 50% of them can understand the lesson better as they have gained more vocabulary through the treatment. Meanwhile the rest of the pupils claimed to feel confused and did not understand the whole content of the lesson.

c) Statement 3 : I will be happy if I can do art activity while learning English.

The result shows that all the pupils love the idea of integrating art activity during English lesson.

d) Statement 4 : I love it when the teacher use pictures to illustrate the word.

The result illustrates that 100% of the pupils prefer the teacher to use pictures while describing the words so that they can have mental images of the words.

e) Statement 5 : I can remember the words better if I draw the picture of the words.

Based on the figure shown above, 75% of the pupils agreed that they can remember the words they have learnt better if they draw the picture of the words. However, 25% of the pupils disagree as they claimed to have poor drawing skills.

f) Statement 6 : I like to learn English in a fun way. Drawing activity during English lesson must be exciting.

This figure shows that 75% of the pupils loved to learn English in a fun way. The idea of having art activity in a language lesson excites them and makes them feel more motivated. However, due to poor drawing skill, 25 % of the pupils did not share the same thought of having fun English lesson by the integration of art activity during language lesson.

Descriptive statistics on overall score performance between the Experimental Group and the Control Group

Samples	Score performance (decreased / increased)
<u>Experimental Group</u>	
Respondent 1	Increased
Respondent 2	Increased
Respondent 3	Increased
Respondent 4	Increased
Respondent 5	Increased
Respondent 6	Increased
Respondent 7	Increased
Respondent 8	Increased
Respondent 9	Increased
Respondent 10	Increased
<u>Control Group</u>	
Respondent 11	None
Respondent 12	Decreased
Respondent 13	Decreased
Respondent 14	Decreased
Respondent 15	None
Respondent 16	Decreased
Respondent 17	Decreased
Respondent 18	Decreased
Respondent 19	Decreased
Respondent 20	Decreased

Table 5 illustrate the general score performance for both groups. Out of 20 respondents, 10 of them (50%) which were from Experimental group had increased in score, 8 respondents (40%) had decreased in score and 2 respondents (10%) did not show any change in score.

Discussion Of Research Findings

The aim of this study was to measure in depth the effectiveness of using Wordaisy Module to help the pupils to expand their range of vocabulary. Therefore, two research questions were formulated in order to achieve the research objectives.

Research question no.1

Does the Wordaisy Technique improve the number of vocabulary among Year 3 Orkid pupils?

Based on the study done, it was proven that the researcher's attempt in using Wordaisy Module is an effective tool to enhance the pupils' range of vocabulary. The conclusion was made as the researcher looked at the students' improvement by getting better scores in the Pos-test. Twelve out of twenty respondents significantly had increased in scores and improved their number of vocabulary after being introduced with Wordaisy Module.

One reason the pupils enjoyed learning through fun activity is through the integration of pictures and art activity during the language lesson. According to Scurletis (2009), regardless of the specific images they conjure in their minds' eyes, the result should be the same: the process of visualizing a concrete image that captures the meaning of a word should help them remember that meaning the next

time they encounter the word. The pictures and drawing activity has succeeded in giving the pupils a new experience of learning English language.

Research question no. 2

Does the Wordaisy Technique helps to create a cheerful English learning environment in the 3 Orkid's classroom?

Yes, enjoyable and stress-free learning classroom environment can motivates pupils to learn the language especially English. A lesson full with content and being integrated by the beauty of art where the pupils can use their creativity definitely provides the pupils with comfortable and stress-free feeling. A relax class where they can look at pictures and draw their own pictures during the treatment process, had provide multiple sources of stimulation in boosting the interest and motivation to learn English among the pupils.

According to Kouyoumdjian (2012), visual learning is then, essentially, a way for the children to better picture and understand concepts. For the pupils, drawing makes their learning easier, more efficient, and more fun. Therefore, the chances to learn and remember new vocabulary are more guaranteed. This was clearly seen by the researcher during the treatment process, where the pupils were actively involved. The module really help to motivate the pupils to be more focus towards the lesson and therefore remember the new words better. This is justified by the positive feedback gained from the post-questionnaire.

Conclusion

In conclusion, the findings from the study clearly show that using Wordaisy Module was very effective to expand pupils' range of English vocabulary. The results of the study from the pre-test and post-test further justifies this. Therefore, it is suggested for English Language teachers to use Wordaisy Module as one of the teaching strategy and techniques in their classroom. Hopefully the teachers will then discover new positive changes in their pupils towards their language learning.

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APPENDIX 1

Pre -Questionnaire

Complete your personal details and tick (/) for your choice.

Mid-term English result : -----

1. Do you like to learn English?
Yes () No ()
2. Do you speak English at home?
Yes () No ()
3. Do you speak English with your English Language teacher?
Yes () No ()
4. Do you speak English with your friends in school?
Yes () No ()
5. Do you like to draw?
Yes () No ()
6. Do you like to draw while learning English Language during English Language lessons at school? ?
Yes () No ()

APPENDIX 2

POST -QUESTIONNAIRE

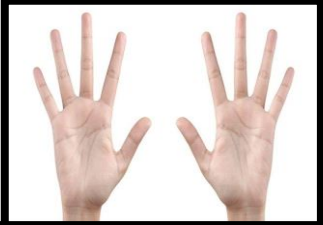
Read the questions carefully. Decide whether you agree or disagree. Tick (/) for your choice.

Questions	AGREE	DISAGREE
1. I enjoyed today's lesson.		
2. I can understand today's lesson better.		
3. I will be happy if I can do art activity while learning English.		
4. I love it when the teacher use pictures to illustrate the words.		
I can remember the words better if I draw the picture of the words.		
5. I like to learn English in a fun way. Drawing activity during English lesson must be exciting.		
6.		

APPENDIX 3

Pre Test & Post Test

INSTRUCTION : Fill in the blanks with the suitable answer.

1.  My _____ is a tailor.
a) mother
b) father
c) sister
2.  She is a _____.
a) doctor
b) teacher
c) engineer
3.  My uncle is a _____.
a) farmer
b) fishmonger
c) baker
4.  I have ten _____.
a) nose
b) eyes
c) fingers
5.  I have twelve _____ in my pencil box.
a) pencils
b) rulers
c) erasers
6.  My hobby is _____.
a) reading
b) dancing
c) singing
7.  Azima loves cooking and _____.
a) jumping
b) painting
c) baking

8.



Akim's hobby is _____.

- a) playing tennis
- b) playing hockey
- c) playing football

9.



There are 49 _____ in my classroom.

- a) desks
- b) chairs
- c) whiteboard

10.



My mother uses a _____ to cut the fruits.

- a) spoon
- b) fork
- c) knife

INSTAGRAM APPLICATION: AN ACTIVE TOOL IN CULTIVATING READING BEHAVIOUR

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Abstract: *The fourth wave of the industrial revolution has brought tremendous changes in our education system. The use of technology in teaching and learning give a great effect on not only pupils, but teachers as well. Technologies also give an opportunity for students and teachers to learn from a broader perspective of learning other skills. As the education system is transforming to a better version, it somehow requires the teachers to be fully equipped with the advancement of technology to develop pupils' potential qualities hence there is a growing need for ESL teachers to find more interactive and fun approach. Recently, technology development has changed pupils' demand in selecting their reading materials. Most of pupils' these days feel that reading is not an attractive activity as they will easier feel bored and short attention span. Unattractive reading materials might give opposite results in enhancing pupils' behaviour in reading. Reading skill is one of the vital elements in helping pupils' to enhance their English language proficiency. Therefore, the study will investigate the use of Instagram application in cultivating reading behaviour among pupils. The study was conducted with 30 pupils in urban area school in Miri, Sarawak. The data was collected via observation, interview and questionnaire to measure the outcome. The finding showed the positive impact in cultivating the reading behaviour among pupils through Instagram. This research is beneficial to the teaching community as it provides an innovative approach teaching in ESL classroom. Thus, it is hoped that Instagram application able to improve pupils' behaviour in reading.*

Keywords: *reading, improve, instagram, behaviour, teachnology*

Introduction

English has always been the second most important language in Malaysia. Hence it is not to surprise to know that Malaysia apparently has the best English language speakers in Asia beating out Singapore, India, Sri Lanka, Taiwan, China and Kazakhstan-according to a Singapore-based English Language school (Anon 2013). It is the most important foreign language in Malaysia and it is used frequently in all aspects of daily life, from business purpose, as well as in daily conversation. There are some reasons why English is so important, and many people attempt to learn it. In Malaysia education, English is a vital subject in both primary and secondary school. However, learning English as a second language is not an easy task. Teaching English in primary school is very hard as the students tend to use their mother tongue in classroom. Realizing the importance of the English language, the government has begun implementing new curriculum to help boost the English language learning as a means of pushing the younger generation towards being better able to compete with the global community (Anon n.d). The mastery of English is essential for pupils to gain information to master four skills in English. In line with the governments' policy on strengthening English, the curriculum has been designed to produce pupils who will be proficient in the language (Jayanthi n.d). The goal of the English language curriculum is to help pupils acquire the language as well as to help them use it in their daily life, to further their

studies and for work purposes (Jayanthi n.d). Thus, it is very essential for teachers to teach English to young learners. As stated in Eleventh shift blueprint which emphasize that every child must be proficient in English language.

Content

Technology and innovation have brought tremendous change in our education nowadays. Most of students these days feel that reading is not an attractive activity as they will easier feel bored and short attention span. The aims of this study are to identify the factors that affect the reading interest among year 4 pupils and to identify whether the implementation of Instagram application is able to promote young learner's interest in reading. The method used is by giving a reading activity for the respondent for a period of 2 weeks with conventional reading activity and then implemented Instagram video for the next 3 weeks. After each of activity, interviews were conducted, and questionnaires were given to all respondent. During both activities, the researcher is doing observations regarding their commitment, interests and the factors that lead the students to loss interests in the reading activity. It is found that the students were not interested in reading as they cannot focus to the activity more than 15 minutes. The commitment they gave for the activity before the implementation of Instagram video is considerably low. The interviews session also proved the observation made, where all the interviewee answers show that they are not interested because of several causes. This is supported by the data from the questionnaires where the factors that can be lack of understanding; that lead them to do more interesting activity, lack of encouragement from parents and siblings, and lack of reading material in home. This is because the reading culture were not exposed to the students and it is important to start exposing them to reading culture since reading is a way to gain knowledge.

a) methodology

This study conducted in one of the schools in Melaka. This school is a cluster school which is well known for its academic excellence. The number of pupils in this school is around 1000 pupils. Thus, there are four or five classes for per standard and the pupils are streamed into these classes according to their academic performance. The Year four pupils will be selected as the respondents of this action study. The pupils in this class are of average proficiency level. The class has 30 pupils. However, not all the pupils in the class were selected as respondents for this action research. Only 12 of them are selected for the studies as these pupils show the lowest grade in language. Besides, the researcher found that easier to manage the data in small group. 12 respondents are enough for the research purpose. The instruments of this study consisted of Interview, Questionnaire and Observation.

b) findings

BEFORE THE IMPLEMENTATION OF INSTAGRAM APPROACH

Before the Instagram are used as a tool to increase the interest of reading among the pupils, the researchers were asking the students to read during classes. Among 12 students that were selected as the respondent, only one students that are able to focus to the reading activity for about 15 minutes before joined his peer in their self-activities. The others are barely able to do the activity without any disruption. They can only do the reading activity for a few minutes before they focused on something else. From this pre-activity, the researches can confirm the observations that are:

Observation: based on their commitment to the recent activity, the pupils seem to have no interest in reading activity in classes.

Interview Result

The interviews were conducted onto three selected students that can understand well English language, were able to speak at least simple English and who is outspoken in personality so that they can commit to the interview session well. The interviews were conducted separately from other pupils so that they can focus on the questions asked. Below are the conversations during the short interviews.

Table 4.1 Interview session. Question asked: Do you like reading?

Pupil	Response
A	No. I do not like reading.
B	No, I do not like reading activity.
C	I'm not sure.

Based on table 4.1, the question asked is "Do you like reading?" Two of the students answer "No" for that question, and one student answer "I'm not sure". The pupils that can focus for 15 minutes also were choose among the interviewee. In the interview, he is labelled as "pupil C" and the one that answer "not sure" for the first question.

Table 4.2 Interview session. Question asked: What makes you less interest to read?

Pupil	Response
A	I always get sleepy when reading.
B	I cannot understand many words from the books.
C	My friends always asked me to play during reading activity.

The next question asked was "what makes you less interest to read?" From the answers, we can see three different categories of them. Pupil A is the one that are not interested at all in reading and always get sleepy when reading. Pupil B less interest in reading because he/she was unable to understand the words from the book. This is logic as the understanding is important to keep a reader to read their books. On the other side, the Pupil C answered, "My friends always asked me to play during reading activity." This shows that Pupil C is interested in reading, however, due to surrounding factors, the focused was changed to something that are more interested than reading.

Table 4.3 Interview session. Question asked: Does reading activity make you feel bored?

Pupil	Response
A	Yes teacher, I get sleepy during reading activity.
B	Yes, I feel bored after a while doing reading.
C	Yes, and I play with my friend. Not reading at all.

The researchers want to confirm the respondent opinion in reading with the question: Does reading activity make you feel bored? All the responses were showing that they are not having any interest in reading activity in classes.

Table 4.4 Interview session. Question asked: Do you understand what you are reading?

Pupil	Response
A	No teacher. I don't understand the words.
B	Some of the words I can understand. Some are hard to understand.
C	I can understand a little. But I don't understand many words.

Based on the table, Pupil A do not understand the words in the book, Pupil B and C can understand some of the words. This still happen even when the student has slightly interest in reading, as the understanding seems to have impact to the interest. After lost the interest, the students turn to something they found more interesting than what they are doing at the moment, which is reading something that they barely able to understand.

Questionnaire Result

The questionnaires consist of ten simple questions that are given before and after the Instagram approach were used. Likert scales were used in the questionnaires, and the results were tabulate and analysed based on the frequency, percentage, mean and standard deviation for the score gathered from the Likert scales. From the table, 1 represent strongly disagree (SD); 2 represent disagree (D); 3 represent do not know (DK); 4 represent agree (A); and 5 represent strongly agree (SA)

Table 4.5 Data collected from the questionnaire before the intervention.

Statement		SD	D	DK	A	SA	Mean	Standard deviation
		1	2	3	4	5		
Reading is joyful activity	f	5	4	3	0	0	1.83	0.83
	%	42	33	25	0	0		
I feel reading is bored	f	0	0	3	4	5	4.17	0.83
	%	0	0	25	33	42		
I have short attention span when read	f	0	0	3	5	4	4.08	0.79
	%	0	0	25	42	33		
Teachers encourage me to read in class	f	0	0	4	5	3	3.92	0.79
	%	0	0	33	42	25		
Parents encourage me to read at home	f	3	4	5	0	0	2.17	0.83
	%	25	33	42	0	0		
There is enough reading material at school	f	0	2	5	5	0	3.25	0.75
	%	0	16	42	42	0		
There is enough reading material at home	f	5	4	2	1	0	1.92	1.00
	%	42	33	17	8	0		
Parents often reading with me at home	f	6	4	2	0	0	1.67	0.78
	%	50	33	17	0	0		
Siblings often reading with me at home	f	5	4	3	0	0	1.83	0.83
	%	42	33	25	0	0		
Social media is more interesting than reading	f	0	0	1	5	6	4.42	0.67
	%	0	0	8	42	50		

Based on the table, the high mean recorded is 4.42, which is for “Social media is more interesting than reading” with standard deviation 0.67; the smallest among the statements. The high mean show that the respondents were strongly support this statement, that they prefer social media such as Instagram, Facebook, Twitter and so on compare to reading books. The small standard deviation proves the statement. Besides, in percentages, 42% choose “Agree” and 50% choose “Strongly agree”; while only 1% chose “Do not know”. The lowest mean value recorded is 1.67, for “Parents often reading with me at home,” according to the table. This show that the parents are not encourages their children to read at home. And this statement is supported by the percentage of the respondent; which are 50% of the respondent choose “Strongly disagree” with the statement. 33% choose “disagree” and the remaining 17% selected “Do not know” in the questionnaire. This may be due to the lack of reading material at home, as recorded in the table, only 1.92 is the mean value for “There is enough reading material at home,” statement; or in percentage, 42% were strongly disagree and 33% were disagree. Therefore,

75% of the respondents don't have enough reading material at home. The second highest mean value is 4.17, represent "I feel reading is bored," statement. A very convincing data to show that the respondent did not prefer reading activity, since the percentage shows that 42% were strongly agree with the statement and 33% were agree; make it 75% in total that support the statements. Besides, other statements that show the lack of interest among the students are "Reading is enjoyable activity," which 42% were strongly disagree, 33% were disagree, and 25% choose "do not know" as their responses. The mean value for this statement is therefore the second lowest among the statements. From these results, the interest of conventional reading methods is at very low level. Pupils tend to do something that they found enjoyable and reading, in this conventional method, is not interesting for them.

After Intervention Of Instagram Results

The result from the pre-activity before intervention of Instagram will be discussed later in this chapter. In this section, results from the observations, interviews and questionnaires that are conducted after the teachers use a new method to make the reading activity interesting that is using Instagram to post the video of their reading activity to the social media. From the Instagram reading-activity video, the researcher can observe that:

Observation: based on the commitment the students put into this activity, Instagram video activity improved the mood of the students. They seem excited and enjoying the moment they recorded the video and post them.

Interview Results

The interviews were conducted onto the same students, to see their reaction after the new method being implemented. Besides, the researcher wants to compare the responses from before the intervention and after the intervention to investigate the impact of the Instagram video methods to the reading activity of year 4 students in the school. Below are the interviews responses that are tabulate based on the question asked.

Table 4.6 Interview session. Question asked: Do you like Instagram video?

Pupil	Response
A	Yes, teacher. I like it so much!
B	Yes teacher, I really like it.
C	Yes, I like it. It is so fun!

The first question asked after the implementation of Instagram video to the reading activity, is "do you like Instagram video?". All students have a same answer that is, "Yes." They seem really like the Instagram video as their generation nowadays are more into social networking site even they are in primary schools. However, there are also students that are first time in recording video and post it to social media, but still can enjoy the activity. This shows that the Instagram video can attract the students to join and commit to the activity.

Table 4.7 Interview session. Question asked: Do you enjoy reading in front of the camera and posted it on Instagram?

Pupil	Response
A	I shy at first. But I enjoy recording video while reading and posted it.
B	Yes, I like to read in front of camera and post it to Instagram.
C	I like to post on Instagram. So, I enjoy reading in front of camera!

Table 4.7 show the answer for second question, “Do you enjoy reading in front of the camera and posted it on Instagram?” There are different answers but all of them showing positive sign. Pupil A state that he/she are shy at first but enjoying recording video while reading and posted it. This might be the first time Pupil A posting something to Instagram. Pupil B states that he/she like to read in front of camera and post it to Instagram. Pupil C, different with Pupil A, used to Instagram apps. He/she like to post on Instagram. So, Pupil C also enjoys reading in front of camera.

Table 4.8 Interview session. Question asked: What do you feel after seeing your video on Instagram

Pupil	Response
A	It is my first time, so I am shy a little bit. But doing this with my friends are fun!
B	It is fun! Reading with my friends and post it to Instagram. There are some “likes” too!
C	I feel happy when someone viewed the video I have posted.

Based on the table 4.8, the responses for question “What do you feel after seeing your video on Instagram” also showing a positive impact. Pupil A’s answer is, “It is my first time, so I am shy a little bit. But doing this with my friends are fun!” This is normal for person that are first time exposed to new social media. However, the aim to make them enjoy the activity are achieved. Pupil B also answer the same, that the feeling is fun, doing reading with his/her friends and post it to Instagram. Pupil C also stated that he/she is feeling happy when someone viewed the video that have been posted to the Instagram.

Table 4.9 Interview session. Question asked: How do you find reading using Instagram Video activity?

Pupil	Response
A	It is fun even I don’t understand some words.
B	Reading activity is very fun!
C	I enjoy reading using Instagram video activity with my friends

Table 4.9 depicts the answers for question “How do you find reading using Instagram Video activity?” Pupil A stated that the activity is still fun even some words is not able to be understood by he/her. Pupil B and C responses are also positive, where they state that reading activity is fun when the Instagram video was used.

Questionnaire Result

Table 4.10 Data collected from the questionnaire after the intervention.

Statement		SD 1	D 2	DK 3	A 4	SA 5	Mean	Standard deviation
I enjoy reading activity	f	0	0	0	5	7	4.58	0.51
	%	0	0	0	42	58		
Instagram video activity able to arouse my interest	f	0	0	0	6	6	4.50	0.52
	%	0	0	0	50	50		
I love reading in front of camera	f	0	0	0	5	7	4.58	0.51
	%	0	0	0	42	58		
I love to see my Video being posted in Instagram	f	0	0	0	6	6	4.50	0.52
	%	0	0	0	50	50		
Parents encourage me to read at home	f	0	0	0	5	7	4.58	0.51
	%	0	0	0	42	58		

There is enough reading material at school	f	0	0	0	6	6	4.50	0.52
	%	0	0	0	50	50		
There is enough reading material at home	f	0	0	0	5	7	4.58	0.51
	%	0	0	0	42	58		
Parents often reading with me at home	f	0	0	0	6	6	4.50	0.52
	%	0	0	0	50	50		
Siblings often reading with me at home	f	0	0	0	5	7	4.58	0.51
	%	0	0	0	42	58		
I am looking forward to do reading activity again next time	f	0	0	0	6	6	4.50	0.52
	%	0	0	0	50	50		

Table 4.10 presented the data from questionnaires that are analysed and tabulate based on the frequency score by the Likert scales and the percentages, mean and standard deviation are calculated and presented. Base on the table, all statements, that representing each question in questionnaires have high mean values, that are 4.58 for the highest value, and 4.50 are the lowest mean value. The standard deviations also are small, which are 0.51 and 0.52. the statements that have 4.58 mean value and 0.51 standard deviations are; “I enjoy reading activity”, “I love reading in front of camera”, “Parents encourage me to read at home”, “There is enough reading material at home”, and “Siblings often reading with me at home”. The statements that have 4.50 means value with 0.52 standard deviations are; “Instagram video activity able to arouse my interest”, “I love to see my Video being posted in Instagram”, “There is enough reading material at school”, “Parents often reading with me at home”, and “I am looking forward to do reading activity again next time”. In term of percentages, all statements, showing a 100% agree where the percentages for “strongly disagree”, “disagree”, and “do not know” are 0%. This shows that the impact of Instagram videos is very positive after three weeks of implementation.

Discussion

From the pre-activity, it can be concluded that among 12 respondents, all 12 of them were less interest in reading in that conventional method. They tend to turn to do something that is more enjoyable for them. Some of the factors that can be detected from the observations, interviews and the questionnaires are; first, some of the students cannot understand the words in the text or books, and this make it less interesting for them. However, if they are actually like to read, then understanding the meaning is not the major factor to contribute to the level of their interest to the books. Second, there are surrounding factors. The students are surrounded by discouraging crowd. At school, their friends or classmates are the same with them, the one who not interested in reading books. That is why that are easy to join their friends rather than focusing on their reading activity. Besides, the third is, less support from the parents. Based on the questionnaires, the parents rarely or never spent their times to read with their children. The reading material at home also was not prepared. Then this becomes everyday routine of the children, a routine without reading. That is the reason why they are not interested to read. Because they never be exposed to that culture. Overall, the first objective to identify the cause or factors that affect reading habits among the year 4 pupils was achieved. Therefore, the researcher would like to discuss the results after implementation of Instagram video in reading activity; in conjunction with how this method reacts to the factors listed before, and what the relationship of Instagram with behavioural theorist is.

After the implementation of Instagram video method, the reaction of the students was changed towards reading. This is because Instagram video are fun to use, and since the students are well exposed to current trend; that use social networking site to share daily life routine to followers worldwide, and receiving reaction on the posts that they uploaded, increased the interest in using the social media. Adapting to that phenomena, Instagram application can be considered as an active tool in cultivating

reading habits. These can be seen in this research, where the interests were increase after using the Instagram video. In term of behavioural theorist, the “likes” and “comments” that they receive after uploaded the video act as the reward and are actually reinforcement in cultivating the reading habits. Reinforcement provides the basis for Skinner's theory about behaviourism. Based on the study, reinforcement was a stimulus-response bond which strengthened desirable behaviours. Reinforcers could be positive verbal praise, high grades, or a feeling of satisfaction (Skinner, 1972). From the interviews, Pupil C mentioned about the “Likes” that they get after posting the video. This “Likes” is a common feature in Instagram that allowed the followers of that account to like and comment on the photo or video that have been posted on the newsfeed. This “comments” and “likes” that the students get after posting their videos can encourage them to post more. In Instagram, the “likes” and “comments” are type of positive verbal praised that give the students a feeling of satisfaction. Through Skinner's research on animals, he concluded that both animals and humans would repeat acts that led to favourable outcomes, and suppress those that produced unfavourable results (Shaffer, 2000). Therefore, once they enjoy reading in front of cameras, they tend to do it again and will then be a daily routine for them to read.

The effect of the implementation of Instagram videos also was positive in handling the factors that contribute to the less-interest problems among the pupils. After conducting the interviews, the researcher noted that the student can enjoy the activity even without understanding all the meaning of the words in the books. The pupils are actually trying to understand and continue reading as the video keep being recorded. Once, they show interests in reading, then understanding the meaning will be not the major problem. The questionnaires data also shows that after the Instagram video was implemented, 50% are agree, and another 50% are strongly agree; that they are looking forward to reading again next time.

Besides, factors of surrounding also can be solve as in class, every student showing the same interest in reading and giving commitment to the activity. Therefore, there is no disruption among their classmates and doing the reading and recording the video together seem more interested them. Other factors that affect the reading habits, parents’ encouragements also are solved with this method. According to the questionnaires that were given before and after the implementation, there are significant differences between the support that the parents give before, and after three weeks of implementation. Before using Instagram, 25% were strongly disagree, and 33% were disagree with statement “Parents encourage me to read at home”. However, after the implementations, 42% were agreed and remaining 58% were strongly agreed with that statement. This showing a rapid growth in support from the parents and because of that, their kids are showing much interest in reading. This also led to the next statement that is “There is enough reading material at home.” This statement also showing great differences between before using Instagram methods and after using the application. Before the implementation, 42% were strongly disagree and 33% were disagree with the statement, whereas after the implementation, the result shows that 42% were agree and remaining 58% were strongly agree with that statement. Not only providing the reading materials, the parents and the siblings are showing support by reading with the students together at home. This statement is supported by the data from the questionnaires, where for statement “Parents often reading with me at home,” 50% were strongly disagree and 33 were disagree with that statement before the implementation, and after using the Instagram video, 50% were agree, and another 50% were strongly agree with that statement. For siblings, before the use of Instagram video was implemented, there were 42% strongly disagree and 33% disagree recorded and after the implementation, the data shows that 42% were agree and 58% were strongly agree with the statements. This proves that the Instagram video is able to promote young learner’s interest in reading and the last objective of this research is achieved.

Conclusion

Instagram video is found effective in cultivating reading habits among the young learners. This is obvious observation that the researcher made that can be seen during the activity, the students are very interested in reading in front of the cameras and posted them to the Instagram make them excited to see themselves in the video. Besides, from the interviews the researcher found that the Instagram application was attracting the students as they are enjoying the activity. They also mentioned about the “likes” and “comments” that they received from the viewer. This encourages them to keep reading and keep posting to the social media, Instagram. From the questionnaires, it is found that the factors that contribute to the lack of interests among the students can be tackle by using this Instagram application method. This is because after the implementation of Instagram video to the reading activity, the surrounding problem such as classmate disruption can be eliminated as all the students are very into recording and reading during the activity. Besides, the students receive great supports from the parents after they are using this method. The parents are starting to read with them, also the siblings help them in recording the video, and reading together make them spending quality time together and the reading culture can be cultivated from home. In term of reading material also showing a great improvement where all of the students agree that there are enough reading material at home after they started reading together and recorded the video together. These supports from family contribute to the improvement of interest in reading among the year 4 pupils.

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THE IMPACT OF CEFR-ALIGNED CURRICULUM ON YEAR 2 INTERMEDIATE PUPILS' LBI READING SCREENING

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Abstract: Curriculum plays an important role in directing teachers and learners to the specific learning goals. Comprehensive curriculum may benefits learners in acquiring language skills especially related to the learning of second language. As education system is transforming to a better version, a lot of programmes have been developed to suit the learners' learning process. However, due to changes in curriculum, the suitability and impact of the new curriculum on the developed programme has yet to be discovered. Therefore, it is a need to discover the impact of new curriculum on the ongoing programmes. This study will investigate the impact of CEFR-aligned English Language curriculum on Literacy and Numeracy Screening (LINUS) particularly reading screening. This study was conducted with 3 English teachers and 61 Year 2 intermediate pupils from an urban school in Melaka. The data was collected via pre-test, post-test, questionnaire and interview. The findings showed that there's an evident showing the positive impact of the new curriculum on pupils' reading screening result compared to the use of previous curriculum. Therefore, it is hoped that the new curriculum will help to improve the reading skills of the pupils thoroughly in ESL classroom.

Keywords: CERF-aligned curriculum, LINUS, impact, reading screening, intermediate

Introduction

A programme has been formed under the Malaysian Education Blueprint 2013-2025 which is called as Linus programme. With the addition of English Literacy (LBI), Linus 2.0 was introduced as the extension of the previous programme. The implementation of this programme was to ensure all pupils to master basic reading, writing, and counting skills before they proceed to the upper primary level.

However, the English language curriculum has went through another shift of transformation to strengthen the implementation of the KSSR curriculum which is called as Common European Framework Reference of Language (CEFR) aligned curriculum. The curriculum emphasizes on achievement based on the global scales for each skills implement in teaching and learning.

Objective of this study

The objectives of the study are as follow:

1. To investigate and analyse the result in LBI reading screening of Year 2 intermediate pupils, before and after implementation of CEFR aligned curriculum.
2. To identify aspects found in CEFR aligned curriculum that would enhance basic literacy skills.

Research questions

Based on the research objectives, this study seek to find answers for the following research questions:

1. Is there any difference on the impact of CEFR aligned curriculum on the Year 2 intermediate pupils' result in LBI reading screening?
2. How does the aspects found in CEFR aligned curriculum enhance Year 2 intermediate pupils' basic literacy skills in reading?

Literature Review

Vygotsky's Sociocultural Theory of Cognitive Development

Vygotsky is most recognized for his concept of Zone of Proximal Development or ZPD pertaining to the learning of children. His theory mentioned that with sufficient assistance, learners can accomplish task successfully compared to learners who perform the task independently. According to Vygotsky (1978, as cited in McLeod 2014), much important learning by the child occurs through social interaction with a skilful tutor. ZPD has been expanded, modified, and changed into new concepts. The concept of scaffolding is closely related to the ZPD, although Vygotsky himself never mentioned the term; instead, scaffolding was developed by other sociocultural theorists applying Vygotsky's ZPD to educational contexts (Innovative Learning n.d.).

Vygotsky studies is related to the current research as there are evidence of scaffolding found in the CEFR aligned curriculum as the teachers provide guidance to the pupils on learning the second language. In the CEFR aligned curriculum, scaffolding could be found as the pupils, teachers interact with each other It can also be seen through the meaningful interactions between pupils who is more competent than the others.

Krashen's Theory of Second Language Acquisition

This study also employed the theory of second language acquisition that is proposed by Stepehn Kreshen (1980). He suggests five hypotheses on second language acquisition which gives focus on how adult and children attempt in learning other than their first language. Krashen advocated the immersion method, where second language learners are exposed to the foreign language as much as first language acquisition with more comprehensible input (Knoop n.d.).

Research Design

This research focuses on the use of mixed method research. The use of this research design would cover the weakness in both quantitative and qualitative data of this study. Quantitative data is driven from the pre and post test based on the result collected by the teachers to screen the intermediate pupils' ability in reading the LBI LINUS constructs. Quantitative data was also collected through the questionnaire responded by three teachers who have been teaching the pupils before the transformation of the English curriculum from KSSR curriculum to CEFR aligned curriculum. For the qualitative data, the interview sessions were done to both teacher and pupil participants to strengthen the quantitative data collected to answer the research questions of this study. The use of semi structured interview questions was planned and asked to three teacher participants and five selected pupils participants that were chosen using systematic sampling.

Participants of This Study

There were 61, year 2 primary pupils in a local school who needs to take the screening test twice for the purpose of Linus programme and three English teacher teaching year 2, who were the respondents of this research. The pupils are intermediate. As for the teachers, they were selected as they have been teaching these pupils English subject since they were in Year 1 primary level. These teachers have more than five years teaching experiences and they have been teaching using KSSR curriculum and CEFR aligned curriculum for a period of time. The school is located in the district of Melaka Tengah.

Research Findings

Research Question 1: Is There Any Difference On The Impact Of Cefr Aligned Curriculum On The Year 2 Intermediate Pupils' Result In Lbi Reading Screening?

a. Score of the learners improved in LBI reading screening result

There is a slight improvement in the pupils LBI reading screening result after the use of CEFR aligned curriculum. This statement is derived from the score in the pre and post tests, and teachers' interview responses. The teachers' interview responses revealed that the use of CEFR aligned curriculum has

slightly improved the learners' score in their LBI reading screening as the curriculum enable the pupils to practice the language structure better compared to the previous.

"I can now see the benefit of using CEFR. My children have minimum errors for their screening test. Most of the pupils passes the screening at first attempt." (T1, IW)

"The pupils result in the LBI constructs are better compared to the previous year screening test" (T2, IW)

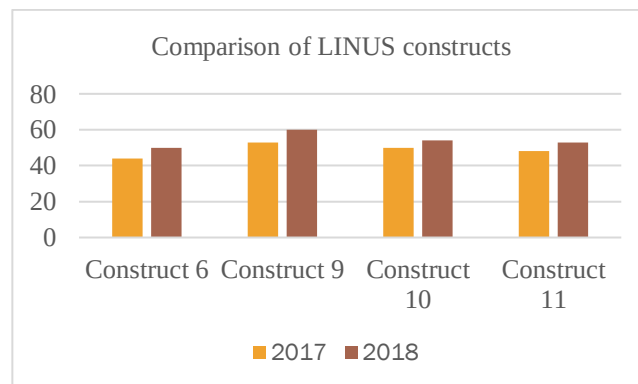


Figure 1: Comparison of full score in constructs 6,9,10, and 11 for 2017 and 2018

Figure 1 above shows the comparisons of full score in LBI reading screening for year 2 intermediate pupils in second phase 2017 and 2018. From the figure, the pupils' show an improvement of scores in a few constructs such as constructs 6, 9 10, and 11. There is 9.83% difference compared to the previous year which shows a sign of improvement for construct 6. As for construct 9, about 53 pupils scored 3 out of 3 responses in 2017. While in 2018, the number of pupils who scored all responses correctly increased to 60 pupils. There is a difference of 6.47%. As for construct 10 and 11, there is a slight increase of 6.55% and 8.21% consecutively. The number of pupils scored all correct for construct 10 and 11 improved from 50 to 54 and 48 to 53 consecutively. The findings reveals that there are a slight improvement on the percentages of pupils fully passed a few constructs in the 2018 screening test. This could be because of the use of basic structure of English language was exposed to the pupils widely in classroom. One of the teachers responded during the interview,

"When using CEFR aligned curriculum, I notice that the pupils' ability to use English language improved because they have been using basic English language properly in classroom. Thus, their scores improved in the screening." (T3, IW)

Moreover, most teachers have generally stated that the pupils' language proficiency has improved by the use of CEFR aligned curriculum because of few factors. One of the teacher mentioned that,

"The pupils received sufficient lessons related to phonics and it was been consolidate while they use the Super Minds textbook. They can read better and passed their screening". (T1, IW)
"I believed that the pupils now can learn basic English in a longer time and they could read the construct in LINUS better. It's very helpful in improving the pupils' basic literacy skills" (T2, IW)

Participants also responded to the questions related to LINUS LBI reading screening. Most participants stated that they could read the module better. This is the evidence from the following thread of interview responses.

“I think I can read and get all correct. Some are easy. When teacher asked me to read I can read it. I’m sure that teacher had taught us before this” (Q1, IW)

“I did well. I think I get everything correct. Teacher nodded her head. It’s easy. The words and sentences are easy. I had learnt in class before” (Q2, IW)

Jahrine (2019) mentioned that in order for the material to be comprehensible, it needs to be slightly beyond the level of competence, not so easy that children can get bored, but not so difficult that they get frustrated. CEFR aligned curriculum uses the materials that suit the competency level of 8 years old children as the texts used in the curriculum was easy to be understood by the pupils which reflect on Krashen’s theory. As for Krashen’s affective filter hypothesis it is clearly seen that the pupils learn the language in a non-stressful environment as the materials used is not pressuring the child as the text focus on simple sentence structures or at word level only. Md. Mohib and Sayeda (2013) highlighted in their research that as a consequence of stressful learning environment, some students become less interested during the reading lesson. Therefore, suitable and contextual reading text found in CEFR aligned curriculum enable the pupils to read better compared to the previous year.

b. Shortcomings of CEFR aligned curriculum with its use on LINUS LBI reading screening
There are some shortcomings in the curriculum that could not be neglected as it will affect the teaching and learning progress in classrooms. One of the teacher responded that the material of the new curriculum is very limited in teaching reading skills to the pupils.

“There are not much materials that we can get to teach the pupils. Yes, there are materials that can be used and we can search it in the internet. However, materials that suit our pupils’ level is not that much.” (T3, IW)

Another main perception put forth by the teacher is pupils are mostly reluctant to learn using the curriculum as the they need to keep repeating the focus language and grammar for several times.

Table 1: The Ongoing Process of Implementation

Statements	No of teacher responded in the likert scale					Mean	SD
	1	2	3	4	5		
Pupils enjoy the lesson all the time.			1	2		3.66	2.53
Pupils are motivated to acquire language focus using the curriculum all the time.		2	1			2.33	0.58
Pupils are very responsive during the lesson all the time.		2	1			2.33	0.58
Pupils always curious to learn all the time while teacher use the curriculum.		1	1	1		3.00	0.82
Pupils give attention throughout the lesson all the time.		3				2.00	2.31
Pupils give cooperation to learn in the classroom all the time.		2	1			2.33	0.82

Table 1 indicates the ongoing process of implementation which focus on teacher's perceptions on the pupils' readiness and acceptance of the new curriculum. Out of 3 teacher respondents, 2 teachers with the mean (3.66), SD, 2.53), agreed that pupils enjoy the lesson all the time the teachers use CEFR aligned curriculum in the classroom. This illustrates that, the CEFR aligned curriculum provides enjoyable lesson to the pupils in learning second language. However, there are time when the pupils were not enjoying the lessons. In addition, 2 teachers with the mean (2.33), SD, 0.58) disagreed that pupils are motivated to learn while using the curriculum. This shows that, even though the pupils enjoyed the lesson but they were not motivated in acquiring the language focus that contains in the CEFR aligned curriculum. Similarly, 2 teacher respondents with the mean (2.33), SD, 0.58) disagree that pupils are very responsive during the lesson all the time. This result also indicates that pupils learn passively during the lesson despite the interesting materials used by the teachers during the lessons.

For the next item, it is found that one teacher respondent agree to the statement, one teacher respondent was not sure or has neutral feeling towards the situation and one teacher respondent disagree that the pupils are curious all the time. The finding shows that the mean is 3.00 with standard deviation 0.82. It can be concluded that the teachers show different opinion that the pupils always curious in learning as curiosity is a feeling that sometimes could not be seen easily. Nevertheless, for the next item used in the questionnaire, all of the teacher respondents disagreed that the pupils pay their attention throughout the lesson all the time with the mean (2.00), SD, 2.31). As for the next item, two teachers disagreed that the pupils gave full cooperation all the time while the teacher conducted the lesson using the CEFR aligned curriculum with the mean (2.33), SD 0.82). The findings show that the curriculum has not yet attracting the pupils in giving their full cooperation while the teacher taught using it.

During the interview, the pupils were asked "Did you enjoy the lesson that was taught by the teacher? Which lesson you enjoy or did not enjoy? Why? Most of the pupils responded that they were bored with a lot of repetition because they have learnt the words before and they are very confident to use the words. However, the teachers always repeat the same words and the pupils expecting to learn more.

"Sometimes I don't like. It's boring. I want to learn something else. I never learn new thing, always same thing" (Q3, IW)

Research Question 2: What Are The Factors That Enhance Reading Skills While Using Cefr Aligned Curriculum

a. Structure of the planned curriculum

From the teachers' perspectives, the curriculum has been planned and structured systematically and provides opportunities for the teacher to conduct lessons that could highlight the language and grammar focus as well as the skills that need to be taught and developed by the pupils.

"Well, as the curriculum is comprehensive, I could understand the content that I should highlight in the classroom. Example for reading lesson, I manage to highlight the words, vocabulary that is the main focus of the lesson. So, when I understand what the words that I need to focus are, the pupils learnt to just read related words. So, they learnt sufficient words preventing them of getting cognitive load as they receive too much info at young age" (T1, IW)

The finding reveals that, structure of the planned curriculum has also impact on the teachers' ability to plan and conduct lessons pertaining to reading skills as they are more confident and have better understanding with the use of the CEFR aligned curriculum in teaching English language. To support, John Trim in his interview stated that expertise produces a solid structure of knowledge, understanding and practice shared by all through the CEFR curriculum (University of Cambridge, 2011). The teachers also believe that the reasons why the pupils enjoyed the lesson and had fun while using the textbook

was because of the words, illustrations and story that are planned and written in the textbook. One of the teacher identified that,

“The pupils enjoy the lesson because of the materials. The materials used for this curriculum is very attractive. The use of child language attracts the pupils to learn using the documents because they are kids, and interference of mother tongue and lack of reading habit would scare them if they receive a book full of words. When the materials consist of words level that suit the pupils’ age and levels, they are more confident to learn the language” (T2, IW)

a. Support received for the curriculum

According to Vygotsky, a person’s construction of knowledge is the result of the internalisation of external dialogue that they use when performing a learning task that is guided by a more knowledgeable person (Driel, Slot and Bakker 2018). The idea proposed by Vygotsky is perceived in CEFR aligned curriculum as teachers were given a lot of scaffolding by the expertise from Cambridge English which helps them to conduct lessons using the curriculum.

Table 2: Support Given to the Teachers Related to CEFR

Statements	No of teacher responded in the likert scale					Mean	SD
	1	2	3	4	5		
I attended professional development activity regarding CEFR				1	2	4.67	3.1
I am very familiar with CEFR documents as I received information about it			1	2		3.67	2.53
JPN or PPD officers provided support to the teachers related to CEFR				3		4.00	4.62
School administrators provided support to the teachers related to CEFR				2	1	4.33	2.15

Table 2 indicates the support given to the teachers related to CEFR. Out of 3 teacher respondents, 2 teachers with the mean (4.67), SD, 3.1) strongly agreed that the government provided professional development activity that the teacher attended to fully understand and familiarize themselves with the content of the CEFR aligned curriculum. Next, 2 teacher respondents with the mean (3.67), SD, 2.53) slightly agree that they are familiar with the documents related to CEFR curriculum that could support their teaching and learning sessions in classroom. This result represents that the training and workshop given to the teachers were adequate and enable them to fully utilised the documents provided under the new curriculum and how to use to documents to develop the pupils language skills. As for the third item, all the teachers with the mean (4.00), SD, 4.62) slightly agreed that JPN and PPD officers provided support to them related to the new curriculum implemented in the education system. Lastly, one teacher respondent strongly agreed that school administrators provided support to the teachers related to CEFR aligned curriculum with the mean (4.33), SD 2.15).

b) Support the pupils received
Scaffolding between teachers and pupils

Scaffolding between teacher and pupils plays an important roles in the pupils’ acquisition of second language. Teacher should act as a role model to the pupils so that the correct structure of second language could be perceived by the pupils without the interference of mother tongue. Table below shows the questionnaire items that the teachers responded to support the statements.

Table 3: Questionnaire Items on Scaffolding Between Teachers and Pupils

Statements	No of teacher responded in the likert scale					Mean	SD
	1	2	3	4	5		
I model the language before the pupils read independently				3		4.00	4.62
I guide the pupils on reading task before the pupils' do it individually				2	1	4.33	2.2
I chunk the reading tasks before asking the pupils to read independently			1	2		3.66	2.53
The suggested lesson outlines in the SOW allow teachers to guide the pupils during reading task				2	1	4.33	2.2
The lesson outlines in the SOW encourage teachers to model the language				3		4.00	4.62

Table 3 indicates the questionnaire responses for the scaffolding between the teachers and pupils. From the data, it is reveals that all the teachers slightly agreed to the statements that they model the language before letting the pupils to read individually with the mean (4.00), SD, 4.62). For the second item, out of 3 teachers, one teacher strongly agree with the mean (4.33), SD, 2.2) for the statement that the teacher guided the pupils on reading tasks before the pupils do it independently. Next, 2 out of 3 teachers slightly agreed to the third statement with the mean (3.66), SD 2.53) while a teacher responded not sure or have neutral feeling on the statement. This shows that most of the teachers have been helping the pupils to develop their reading skills in few steps before they could understand the reading text. As for the next statement one teacher strongly agreed to the statement with the mean (4.33), SD 2.2). This result reveals that the scheme of work documents where teachers used as a guidelines to plan lessons related to CEFR aligned curriculum encourages the teachers to give guidance to the pupils in developing their language skills. Lastly, all teachers responded that they slightly agreed to the statement that the lesson outlines in the scheme of work allow the teachers to model the language with the mean (4.00), SD, 4.62). It shows that teachers believe that the documents provided suggestions for the teacher to model the language before the children use the language independently. Tapping into the pupils' prior knowledge such as offering hints and suggestions, also lead them to the connections a bit, which enable the pupils to grasp the content as their own, is considered as one of scaffolding (Alber 2011). Hence, scaffolding can be seen through the teachers and pupils interactions.

i) Scaffolding among the pupils

The result of this study also focusing on the scaffolding that took place during the interactions between the pupils while using the CEFR aligned curriculum. The results for the interview sessions indicates that a lot of scaffolding methods have been used in the lessons using the CEFR aligned curriculum. It also shows that the interactions between the pupils has been one of the factors that impact on the improvement of the pupils' reading skills. During the interview, the pupils responded that

"I always read with my partner. Then teacher choose anyone from us to read in front. I am not scared when we read together." (Q2, IW)

"We would read together in pairs then teacher will ask us to read together in front. Our friends will listen to us. I feel comfortable because I have friend who can help me" (Q5, IW)

The findings of this research indicates that CEFR helps to nurture collaboration among the learners. This is similar to the concept of scaffolding proposed in chapter 2 where high students' engagement could be achieved through peer collaboration. This interactions is regarded as scaffolding which brings benefits to language learners. Knestrack (2013) supported that by stating that scaffolding helps to reduce anxiety and uncertainty among children. She (2013) also added that scaffolding serves as feedback about

correctness, preventing misconceptions from taking hold and resolving uncertainty that may otherwise pervade the assessment experience which eventually creates momentum of learning for the children.

b. Teachers' Involvement

For the CEFR aligned curriculum, teachers get the autonomy to plan the lesson according to their pupils' readiness and ability. One of the teacher responded that,

"I take full responsibility to adapt the provided documents so it suit my students' level. If I think the lesson is too difficult, I adapt it and adding few other materials that I have got from other resources" (T1, IW)

Öztürk (2012) mentioned that an instructional plans have a crucial function in helping teachers participate in the planning of instructional practices, which enables teachers to create a unique design for their own students. He also added that, it has been observed that teachers have a larger area of autonomy in the application stage, which is made possible by the privacy nature of the classroom environment, which is partially detached from the effects of the outer world.

c. Challenges In Implementing The CEFR Aligned Curriculum

Even though the curriculum shows that pupils' reading skills developed better compared to the previous curriculum based on their score in the LINUS program, however there are a few challenges that the teachers need to face in implementing the new curriculum through their teaching practices. The teacher responded that,

"There's a lot of activities that we the teachers need to use resources such as videos and audios. We need to prepare speaker, laptop and few other tools to display the materials." (T1, IW)

Discussion, Implications, Recommendations

Implications and Recommendations for ESL Learners, Teachers, And Stakeholders

a. ESL Learners

Using the CEFR aligned curriculum benefits the young learners in a lot of ways. One of it was, they were exposed on the knowledge that is not from their surrounding which enable them to learn about others' culture better. Not only that, it also sparked the pupils' curiosity and thinking as they were attracted to learn about something they have never knew before. Stenger (2014) supported and mentioned that learners' curiosity makes learners' brain receptive for learning, and as they learn, they enjoy the sensation of learning.

In addition, the interactions with their peers and teachers that were done in a quality period of time eventually helped them to gain the reading skills better through interactions. Other than that, the use of this curriculum suit the pupils' age as the materials and text were made by the experts of English language so it can be used globally. Learners are able to interact using a quality materials which is globally used and globally approved for its effectiveness and qualities.

b. Teachers

The use of this new curriculum has impacted the teachers' delivery of knowledge as the teachers are given access and power in delivering the language according to the written framework. With the use of this new curriculum, teachers are well aware of the suggested activities and techniques in delivering particular skills which allows teachers to think or use the possible ways suggested while delivering the lessons.

The use of CEFR aligned curriculum also enable teachers to prepare their lessons better as they can utilize the shared materials used by the countries all over the world as this curriculum is a global curriculum used for English language.

c. Policy Makers

Based from the result of this study, policy makers could understand the shortcomings of this new curriculum and help the ministry in providing better and improved version of curriculum that could be useful even though the curriculum is adopted from a global curriculum.

Furthermore, policy makers can educate the society on understanding the benefits of this curriculum on learners' acquisition of basic fundamental English language.

Summary

The CEFR aligned curriculum has contributed to the participants' improvement in their reading skills. This can be seen from the result collected in their LBI reading screening after the use of the curriculum in teaching and learning. Curriculum should be driven by a lot of aspects that could cater the needs of young children especially if the English language is not their mother tongue. Furthermore, learning using curriculum that is used globally benefits the children more as they could absorb the new knowledge about global culture and how to respect the difference among each other. Hence, it is hoped that by the use of this CEFR aligned curriculum, the young Malaysian learners could be able to use the English language effectively with full fluency and accuracy so it could uphold the mission and vision in our education system.

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Appendix

Impact of CEFR on Year 2 Intermediate Pupils' Reading Screening Questionnaire

A. Demographic Questionnaire

Please fill in the blanks or place an X or check mark next to the word or phrase that best matches your response.

What is your gender?

☐	Male	
☐	Female	
How long have you teach English?		
☐	Less than 5 years	
☐	6-10 years	
☐	11-15 years	
☐	16-20 years	
☐	21-25 years	

B. Support Received Under CEFR

Tick "X" on the selected response.

Note: 1= Strongly disagree, 2=Slightly disagree, 3=Not sure/Neutral, 4=Slightly agree, 5=Strongly agree

No	Statement	1	2	3	4	5
1.	I know about the workshop related to CEFR					
2.	I sign up the workshop related to CEFR					
3.	My school administrator encourage me to take part in the workshop related to CEFR					
4.	I attended professional development activity regarding CEFR					
5.	I am very familiar with CEFR documents as I received information about it					

6.	JPN or PPD officers provided support to the teachers related to CEFR					
7.	JPN and PPD officers always track on my progress from time to time					
8.	School administrators provided support to the teachers related to CEFR					
9.	I received a lot of materials given by the ministry to conduct lessons using CEFR					
10.	My school teachers helped to provide support if I'm unclear of the CEFR					
11.	I could easily relate the problem I faced regarding CEFR to my school teacher					
12.	I could easily relate the problem I faced regarding CEFR to the JPN or PPD officers					
13.	I received fast responses from the JPN or PPD officers for my issue related to CEFR					

C. Relationship between change and perceptions of autonomy and workload.

No	Statement	1	2	3	4	5
1.	I am aware of the new curriculum					
2.	I use the new curriculum in classroom					
3.	I look for information related to the curriculum					
4.	The new curriculum ease my teaching session					
5.	The new curriculum improve my teaching practices					
6.	I model the language before the pupils read independently					
7.	I guide the pupils on reading task before the pupils' do it individually					
8.	I chunk the reading tasks before asking the pupils to read independently					
9.	The suggested lesson outlines in the SOW allow teachers to guide the pupils during reading task					
10.	The lesson outlines in the SOW encourage teachers to model the language					

D. Teachers' Involvement

No	Statement	1	2	3	4	5
1.	I get to choose suitable materials for the CEFR lessons					
2.	I get to develop suitable materials for CEFR lessons					
3.	I get to choose which activities that I want to use in my CEFR classroom					
4.	I get to choose type of assessment for my CEFR classroom					
5.	I feel it is burdensome to develop my own materials					

E. The ongoing process of the curriculum

No	Statement	1	2	3	4	5
1.	Pupils enjoy the lesson all the time.					
2.	Pupils are motivated to acquire language focus using the curriculum all the time.					
3.	Pupils are very responsive during the lesson all the time.					
4.	Pupils always curious to learn all the time while teacher use the curriculum.					
5.	Pupils give attention throughout the lesson all the time.					
6.	Pupils give cooperation to learn in the classroom all the time.					
7.	Pupils are willing to do the task using CEFR curriculum					

8.	Parents give cooperation in helping their children with the task					
9.	Parents asks the pupils' development through the use of CEFR					
10.	I give support to parents in helping their children using the CEFR					

STUDENT-TEACHERS' EXPERIENCES IN DEVELOPING ORAL HISTORY TEXTS FOR THE TEACHING OF READING IN A FORM TWO ESL CLASSROOM.

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Abstract: *The Malaysian government has announced that students would be using CEFR aligned English textbooks which are imported from the United Kingdom. However, the use of the imported textbooks face many oppositions. The proponents of Malaysian based textbooks believe that English textbooks should be written in English by giving due consideration to contents based on local setting. Thus, the researchers worked collaboratively with 30 Year 3 h student-teachers who have enrolled in the course 'Teaching Reading Skills in English as a Second Language context' to produce an English supplementary book which consists of oral history texts with local context for lower secondary pupils. The research objective is to find out to what extent the student-teachers have gained from creating the oral history texts. This study employed a qualitative research approach adopting a case study method. Data were collected from a purposive sampling of 30 TESL student - teachers, who wrote the oral history texts. The research instruments employed were reflective journals, document analysis and interviews. The findings are discussed in detail in this paper. It is hoped that this study could give insights to other educators, policy makers and textbook writers in developing English textbook with local context.*

Keywords : *Oral history text, Teaching reading skills, Secondary school, TESL student teachers.*

Introduction

The government has announced that they have imported English textbooks from the United Kingdom to teach the newly introduced Common European Framework of Reference for Languages (CEFR) aligned KSSM curriculum. This is part of the reform employed by the Ministry of Education to ensure pupils achieve proficiency level aligned to international standards.

The English Language Roadmap 2015-2025 is part of the implementation of Malaysian Education Blueprint 2013-2025 to reform English Language education in the country. The roadmap to upskill teachers to use the Common European Framework of Reference for Languages (CEFR) was produced by the English Language Standards and Quality Council. An educational activist and a professor at UCSI University, Tajuddin Rasdi, lauded the government's move as he argues, firstly, imported textbooks from the UK are written in native English language, which is of higher level in terms of its grammatical structure and vocabulary, than locally produced textbooks. He further argues that

imported textbooks would broaden our students' worldview when they are exposed to other culture, religion and lifestyle.

Our concern over the government's move is that there is an underlying assumption that English texts produced in the UK by its native speakers are far more superior in terms of language and content, and that they are the only authority of the English language. There are great writers in English from countries outside the UK. In the literature component, they have included literary texts from the UK, US, and other commonwealth countries including Malaysia, which is more representative of the diversity of English used in the world. Undeniably, there are renowned local writers like Tash Aw and Tan Twan Eng, who have shown great writings representing Malaysian context. The question here is why are we moving backwards to glorifying British culture and language? If we are, then we have not moved beyond a colonial mind set. Malaysia for centuries has been open to other cultural influences while remain rooted in our identity. Thus, there may be some merit in importing foreign textbooks, but we must not neglect the contribution of multi-lingual and cultural diversity of Malaysia to the English language. The researchers believes that there is value for our Malaysian students to read and write texts that are representative of their cultural and real-world context. This will enable them to see themselves represented in a language that would become less foreign and eventually feel a sense of ownership of the language. Based on this believe the study was embarked.

Literature Review

Transactional Theory of reading

A reader performs two categories of reading - efferent and aesthetic. Efferent reading is reading to "take away" particular bits of information. The reader is not interested in the rhythms of the language or the prose style but is focused on obtaining pieces of information. In efferent reading, "the reader's attention is focused primarily on what will remain as the residue after the reading – the information to be acquired, the logical solution to a problem, the actions to be carried out" (Rosenblatt, 1978, p.23).

Aesthetic reading is reading to explore the work and oneself. Here, readers are engaged in the experience of reading. In an aesthetic reading, "the reader's attention is centred directly on what he is living through his relationship with that particular text" (ibid, p.25). A poem is under the category of aesthetic reading material because a reader has to pay "attention to the sound and rhythm of the words in the inner ear,...attention to the overtones of the feeling, the chiming of sound, sense, idea, and association" (Rosenblatt, p.26). However, Rosenblatt conceived that the efferent-aesthetic continuum is not only inherent in the text but it is more of an act of a reader when s/he performs her/his reading. Rosenblatt's transactional theory is relevant to ELT material development as it attends to both the cognitive and affective dimensions. Tomlinson (2008) asserts, most course materials "are preventing learners from achieving affective engagement by presenting them with bland, safe texts (Wajnryb 1996). In this study, student-teachers' will write authentic oral history texts based on their lived experiences on the theme of 'family'. The oral history text will be utilised in teaching form 2 ESL reading classrooms. Here, the oral history text based on the 'family' theme not only attends to cognitive but also to affective dimensions. Tomlinson (2008) in his book on "English Language Material" critiques on professionally and commercially developed ELT materials because these workbook are often written for the benefit of the teacher and take little consideration for students' language acquisition and development needs. It focuses too much on the discrete linguistic items which do less to encourage learners' language development. Furthermore, textbook that focuses too much on efferent reading, which entail students to recall facts and information at the expense of aesthetic reading, do little to promote "both enjoyment of the language and acquisition of it" (Rosenblatt 1978 in Tomlinson 2008, p.7). In this study, the student-teachers will be exposed to the authentic use of English through the writing of oral history texts to engage learners in a reading class both cognitively and affectively. In the reading class, the pupils will be engaged in both efferent and aesthetic reading as they can relate themselves to the stories on family issues discussed in the reading texts. The valuable experience gained throughout the process of

developing the oral history texts will encourage the student-teachers to develop more local and non-commercial materials which is driven by consideration for needs and wants of target learners and by principles of language acquisition.

Post Colonialism

The term “post-colonial” is used to define “all the culture affected by the imperial process from the moment of colonisation to the moment of today” (Ashcroft et al.1989). Bill Ashcroft, Gareth Griffiths and Helen Tiffin explain in “The Empire Writes Back” that today, English is a world language and the publication of literature in English is dominated by the former British colonies. Consequently, it is not enough to deal with solely British based texts in school. In fact, all texts from the imperial centre “can be made to serve colonial interests through educational systems that devalue native literatures, and by Euro-centric practices which insist on Western texts being markers of superior culture and value” (Loomba 75).

Scholes (1998, p.149) argues that “material 'covered' in classrooms and not incorporated into the communicative lives of students simply fades away”. A more powerful means of learning would not be the type of text one has read, but rather one’s ability to deconstruct a text and identify its strengths and limitations. Scholes extends this further when he argues that students should not only be consumers but also producers of texts. “The best preparation we can give our students will be the highest level of competence as readers and writers, producers and consumers of the various texts they will encounter” (p. 154). He sums it up when he states, “one needs to be able to read, interpret, and criticise texts in a wide range of modes, genres, and media. What our students need, to function in such a world, then, is an education for a society still struggling to balance its promises of freedom and equality, still hoping to achieve greater measures of social justice, still trying not to homogenise its people but to allow for social mobility and to make the lower levels of its economic structure tolerable and humane” (p. 84).

Scholes's conception of English Education moves away from valuing literary texts as cultural capital as part of the nationalistic movement or identification of ‘cultured’ citizens. Instead, it is particularly resonant with people who have experienced and is still experiencing various forms of injustice and oppression particularly through the discursive use of the English language. Post-colonial countries such as Malaysia, need to also turn its gaze upon itself because when its gaze is turned outward toward the colonisers, it fails to acknowledge its own oppression by enacting the very colonial discourse it opposes. In lieu of Scholes’ conception of an English Education, where its learners are encouraged to be critical readers and producers of texts, that this study was conceived. In constructing their own oral history texts, the student teachers in the course ‘Teaching of reading in an ESL context’ will engage in critical thinking by studying the three elements of textuality; “how to situate a text (history), how to compose one (production), and how to read one (consumption)” (Scholes, p. 147), where they would examine and make a link between their own oral history with social justice on issues being discussed in the English textbook for Form 2. The student-teachers who have developed critical thinking on the community’s social issues would in turn create a classroom that would encourage and nurture the same critical thinking among their own students. It is no longer sufficient as part of teacher training to have student-teachers be mere consumers of texts, but rather need to be producers of texts that inscribe and re-inscribe their own social reality in the Malaysian context so they may represent their own experiences whilst examining how their experiences are discursively constructed within a social, cultural and historical contexts.

Principles of Material Development

Materials can be defined as “anything which can be used to facilitate the learning of a language, including course books, videos, graded readers, flash cards, games, websites and mobile phone interactions” (Tomlinson, 2012, p. 143). They can be “informative (informing the learner about the target language), instructional (guiding the learner in practising the language), experiential (providing

the learner with experience of the language in use), eliciting (encouraging the learner to use the language) and exploratory (helping the learner to make discoveries about the language)” (Tomlinson, 2012, p. 143). He further added that materials should be developed for learning and not merely teaching and should perform all the above-mentioned functions. It is also commonly accepted that most language teachers use course books. However, no course book could meet the needs and wants of every (or even any) class (Tomlinson, 2010). Therefore, in order to cater to the needs of every class, all teachers could develop their own teaching materials.

Different scholars have suggested various procedures and criteria for evaluating ELT materials. Tomlinson (1998) provides an extensive list of principles to be considered in material development and evaluation.

He proposes that good English language learning-teaching materials should:

“Achieve impact (by having novelty and variety and by being attractive and appealing) besides helping learners feel at ease and overcome anxiety (by providing plenty of white space and providing comprehensible input, Krashen, 1988). In any attempt to introduce new materials, it is utmost important that the materials need to be relevant to the learners’ needs. And promote learner self-investment (by involving them in projects and creating their own resources) by presenting them in authentic language. The newly introduced materials should also draw learners’ attention to linguistic features of the input (which does not necessarily mean an explicit presentation of grammar)”.

The underlying idea is to promote the use of target language to achieve communicative purposes (e.g. through information gap activities) consider the fact that positive effects of instruction are often delayed. The materials developed should consider learners’ varying learning styles and affective attitudes. Ample time should be given and permit a silent period at the beginning of instruction. In the process of developing materials, care should be given in materials which encourage intellectual, aesthetic and emotional involvement that stimulates both right and left-brain hemispheres (through activities like singing a song). These materials produced should ensure non-reliance on controlled practice (since it is retained only in short-term memory). The developers while developing materials, should not neglect from providing opportunities for the children’s learning outcome by giving feedback (by activities that encourage them to check their language achievement).

In this study, the experts and student-teachers will review the oral history texts based on the material evaluation guidelines developed by Tomlinson (1998). The experiences gained in the process of developing oral history texts will give exposure to the student-teachers on authentic material development for ESL context. It prepares them to be future material developers who are able to develop material which gives consideration for pupils’ language acquisition and development needs.

Oral History As An Effective Pedagogical Practice In School

Portelli (1997), a professor of American literature at the University of Rome-La Sapienza, defines oral history as a specific form of discourse in which history evokes a narrative of the past, and oral indicates a medium of expression. Another historian, Walker (2006), has used oral histories extensively in her research i.e. about memory, communities of memory, and how people construct the past. She states that, “The very act of telling stories about the past is a way of making meaning, of interpreting, and explaining” (2006, p. 2, para. 2). Oral history is a platform for creative and innovative learning and teaching which involve the whole self in the learning experience. Embodied learning takes a learner on a journey that is visual, oral and academic. Oral history is a perfect vehicle for embodied learning as it engages the students actively in a sensory and collaborative experience.

Oral history establishes connections between discreet individuals (the subject of their oral history) and larger historical events or process that this student-teachers may have experienced or been part of. In this study, the student-teachers prepared materials for their pupils to impress upon them that an oral history must be more than an interesting life story. They too used history to illuminate their

personal stories. Pupils, of course, start out with little or no knowledge of what oral history entails. However, student-teachers will facilitate them along the lessons.

Oral history promotes the concept of learning from another person's experiences. In this study, the pupils learn from their student teachers' family stories. The pupils could connect the learning content to their personal family stories where it will emulate the interest in learning among the pupils. The family themed stories are not only compatible to the need of the learners but also to the interest of learners.

Nikoletta Christodoulou from Department of Teacher Education, Augusta University, USA agrees that oral history allows the ability to see oneself and the future through the lives of others, gain inspiration from them, and be engaged in the present through the processes of oral history which has the ability to help students to turn "mirrors into windows". A mirror always reflects what's already within a particular range and not allowing us to see what's behind or beyond it. The mirror obscures the view. On the other hand, windows, present what's out there and the likelihood to see new openings and spaces for inspiration and imaginations, while gazing towards the future.

In the same vein, the oral history also provides a platform to assemble anecdotes, students' life experiences, and traditional knowledge of parents, grandparents and great grandparents which cannot be found in traditional textbooks and curriculum. Guillermo Vodniza (2016) believes in the importance in connecting pupils' lives through oral history and storytelling to recognise and celebrate an individual's culture and heritage. He used oral history and traditional story telling in his teaching practice to support students in discovering traditional values and identities. This is very much practical in our normal ESL classroom itself where the collection of stories from the pupils can be collected and utilised as interesting reading materials.

Margaret Smith Crocco (1998) stated that the use of oral history texts provides a means of including individual life stories without necessitating an investment in new classroom materials. For the teacher, the start-up costs are minimal. When student- teachers use the oral history texts for teaching and learning in an ESL classroom, they become developers of their own materials without any single cost.

Methodology

A case study was employed to conduct this qualitative research. This is considered appropriate as the researchers were interested in obtaining a better and in-depth understanding of the student-teachers' experiences when engaging in developing oral history texts for Form 2 ESL reading class (Yin 2009; Creswell 2009).

A total number of thirty, Year 3 student-teachers from the TESL programme at the Faculty of Education, The National University of Malaysia (UKM) were selected for this study. Of the thirty participants of this study, twenty were selected for the individual interview. These student-teachers were selected because they were enrolled in 'Teaching of Reading' course and they were the writers of the oral history texts. They fulfilled the characteristics, which the researchers had determined relevant to the study and they also served the research objectives of this study (Dornyei 2007).

The research instruments used to triangulate and corroborate data in this study would comprise of personal reflective journal (PRJ), field notes (FN), document analysis (DA) and individual interviews (STI). The students were asked to keep a personal reflective journal detailing what they have learnt and the challenges they faced in the processes involved. Classroom observations were conducted and documented as field notes. The researchers and the lecturers from Faculty of Education, University Kebangsaan Malaysia, as non-participant observers, recorded the progress of the lessons' implementation in form 2 classrooms of Sekolah Menengah Kebangsaan Bandar Puncak Jalil and Sekolah Menengah Kebangsaan Pusat Bandar Puchong (1). The researchers carried out individual interviews to interrogate the student teachers' experiences in developing the oral history texts for teaching of reading in an ESL classroom. The interviews were recorded and transcribed in verbatim.

To increase validity and reliability of this study, the researchers applied triangulation method which according to Creswell (2012) is the process of corroborating evidences from different individuals, method or type of data. In addition, the interview questions were reviewed by experts, and the transcriptions of the findings were checked by respondents for verification. Measures to comply with research ethical conduct were taken, as the researchers explained to the respondents that their participation was voluntary and their confidentiality was protected.

Findings and Discussions

The finding and discussion are explained by answering the research question of the study.

How did the TESL student-teachers experience on the development of oral history texts help them to understand the principle of reading, teaching reading and material development in an ESL context?

The findings for RQ1 was divided into 3 stages namely pre-writing, while-writing and post-writing stage and implementation stage.

Pre Writing Stage

In the pre-writing stage, the student-teachers gained valuable knowledge as they are still in the embryonic stage of writing oral history texts.

a. Consideration For the Need and Interest of the pupils

The student-teachers confessed that they gave great importance for the need and interest as well as the values they want to instill among the pupils, before writing the oral history text. Themes derived from the oral history texts were single parent struggles as s/he faces challenges in life, family struggles to meet basic needs, irresponsible father, siblings' rivalry, relationship among siblings and caring for grandparents, which cannot be found in traditional textbooks and curriculum. The 6 student-teachers realisation in this aspect can be evidenced from the following thread of interview responses.

"I have to match with the students' need and I have to make sure that all the story, all the flow of the story suitable for the students' themselves, for the level of the students and also, I have to make sure the usage of the words and also when constructing the question as well" (Nur, STI)

"There is a sufficient need to make it very compatible for the students because it is the matter of their interest. Because when the text is something out the context, out of the experiences, we could not grab their attention". (Joe, STI)

The analysis of student-teachers' personal reflective journal showed that careful consideration was given to the aspects of need and interest, as Afif wrote ...*When looking for a topic for oral history text, I need to find a topic that is suitable to all readers.*

In the pre-writing stage the student-teachers' learned that they need to ensure the texts have the ability to impact, as suggested by Tomlinson (1998). It should have novelty and variety and by being attractive and appealing, besides helping learners feel at ease and overcome anxiety (by providing plenty of white space and providing comprehensible input, Krashen, 1988).

While Writing

Deciding on The Length of the Oral History Text.

The student-teachers' developed lengthy oral history text (3-4 pages) and during the editing process by the experts, they shortened their stories as most of the texts in Form 2 textbook are 500-600 words. The students-teachers' learned that to ensure students stay focused in reading class, the reading text should be short. The student teachers' realisation in this aspect can be evidenced from the following thread of interview responses.

"We have to ensure that the length of the text is suitable with the learners' level. Previously, we make it three pages and we have to shorten it into 1 page". (Irah, STI)

"Actually yes, many of our texts are too long and in that point I think that they are actually having quite a difficulty to stay focus because we have many long pages". (Joe, STI)

The data above are also supported by the student-teachers' personal reflective journals.

Afifah wrote in her personnel reflective journal *I realised that the story of my essay is quite heavy for secondary level, and lecturers finally chose Marya's essay to be our group's reading materials.*

a. **Balanced Distribution of Vocabularies**

The student-teachers learned that another important factor to consider in this stage is the range of vocabulary used in the oral history texts. The vocabulary should be within the form 2 KSSM syllabus and the distribution of new words should be appropriate to pupil's level. Their concern can be evident from their interview responses.

" I was worried that some of the language or the word usage might be difficult for the students to understand ". (Aliya, STI)

" I learned that the reading text itself must be on the range of the understanding". (Maria, STI)

In the same vein, 3 student-teachers also reflected on this. Ong reflected that... *, I re-read the text for a few times and I was pretty confident that it would make an impact to the readers. I also made sure that the language and vocabularies used are friendly to the young readers that I will be facing during the reading lesson.* Nadiatul also reflected that.... *the text must be comprehensive yet interesting with appropriate vocabulary used in the text.*

The writing experience gave the student-teachers' valuable experience on how to write an oral history text with balanced distribution of vocabularies. This is an important aspect which needs careful consideration. Hussin, Nimehchisalem, Kalajahi & Yunus (2016) stated in their study that learners in Malaysia usually face difficulties in acquiring their four skills: listening, speaking, reading and writing in English language because of their limited knowledge in vocabulary and the problem can be solved by giving serious attention to effective learning of vocabulary.

The student-teachers' oral history texts were also parallel with the guidelines for material development for student-teachers (adapted from Mukundan and Nimehchisalem 2012) The number of new words in the text was appropriate to the pupils' level with a good distribution (simple to complex) of vocabulary load across the texts.

b. **Parallel To Student's Proficiency Level**

The student-teachers learned not only to pay attention on selection of vocabulary but also to student's level of proficiency in the language.

" We need to filter the suitable text according to the suitable level, level of the students because every student has different main issue right. So, we really need to come out with few steps and we need to see which text fits and relate with the students' real life experiences". (Hazman, STI)

The researchers believe that the student-teachers have learned to write oral history texts parallel to the student's proficiency level as 3 student-teachers reflected on this.

....As a teacher, we need to be aware of the selection of the text and the context of the question and it must be parallel with the text. It is because we have to understand the students' ability of interpreting the text because the level of the text is important towards student participation in the classroom. (Nazrol, PRJ)

We must help the students to understand text in a simple way. (Nalini, PRJ)

Post Writing and Implementation of the Reading Lesson

a. Impact of the lesson

The student-teachers implemented the reading lesson in two selected schools namely Sekolah Menengah Kebangsaan Puncak Jalil, and Sekolah Menengah Kebangsaan Pusat Bandar Puchong (1). The experiences gained during the implementation of the lesson, gave student-teachers positive and negative feedback which helped them to adapt their oral history texts.

During the implementing, the student-teachers faced situations where pupils were not responding effectively, which was obvious from their facial expression. From the researchers' observation, the situation was because they were not familiar with their new teachers. They were reticent to talk or give expected responses (FN). This can be evident from the interview as Raidah stated... *"Sometimes, when you are teaching you might feel the students you know their facial expression. Some of them might follow but some of them might stare at you blankly"*.

In some classroom, the student-teachers realised that the level of oral history text was slightly high for the students. They realised that their family themed oral history text should be simple to cater for the low proficiency pupils.

"The content itself whether or not it is too deep for the students to actually digest and understand and relate to and as well as the language because you know in one classroom there are students of different levels of ability when it comes to the language usage so I was struggling when I need to use lesser range of the tenses or easier vocabs instead of the complex one and in terms of the relating classroom activities". (Ong, STI)

In some classes, the oral history text was delivered successfully and the pupils were able to read and understand the story besides giving positive responses. The success of the reading class can be linked to written statement by the student-teachers in their personal reflective journal.

Iylia reflected that.... *I have learnt the way to develop our own teaching materials, questions and also classroom management. Developing our own teaching material can ensure that we could cater to every students' preference and personal experience. Some of the materials that are available readily like the textbook might not be applicable to all students thus making them unable to relate to the topic. If the students are able to relate to the content of our teaching materials, they will become more interested to learn.*(PRJ)

b. Realisation on Aspects to Consider in Producing Oral History Texts

The experiences gained by the student-teachers gave the realisation that there are many factors to consider while writing. Although the student-teachers had enrolled in a reading course and learned the theoretical aspect of a reading class, the micro teaching gave them a better realisation and experience.

Ong stated.... *"At first, my knowledge was really shallow when it comes to this reading class because of my previous experiences as a student, but later on when I was learning from my lecturer in this course, I found out that there are actually many aspects that we need to pay attention to during a reading lesson in an ESL classroom like you know, the whole casts, the language usage and the content itself, a lot of stuff that we need to actually pay attention to"*. (STI)

The study gave the student-teachers the opportunity to gain valuable knowledge and this can be evident from the responses given during the interview and researchers' field notes.

c. Putting Theories into Practice

The study gave an opportunity to the TESL student-teachers to put into practice all the knowledge they gained from GGGV3223–Teaching of Reading in an ESL Context course.

“ This course helped to practice the theory in the class. It actually improved my writing and teaching skill. I improved my understanding in reading text because this course taught me how to separate types of questions, which level it should be and then how to write suitable texts for pupils. Many things are new for me because before this when I see text, I just see a text. After I joined this course, I learned that there are many things that we can do with reading texts. ” (Hazman, STI)

d. Improved Oral History Text Writing Skills

The student-teachers improved their oral history text writing skills. This will be a stepping stone towards producing more authentic reading materials in the future. This can be evident from responses recorded from one of the interviews.

Ivy highlighted that, *“ I gained knowledge about how to create the good text and how to relate with the questions so that the students are able to understand and analyse the text to answer the question. Yes it is useful in future so that I will be able to create a very good text and comprehension questions that the students can use ”.*(STI)

Marya also reflected that.....*I personally like this task because it helps to build our sense of imagination in creating a story.*(PRJ)

Implication of The Study

Findings of this study have definite implications on the student-teachers. They have gained valuable experiences on how to develop oral history texts for the teaching of reading in an ESL classroom. They gained a greater understanding on the principles of reading, teaching reading and material development in an ESL context. This experience will be a stepping stone for the student-teachers to enable them to produce more reading materials based on Malaysian social and cultural context. The study shows that there is value for our Malaysian students to write texts that are representative of their cultural and real-world context in order for them to see themselves represented in a language that would become less foreign and eventually feel a sense of ownership to the language.

The findings will be able to guide the current and future teacher training educators. Teacher-educators may need to implement more material development courses in the universities for the fresh teacher-trainees so that they will not merely be consumers of materials but also developers of teaching and reading materials which are based on Malaysian social and cultural context.

Curriculum planners and developers may also need to consider using more locally produced teaching and learning materials since there are many renowned writers in Malaysia. This study also shows that student-teachers can be trained to be materials developers in the future. Locally produced authentic materials based on Malaysian social and cultural context will help our students to value their own culture more. Rather than depending on professionally and commercially produced textbooks and teaching materials, the curricular developers should encourage local, non-commercial materials which are not driven by the profit imperative but rather driven by considerations of the needs and wants of the target learners and by principles of language acquisition.

Conclusion

The present study investigated the student-teachers' experiences in developing oral history text for the teaching of reading in form two ESL classroom. The findings showed that student-teachers gained valuable experiences and a deeper understanding of the principles of reading, teaching reading and material development through the inter-twining engagement between theory and practice. The process of developing the oral history text for the reading class also harnessed the student-teachers' creativity and thinking skills. They can continuously value creative and critical thinking skills while being engaged in their respective classrooms in the future. Besides, the student-teachers learnt to value personal narrative as a mean to engage with social and cultural issues, by reading the 'word and the world',

connecting the personal with the sociocultural and engaging the students both cognitively and affectively (Tomlinson 2008). These experiences are believed to boost their confidence in developing more teaching and learning materials that are representative of our cultural setting and they can see themselves being represented in the target language.

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AN EMPIRICAL STUDY ON CHALLENGES AND STRATEGIES TO EMPLOYABILITY FOR GRADUATES: A BILINEAR COST FUNCTION APPROACH

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Abstract: *The aim of this paper is to examine challenges and strategies for graduate employability. With the demand from the industry to be more ready for employment, students are now equipped with knowledge and skills that are deemed appropriate for applications at work later. Even though with the requirement of practical training within the curriculum, students still need to further enhance their readiness to serve the industry. A bilinear cost function is offered to formulate strategies in addressing challenges, that expresses outcomes and benefits as a result. An experimental approach using vignette is the sampling technique to gauge a focus group's responses that will pilot generalisation from the cost function. A p-value of 0.01 on Fisher's exact test showed significance of relationship between challenges and strategies. This paper offers the strategies that can be used as options to overcoming challenges in order to enhance employability for the graduates. A proposed framework and checklist are provided that includes advanced training, probation, professional qualification and certifications, endorsed-employer skills, among others. These elements are deemed to be of priority for better penetration into the industry. It is hoped that readers will consider the results of this study as strategies to resolve the employability challenges.*

Keywords: *employability, graduates, challenges, strategies, training.*

Introduction

The world today seeks for better and better candidates for employment, as the industry undergoes dynamic shifts in the economy. More so, this demand is felt by universities, as they craft and offer programs that are deemed relevant to the industry. Producing graduates who are ready and apt is one of the key objectives for a typical university. Nevertheless, there seems to be some differences in interpretation of the word 'readiness' from the viewpoints of the university and the employer.

For the academic institution, like colleges, polytechnics and university, they produce trainable graduates who are ready to serve the industry, and the expectation is that they will be trained further by the employer in order to acquire more skills or sharpen their capabilities. On the other hand, it seems that the employer expects graduates to be ready and be able to meet their expectations instantaneously upon joining employment. So, this mismatch has often been brought to the roundtable at various levels for enhancement at preparation and training levels.

Research Problem

A known mismatch between academic and employment needs, have been long established when it comes to choice of work and career development. A student may pursue for say an accounting discipline, and graduate with a Diploma or Degree, but discovers that the interest is not in the heart. So, he or she will pursue a career that might seem easier to their perspective, and subsequently end up in another career discipline. If only at the point of university entrance, students are given the exposure to the different choice of career within their chosen discipline, they may still be pursuing a career that fits their degree. Due to lack of guidance, the students, focus and choice of career may differ from the original

choice of degree pursued. In other words, the students' career decision shifts towards what the student feels strongly towards, rather than what they studied for at university. .

As an improvement to prepare the graduates better for the industry, there are support and provisions put in place to provide training platforms. These trainings are held either during the course of study that is practical training placements (internship); or at the point of graduation, which is termed as apprenticeship employment. These opportunities provide avenues for candidates to build up their working experience and this experience is subsequently included onto their resume for future job applications. With such experience, graduates improve their skills and capabilities for better employment chance.

Nevertheless, this study will propose strategies to better address the mismatch, and hopefully these strategies will guide students to build their career in the right direction. That is to fit their chosen employment with their academic qualification.

Aim of Study

The aim of this paper is to examine challenges and strategies to employability for graduates. With the demand from the industry to be more ready for employment, students are now equipped with knowledge and skills that are deemed appropriate for applications at work later. Even though with the inclusion of practical training within the curriculum, students still need to further enhance their readiness to serve the industry.

The objectives of the study are as follows:

1. To examine the challenges faced by students and graduates
2. To examine the strategies to overcome challenges to employability

In line with the objectives, the research questions in this study are:

1. what are the typical challenges faced by students and graduates?
2. what are strategies to overcome the challenges delineated by respondents, who are various parties involved in employability.

The outcome of this study will be a proposed framework, based on a bilinear cost function to show dependency in the relationship between challenges and strategies. A checklist will also be provided subsequently.

Significance Of Study

This study will provide a unique mechanism through a framework derived from the bilinear cost function towards understanding the challenges of graduate employability, and how they relate to formulating strategies, addressing those issues involved with regards to employment. This study will also highlight any salient issues that should be considered by stakeholders for future improvements. The contribution will be three-fold namely practical, methodological and theoretical

Background Information

Kanuka and Smith (2019), in their study, perceived that it is important to have certifications and credentials when seeking for a job, in their case of teaching in higher education. Kluve et al. (2019) made suggestions to employers on the use of interventions that may influence the success of employment programs of different training. Marrington, O'Shea and Burton (2019) pointed out that work-based learning helps with developing skills and actual work experience. As such, students are aware of what is expected by the employers. Mohd Salleh, Mapjabil and Legino (2019) presented a study on graduate work-readiness (GWR) challenges from the viewpoint of stakeholders, facilitating human resource development and fit for role purposes.

Dhakal, Prikshat, Nankervis and Burgess (2019), presented several findings from studies pointing to the direction towards GWR, vocational education incorporating stakeholders' considerations. A study by Waring, Vas and Bali (2019) offered an outlook on the transition between education to employment. The study indicated no employability issues in their country as they reduce foreign labour force, and at the same time introduced upskilling of competencies of the local human workforce, whilst encouraging for automation in small-medium businesses.

As far as measuring performance, Otrusinova and Pastuszkova (2012) provided options through 3E's, 'Economical, Effectiveness and Efficiency' in a typical in their case for a public administration performance. In relation to our current study, 'Economical' means that the programs are at a cost-effective and worth the spending of the resources towards improving the skills and capabilities of the students and graduates, that are seen to be profitable and beneficial. 'Effectiveness' means that the outcome of the programs undergone by the participants are effective in that it was evident in the students to have improved their communication, skills and on-the-job performance. In other words, the programs taken works! In addition, 'Efficiency' relates to well-organised programs, making the participants be more competent and they have become more resourceful. As far as funding for training is concerned, Waring, Vas and Bali (2019) indicated that the encouragement towards automation and mechanical could be made possible through generous grants as well as subsidies as investment in technology.

It can be seen that the few selected literature examined areas of challenges and proposed some strategies as a measure to overcome, whilst indicating that in general, some level of training and exposure helps students and graduates in developing skills and employers' expectations. In addition, it can also be considered that organisations might sponsor for the training required, a win-win for both the students or graduates as well as the employers as they too prepare their potential employees before joining on board.

Methodology

The approach to this study is a mixed method, one that is experimental in nature, and vignette based on data drawn up from an actual observation. The qualitative part of the study will make the study unique in that measures of the challenges and strategies, explained by a bilinear cost function approach. Prior to this, possible models of dependency are investigated to determine the most suitable function of modelling the dependency. This means that when challenges are more, the strategies to address should also be substantial; in other words, weights can be assigned to the scale of the challenges.

The study assumes authenticity and accuracy of information and data used, based on the responses received. A control group of a class of 20 students at postgraduate level, 3 lecturers, and 3 employers were used in this study for response data. The questions cover the following areas:

1. In your opinion, what are the challenges with employability?
2. What are the strategies that will address those challenges?

The responses are both quantitative and qualitative, then transcribed accordingly by simple spreadsheet and administered onto a matlab software before the possible models are weighted and results produced.

A Bi-Linear Cost Function Approach To Response Data

It should be noted that when there are basically two variables in the current study, that in the law of small number of responses, Fisher's Exact test can be used to test significance of the relationships (Aziz-Khairulfazi, 2004); in this case the two variables are i) the challenges, being the input and ii) the strategies, being the output with a function to an outcome of employability.

Applying the recommendation given by Goodwin (1996), the mathematical functions involved will take the following forms (Aziz-Khairulfazi, 2004):

1. Normal distribution for outcome of a relationship

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2}; -\infty < x < \infty$$

2. Cost function for this application is the bilinear form

$$\text{where } c(x) = \begin{cases} c_1(\mu - x); x < \mu \\ c_2(x - \mu); x > \mu \end{cases}$$

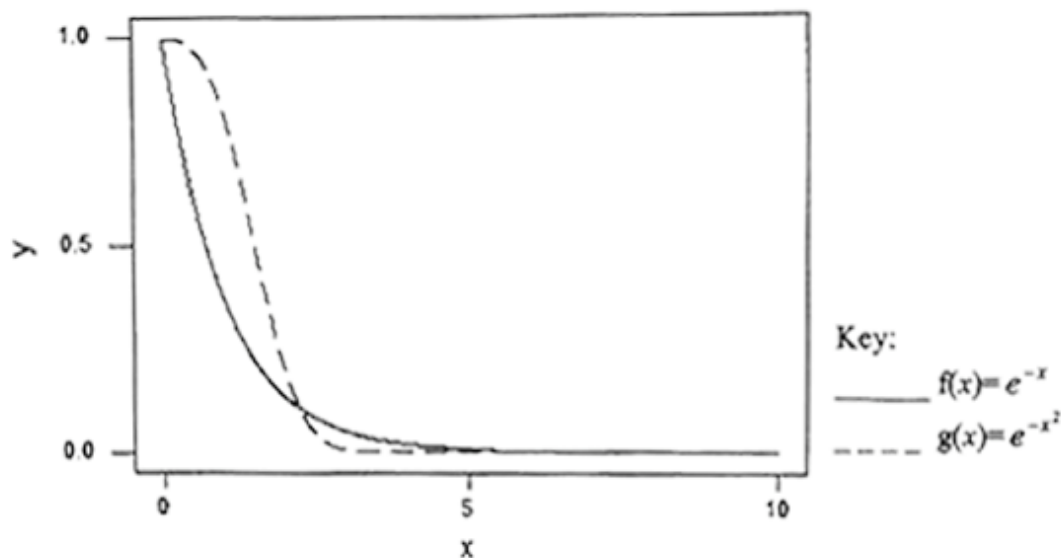
3. This means that there is a cost involved when the employability is compromised, hence cost of employability. This cost refers to the challenges and strategies not aligned in order to address employability.

Then, the decision analysis will be based on minimising the expected cost, as follows:

$$\begin{aligned} E(c(X)) &= \int_{-\infty}^{\infty} c(x) f(x) dx \\ &= \int_{-\infty}^{\mu} c_1(\mu - x) \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2} dx + \int_{\mu}^{\infty} c_2(x - \mu) \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{1}{2}\left(\frac{x-\mu}{\sigma}\right)^2} dx \end{aligned}$$

The mathematical function then extends onto dependency model from this bilinear approach, the graph of which given in Figure 1.

Figure 1 - Possible models for dependency of y on x



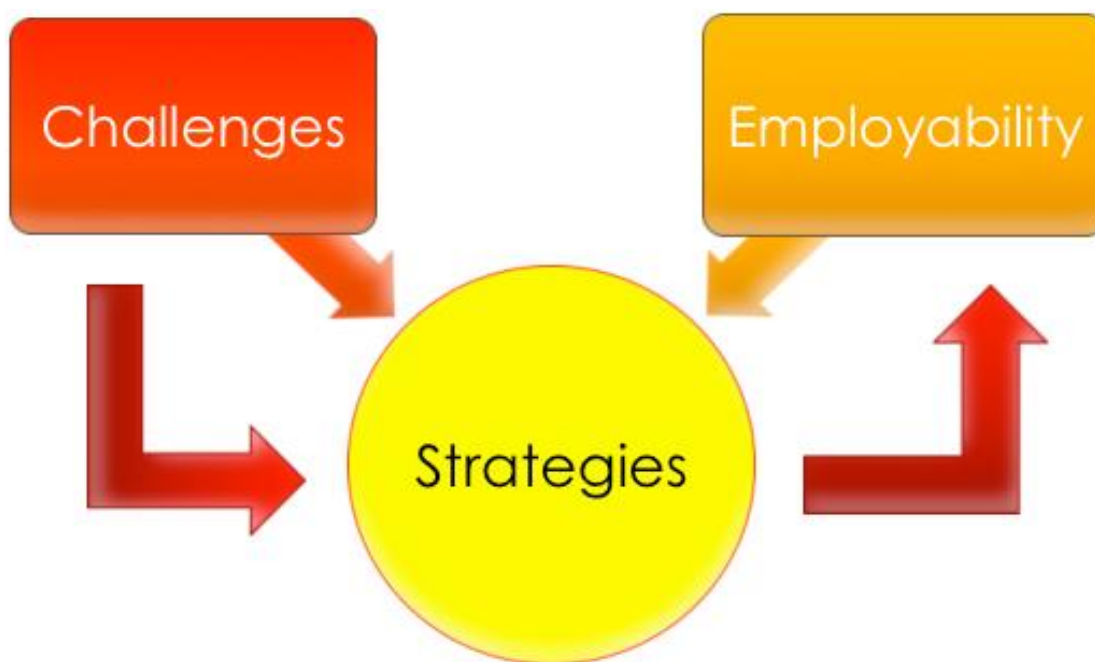
This means that there is input involved, i.e. x , when the actual outcome or return, i.e. y , is more or less the expected performance or output. Input takes the form of monetary investment, time, opportunity loss, any penalty etc. The actual outcome would be the benefits, the increased salary gained in post-training jobs and skills developed. The measure may also consider the 3E's and is based on a capture of the input-output relationship that will be able to deduce the gains or losses as a result of the training programs conducted. The bilinear function serves the purpose of showing a proportionate change between before and after the training programs taken.

Figure 1 may take the form of dependency observation that when challenges are present, strategies will reduce those challenges to enhance employability.

Proposed Framework And A Checklist

Based on the results of the analysis from the models given, the following framework is deduced in Figure 2, to capture challenges, strategies and employability.

**Figure 2: A Cost Bilinear Function to Employability:
Challenges and Strategies**



If the challenges are identified, and strategies formulated to address the challenges, then employability will be enhanced. The following challenges and strategies are listed in Table 1, delineated from the respondents' input:

Table 1: Challenges and Strategies

No.	Challenges (Issues)	Strategies (Actions)
1.	Monetary investment	Measure by 3E's and monitor
2.	The appropriate training placements	Criteria conforming to requirement by industry
3.	Scope of work	choice of training placements - must find the right fit and placement, on-the-job learning and applications, on-campus firms
4.	Academic performance of students	Intervention during and after, case studies in class, role play, self-assessment
5.	Readiness to employability	Training, part-time employment and networking programs, better CV development, extra curriculum, career advice
6.	Communication, confidence, introvert, personality and attitude	student exchange programs, public speaking, competition
7.	Poor acceptance to real life work	supervision, academic advisor and close mentoring, endorsed-employer skills, probation

It can be seen that the checklist above is not exhaustive, as there is bound to be some other challenges and issues experienced by parties involved in employability, followed by the suggestions towards strategising and re-strategising mechanisms to address problems accordingly. When new era arise, so will challenges and new ideas and strategies, even innovation should be functional to contribute to solutions.

Conclusion and Recommendation

It can be seen from the above that it will be a constructive journey for a student and graduate to go through before reaching the ultimate goal in their career, to be successful at the helm of their profession. As indicated earlier, this study contributes in terms of the three areas:

1. Theoretical - various perspectives are found in the literature, the current study brings mathematics as an application to address challenges and strategies, thus enhancing the body of related knowledge.
2. Methodological - a unique approach employed here is with the bilinear cost function and dependency modelling that facilitate an alternative explanation of the relationship between challenges and strategies for employability.

Practical - An insight into challenges and strategies will provide a better preparation and plan from the employers' perspective, an understanding to bridge theory and practice in terms of employability.

As for future work, it is recommended to test the effectiveness of such strategies by the specific disciplines, as an enhancement to the increase or decrease of employability. The current study is indicative towards the drive towards ensuring graduate readiness to employability, in line with that of Kanuka and Smith (2019), Kluve et al. (2019) and Marrington, O'Shea and Burton (2019), among others.

As a conclusion, this paper has attempted to offer the strategies that can be used as options to overcoming challenges in order to enhance employability for the graduates. The proposed framework and checklist are provided that includes advanced training, probation, professional qualification and certifications, endorsed-employer skills, among others as some actions for the strategies proposed. It is hoped that readers will consider the results of this study as strategies to resolve the employability challenges.

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A LITERATURE REVIEW: WOMEN WORKER COMMUTING PRODUCTIVITY IN FORMAL SECTOR

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Abstract: *The debate over the opinions on the productivity of women worker commuting is interesting to discuss, one side says women worker commuting workers will decrease the productivity, but the other side says productivity will increases. The number of women worker commuting in the formal sector is increasing currently, especially in urban areas. The possibility of this due to the increased confidence of business owner in the good work productivity of women worker commuting . There some interesting things this article, there are urban economic sectors offer more service sectors. Women workers are considered more suitable to work in the formal sector, especially services which related to women's characteristics. The concept of gender encourages women workers to be more enthusiastic to work well, as economic driver of family or working hard for themselves. The effect of modernization is one of the drivers of mobility of women in suburban area to urban areas both from behaviour and means of transportation. The compatibility of the characteristics of women working in the formal sector (service) is possible to encourage work productivity.*

Keywords: *Commuter, Formal sector, Women Productivity*

Introduction

Indonesia recognizes Commuter with “*penglaju*” which is defined as workers who travel from their homes around the city to work to city centre or CBD (Central Business District). Commuters are a characteristic of the size of urban areas which are divided into big cities, metropolitan, and megapolitan. Kim (2015) states that commuting is the impact of unemployment which is part of the growth of workers in the metropolitan area. (Andersson, Lavesson, & Niedomysl, 2018) the economy can be flexible in terms of how, where and when people work, the mobility of workers can be facilitated and residents in rural areas and could commute to work in urban areas where cities are central to employment and career opportunities. The presence of mobility (commuters) is considered to provide changes for labor market in urban areas.

Changes in the composition of the Indonesian labor market experienced transformation the formal sector between male and women workers. Based on data from commuter workers in 2011 where the number of workers in the formal sector was dominated by men, which amounted to 64.70% while women were 63.78%. This condition reversed in 2016 where women dominated employment in the formal sector at 36.22% and men 35.30% (Population and Labor Mobility Statistics, 2017). It show the number of women working in the formal sector has increased, indicating that there is an increase in the number of womenworkers who commute. This condition also shows that employment opportunities in the formal sector is widely available in urban areas. (Galvin & Madlener, 2014) The increase of the number commuter workers in Germany cause the skill of workers are increasing and they can be used in the city that need more labor

Based on the theory of mobility, commuters can use the gravity model (Stefanouli & Polyzos, 2017) which was pioneered by Ravenstein (1885). The phenomenon of women participant in formal

sector is possible in relation to work productivity. The opinion is related to the determination of wages and the level of confidence of business owners regarding the productivity of the commuter labor. Accordance Felds (2005) that wage recognition arises from various institutional forces that may include minimum wages, trade unions, government payment policies, paying for multinational company policies, and labor rules. (Pierrard, 2008) the decision to travel depends on worker productivity and work perspective. Under certain conditions, increasing cross-border commuter competition can result in positive externalities in domestic unemployment. (Ignacio, José, & Molina, 2011) The general assumption in the urban economic literature is that private commuter costs are fully by workers and do not affect worker productivity.

Some of the thoughts above lead to debate whether commuter workers, especially women who work in the formal sector have good productivity. This study aims to review several other studies regarding the impact of productivity of womenworkers commuting in the formal sector. This review will be divided into two views. One side of the opinion holds that woman workers commuter have good work productivity (optimistic) and on the other hand opinions that hold that woman workers commuter have poor work productivity (pessimistic)

Literature Review

Basic Concepts of Commuting

The concept of commuter was introduced by Wilbur Zelinsky (1971) based on the theory of mobility about the movement of people who has purposes from one place to another place for one objective. The transition mobility hypothesis expressed by Zelinsky is that there is a definite and patterned order in the growth of personal mobility transitions through space time that compares a core component of the modernization process. From the hypothesis delivered by Zelinsky, it can be concluded that the transition of individual mobility occurs due to order and pattern both in function, frequency, period, distance, route and origin of destination, class and migrant category. Transition of mobility can be done both physically and socially and there was a change in technology. Besides that, Zelinsky also looked at the interrelation between the stages of development and the mobility of the population consisting of the five stages of community development. The first, traditional pre modern society and there is very little or no migration and a natural rate of increase of around zero. There is a very high level of mobility (nomadism), but there is very little migration. The second, early transitional society at this stage massive mobility from village to city. And part of the community will undergo a process of modernization. There is a rapid rate of natural increase even though the total population increase. The third, the final transitional society at this stage of migration where urban-to-urban migration goes beyond rural to urban migration which continues but fades to the absolute or relative level, and migration movements and complex circles in urban networks, from city to city or in a metropolitan area, circulation and non-economic migration began to emerge. Then the net out migration trend shifted to the trend of net migration when more people immigrated than emigrated. That is, more people are moving than out. The fourth stage, the movement from village to city continues but decreases in absolute and relative terms, the strong migrant movement from city to city and in urban agglomeration especially in large and small metropolis cities. An increase in large urban migration to the suburbs can also occur. The last, future super advanced society, in this stage, almost all possible housing migrations from various cities. There are no plausible predictions about fertility behaviour, a pattern of mortality that is slightly stable.

Mantra (2000) divides population mobility in permanent and non-permanent mobility. Permanent mobility is the movement of the population which is carried out permanently at the destination while non-permanent mobility is the movement of the population irregularly. Permanent mobility are commuting and stay or circulation in the destination. The difference between commuting and staying or circulation is at the time limit of returning to the real home. For commuting mobility, on 1981, Mantra defines it as a return to the origin area on that day or at circle time more than 6 (six) hours and less than 1 (one) day.

Lyons and Chatterjee (2008) stated that the commuter emphasizes the routine and recurring nature of a journey that was initially related to public transportation. This commuter activity is a feature of modern (industrial) society, commuters also provide a means of developing and making an impact on the place of life. The existence of individual movements in efforts to improve welfare give the idea of commuting is a form of mobility. Pooley (2009) also states that daily mobility is another aspect of population movements such as migration on long trips. Mobility at this time has been carried out by many people to make long trips every day compared to moving houses close to work. This is a social, economic and family life process that plays an important role, not only to human geography so there needs to be a more complete explanation of other things. The existence of daily mobility for some people, daily mobility is certainly related to costs as the effect of daily travel as the end of the social function process. The mobility costs are personal and family costs, social and cultural costs, economic costs, government fees and environmental costs. Cost research has been carried out by Ortuzar, Willumsen, 2001; Stradling, 2006; Ommeren, 2009; Shuai, 2012,

Indraren (2013) said that commuters are routine movements occur in one day in a short distance. This movement is carried out by migrants not to settle in the destination area. Carson (2014) also added in his study at Australia, that increasing mobility, especially for travel short population including circulation of locations and those returning home, as contemporary social characteristics. The application of Zelinsky hypothesis in this study is assumed directly to post-industrial societies and technology supported population mobility.

Many studies on commuter from various aspects of commuting, such as (An & Zhang, 2012; Bloze & Skak, 2016; Takayama & Kuwahara, 2017). The other researches that focused on employment with various variable has also been done by (Bjuggren et al., 2015; Carta & Philippis, 2018; Guirao, Campa, & Casado-Sanz, 2018; Gutiérrez-i-Puigarnau & van Ommeren, 2010; Ignacio et al., 2011; Novaco & Gonzalez, 2009; Van Ommeren & Fosgerau, 2009)

Women's Commuter Productivity (Optimistic and Pessimistic)

In the concept above has been explained, regarding commuter based on the theory of mobility. There are much research has been done on commuters related to the impact, costs and well-being of households. But besides that, it is also necessary to discuss how the productivity of the worker commuting, especially women. This is interesting to study consider of women in the worker is increasing. (Mac Donald, 1999) the past three decades, the position of women in the structure of the worker and the family where women live and work has changed significantly.

The increasing development of urban areas and the increasing level of women's education today is not likely the possibility of women workers around urban areas. (Mac Donald, 1999) that the women in the local labor market who come from rural areas, working in non-metropolitan city areas will have shorter commuter trips which reduce commuter costs compared to women who work in metropolitan areas. However, the opportunities offered by non-metropolitan labor market will decline due to shifting jobs in more diverse metropolitan locations. (Macdonald, 1999) employment for women is likely to be more equitable than men, where women are more likely to work in contact with consumers. (Chapple & Weinberger, 1996) the concentration of work in the city is stronger in women than men, 75% women work in special industry like hospital, school, finance and insurance, department store, and household service.

The labor productivity in general commuting commuters there are fundamental differences such as the findings obtained by Ommeren, Pigernau (2011) strong positive for absence, with an elasticity of around 0.07. In the case of workers in the entire economy where travel is ignored, absenteeism will be around 16% lower. This implies a negative influence between the lengths of the journey towards worker productivity. The increased productivity of the individual worker will have a positive impact on the sustainability of development. (Office for National Statistics, 2007). (Emre, 2015) Labor productivity related to timeliness is a problem and becomes a driver of future behaviour that results in negligence

and absenteeism to labor turnover. The finding of this research applied to all worker. On the other argue that women workers commuting will have experience low productivity as research conducted by (Künn-Nelen, 2016) that commuter have negative impact for woman's health. Beside that it show have heterogenic impact to cross gender and low productivity for women. (Zenou, 2002; Ross and Zenou, 2008; Zenou, 2008), the existence of long distance travel can reduce the ability of workers. Judging from the trade-offs between work and leisure, long trips can cause work ability to decline because there is no time to relax making less time available to relax (Macdonald, 1999) also states that the distance between residence and work will lead to constraints on women. This will certainly be related to productivity at work

This is contrary to the research conducted by (Rendall, 2014) women workers have higher productivity in the service sector where work in this sector does not prioritize physical strength and a comfortable work environment. Because differences in the sex of wages cannot depend entirely on differences in productivity. Stankovic et al. (2015) also stated in a study in the southern part of Serbia with results that there was a positive relationship between women worker and employers' perceptions of the quality of the worker. Where a 1% increase in women worker will result in an increase in the level of quality of work with an average of 0.439. Puigarnau (2010) states that the effect of distance has more influence on the pattern of employment for women who travel as commuters but have very little effect, not even rarely too many women work in the city.

According to Ommeren, Puigarnou (2009) one of dismiss of this result. In particular, if wages are downward adjusted when commutes increase, so employers are then neutral regarding the residence location of workers. As there is no evidence that wages negatively related to distance is the case (in fact, all evidence supports a positive relationship between wages and the length of the commute), this implies that workers' net productivity –the productivity minus the wage is a negative function of workers' commuting costs. The increasing number of womencommuter workers in the formal sector can imply that from the demand side business owners believe that women's productivity is not related to the distance travelled.

(Shaw, 2005) stated the driving forces of the economic environment in the form of accelerating technological change and tight global competition, showed that women have comparative advantages in managerial skills related to company productivity now. The existence of social networking is good for women's progress and for company productivity, besides that women are always good at building and maintaining social networking in the company. (Åslund, Blind, & Dahlberg, 2017) employment and wages depend on the ability of the Entrepreneur to observe the commuter costs of his workers to anticipate the behavior of workers. In other models, the commuter need a little time on trip will be less work fatigue, so it can increase work productivity.

Conclusion

The urban development area is one of the attractiveness for the worker in suburban. Where urban areas provide many employment opportunities in the formal sector which filled with a lot of women worker who certainly have high skills and education. The International Labour Organization (ILO, 2004) argues that labor mobility caused by there's no a meeting point between locations where employment opportunities continue to grow with the location where job seekers live . In addition (Macdonald, 1999) argues that employment in urban areas is women are likely to be more evenly work distributed with consumer than men,

The theoretical study produces two different opinions regarding the productivity of women commuters in the formal sector or urban areas (Shaw, 2005; Ommeren, Puigarnou, 2009; Puigarnau, 2010; Rendall, 2014; Stankovic et al, 2015, Åslund, Blind, & Dahlberg, 2017) However, there is still debate that women workers commuting have many obstacles that can reduce their productivity (Künn-Nelen, 2016; Macdonald, 1999; Zenou, 2002; Ross and Zenou, 2008; Zenou, 2008),

Beside that there are three point related woman productivity in formal sector. The first economic sector in urban offered more service sector then production. The second gender concept have push spirit of women worker to work. Worker commuter women also increase family welfare and hers self. The last modernisation effect become one of pusher for women mobility from rural and suburban to urban related availability public transportation like train, bus and private transportation. The author believes, this difference is likely to be influenced by the characteristics of the sample, the behaviour and the sample area. Therefore an empirical study is needed to make prove in Indonesia. But if we saw the phenomenon above, the author tends to be optimistic, there is a positive relationship between the increases of women worker commuter in formal sector to increase productivity.

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THE CHALLENGES FACED BY THE TEACHERS IN ACHIEVING THE LITERASI BAHASA INGGRIS KEY PERFORMANCE INDEX (LBI KPI) IN NATIONAL PRIMARY SCHOOLS IN GERIK DISTRICT

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Abstract: LINUS or well known as Literacy, Numeracy and screening 2.0 program was implemented by the Ministry of Education in primary schools in Malaysia. It serves the purpose to increase the literacy skills among the lower primary pupils from Year 1 to Year 3. By the end of Year 3, the pupils are expected to master the basic reading and writing skills based on the LINUS modules which encompasses all the 12 different constructs. It was found that the number of pupils who did not achieve the LBI Key Performance Index(KPI) increased every year. Hence, this study was conducted to investigate and research the challenges faced by the teacher in achieving the LBI KPI in national primary schools in Gerik district. LINUS program is fully carried out by the teachers in schools hence the effectiveness of LINUS program is based on the teachers themselves as they play a major role in it. The challenges faced by the teachers in achieving the LBI KPI allows the Ministry of Education to overcome the issues in it as well as increase the rate of success among the pupils in mastering basic literacy skills. A multiple case study method was adopted in this study. Fifty teachers from ten different national primary schools were selected to participate in this study. Factors such as guidance, training and support as well facilities were asked as the base of the questions to the teachers. The findings in the study suggests that the research participants are facing difficulties in terms of training and support, guidance from the FaciLinus as well facilities that are being used to conduct the LINUS session. This leads to the failure of achieving the LBI KPI in schools. The findings also revealed that the pupils' absenteeism, lack of basic literacy skills and cooperation among parents serves as challenges to the teachers to achieve the LBI KPI. The implication of this study is that challenges faced by the teachers need to be addressed by the Ministry of Education, in order to evaluate and necessary actions are taken to ensure the program can be implemented successfully.

Keywords: LINUS, Teachers, TESL, primary school, LBI KPI

Introduction

Throughout the history of literacy, literate has been always associated with literature or more specifically as 'well educated and learned'. It was later in the 19th century, the definition was changed to the ability to read and write words as well having adequate knowledge in particular field. Later on, scholars and academics have come up with four core understandings of literacy which includes literacy as a set of skills, literacy can be applied and practised, literacy as a learning process and literacy as text. These basic four core points covers up the basic understanding of literacy. Other definition of literacy is from National Institute of Literacy Council in 1992 has defined literacy as the ability to read and write, to use and written language in all respects, and to critically and effectively use oral and written languages "for all purposes" (National Institute for Literacy Council Report 1992). National Institute of Literacy Council has stated that a person must be able critically analyse about what he reads and able to practice it as well in order to be able comprehend literacy. Hence, literacy skills are being emphasized throughout

English language and has been a part of any education system. Literacy skills play a major role in a student's life in order for him to be able to comprehend the knowledge and put it into practice in real life situations.

English is a second language commonly practiced by Malaysian students and is given utmost importance in the Malaysian Education system. In the 21st century teaching and learning process, learners play a major role to facilitate their own learning rather than teacher giving all the input to the students. Hence, it is clear that language learning strategies play a major role in facilitating student's learning process of English language. According to Oxford and Crookall, learning strategies are steps taken by language students to facilitate the whole process of acquisition, storage, retrieval, or using language information. Language learning strategies allow the students to charge of their own learning in the way suits them the most. Besides, language learning strategies allow the educators to identify and use the right strategies to help the students who are struggling in the second language learning process. Malaysian Education system has seen drastic changes in their curriculum especially in English language and the latest curriculum being implemented is the Common European Framework of Reference for Languages or well known as CEFR. The aim of these curriculums are to ensure the pupils are able to equip themselves with basic English language skills in order for them to be able to communicate both orally and in written form. According to Ministry of Education, in order for the pupils to be able to equip themselves with basic English language skills, there are certain criteria that needs to be fulfilled. One of the criteria is i) learners should be able to listen to and understand simple spoken English in certain given contexts. The current curriculum has separated English language into different set of skills which are listening and speaking, reading, writing, grammar as well as language arts. Hence, in order for the pupils to master English language, pupils need acquire all the skills through learner centred teaching method and language learning strategies play a major role as pupils are facilitating their own learning comprehension is one of the most important components in the English syllabus.

Despite this emphasis, some children without learning disabilities are still unable to acquire the basic literacy skills of English during their lower primary school level. This problem is a continuing concern to teachers and policy makers alike as every Malaysian child is expected to acquire these skills after 3 years of mainstream primary education (Kementerian Pendidikan Malaysia, 2015). To address this problem, a Literacy Intervention Program, (LBI) 2.0 program was introduced by the Ministry of Education, Malaysia in all Malaysian lower primary schools since the beginning of 2013, for identified lower primary pupils in Year One. This initiative, which is an extension of the LINUS (Literacy, Numeracy and Screening) program for the Malay language and Mathematics subjects aims at enhancing the rate of literacy in English among the lower primary learners.

Literature Review

Malaysian Education system has aimed to produce pupils who are developed holistically and acquire all skills to be globally competent. This is in line with the National Education Philosophy and current curriculum as well. The current curriculum known as Kurikulum Standard Sekolah Rendah (KSSR) is an effort of the Ministry of Education in order to reform the education system. KSSR curriculum (2012) brings in more opportunities for the pupils to excel in academic and non-academic aspects. KSSR curriculum, especially English language curriculum has given much importance for the development of language skills.

The success in learning a second language depends upon many factors such as learning style, motivation (Deci and Ryan, 1985), and attitude towards the language (Walqui 2000). There are certain aspects that would affect a student's life such as self-discipline and they would feel less inferior in schools as they are not able to master reading and writing skills. Hence, the students would act rebellious in schools in order to gain the teachers' and friends' interest. Besides, their motivation and self-esteem would drop due to humility by constantly failing the examination and not mastering the basic literacy skills which would allow them to communicate well with friends and teachers.

Achievement in a target language as proposed by Mohamad Jafre (2012) relies not only on intellectual capacity, but also in the learners' attitudes towards language learning. Aggressive behavior, negative, childish and mope are indicators of serious problems. This would affect their ability to master language skills more effectively (Abdul Rashid, 2011). Positive attitude will significantly contribute to the success of second language learning (Samsiah *et al.*, 2009). Conversely, negative attitudes may lead to class anxiety (Ratnawati and Ismail, 2003), low cognitive achievement, and low motivation (Victori and Lockhart, 1995).

This problem is a continuing concern to teachers and policy makers alike as every Malaysian child is expected to acquire these skills after 3 years of mainstream primary education (KPM, 2013). In order to overcome this problem, Literacy Programme (LBI) 2.0 programme was introduced by the Ministry of Education in all National and National-type lower primary schools since the beginning of 2013. The new curriculums aim to ensure that no child will be left behind and that every child, by the end of Year Six for primary education and end of Form Five for secondary education, will acquire the literacy, numeracy and essential life skills (MoE 2015). Screening process that happens twice a year will allow the teachers to identify the literacy problems among the pupils. An issue that has been a problem among the teachers is the students who are not able grasp the basic English Language literacy skills by end of their primary school. The new curriculum focuses on English Language literacy skills among the lower primary students which allows the problem to be identified and addressed at early stage itself.

Most often the only access and exposure to the language is experienced at schools only no matter how limited (Hazita 2006, Sulaiman *et al.* 2015). Hence, it is important the screening happens in rural schools and national-type schools whereby the only exposure the students get of English language is in their school and especially their English lesson.

A study conducted by Evelyn Wong (2014), Nazariyah Sani and Abdul Rahman Idris (2013), and Marina Ramle (2012). Wong's (2014). The researchers focused on to measure the level of management in conducting LINUS programme in one primary school in the state of Johor. A questionnaire, which focused on various dimensions, such as the management of objectives, management of communication, management of supervision and evaluation, management of curriculum, management of pupils' achievement and management of teaching and learning was administered to the LINUS teachers.

Abdul Jalil Othman, Norzan Normarini, Ghazali Darusalam and Saedah Siraj (2011) examined the relationship between the implementation of the LINUS programme with the challenges that the LINUS teachers had to face in attaining the mastery of literacy skills. This study focused on the relationship between having well-planned strategies, and teaching and learning plans. This would help to overcome the problems and challenges faced by the teachers in implementing the programme. According to the researchers, this would help the students to have an effective and meaningful learning to the pupils aligned with the implementation of the LINUS programme.

Besides, researches focused on school management has been conducted as well. Nazariyah Sani and Abdul Rahman Idris (2013) examined school leaders' understanding of the implementation of the LINUS program based on features highlighted by Van Meter and Van Horn (1975), a model of the policy implementation adopted for the implementation of the program in four schools in Selangor. The result indicated that the teachers and administrators' good understanding of the program's objectives has direct effect on the success rate of a program a school level. The study has concluded that if the school management and the leader misunderstands the objective of the program, the result of the program will be affected and targeted results can't be achieved. At the end, it was recommended that Van Meter and Van Horn's Program implementation model, can be helpful in implementing LINUS (LBI) 2.0 program in school.

Tubah and Hamid (2011) examined the influence of demography on reading and comprehension skills of LINUS pupils. Vygotsky's theories on the role of "scaffolding" and "ZPT" was used as the

basis of this study. The researchers stated that these two theories serve as a guide for the LINUS teachers in teaching reading and comprehension skills in the LINUS class. This research revealed that not all the demographic factors of pupils or teachers seem to influence the pupils' reading and comprehension skills. LINUS teachers must be able to identify as well as understand the students' readiness. The teachers need to have an understanding of the level of guidance that needs to be delivered to the LINUS students. It is also identified that the psycholinguistic method of teaching is important to ensure that the teachers are able to identify the mental ability and mastery of language.

Methodology

In order to investigate the challenges faced by the teachers in achieving the LBI KPI, multiple case study research design was adopted. A difference between a single case study and a multiple case study is that in the last mentioned, the researcher is studying multiple cases to understand the differences and the similarities between the cases (Baxter & Jack, 2008; Stake, 1995). This approach allows a researcher to examine a problem holistically. Besides, this will help to maximize efficiency and validity. The case study approach chosen will provide a deeper look into this issue which has to be resolved soon. Qualitative methods allow the researcher to explore and have clearer on the reasons for a success and failure of a program or practice. This research design will assist the researcher in identifying the challenges faced by the teachers in achieving the LBI KPI.

This set of respondents had been chosen because they fulfilled the characteristics, which the researcher had determined to the study and they also served the research objectives of this study (Dornyei 2007). The participants were selected based on two criteria. The first criteria in determining the population sample of the study is the schools which have failed in achieving the LBI KPI for the year 2018. This is very important as to ensure that this study can be conducted successfully at the selected schools which have failed. Since the schools selected are those who have not achieved the fixed LBI KPI of the year, the selected sample fulfils the first criteria. Another criterion that is used to select the participants of the study is that they represent national schools. The public schooling system in Malaysia is divided into two, namely, Sekolah Kebangsaan and vernacular schools (Sekolah Jenis Kebangsaan Tamil/ Cina). In this research context, national schools will be focused. This research was carried out in national schools in Gerik district.

Based on these criteria, 50 teachers were selected from 10 Gerik national schools. The selection of schools were done with the help of FasiLinus in Pejabat Pendidikan Daerah Gerik (PPDG). The FasiLinus have assisted the researcher in analyzing the data of the Linus Screening 1 which was held in March and April. The result of Linus Screening 1 has showed that these schools had a struggle in achieving the LBI KPI set by the KPM for the year 2018.

Methodology

Research design

Under the qualitative research design, there are many approaches. However, in this study in identifying the challenges faced by the teachers in achieving the LBI KPI, the multiple case study approach is chosen. A multiple case study enables the researcher to explore differences within and between cases. The goal is to replicate findings across cases. Because comparisons will be drawn, it is imperative that the cases are chosen carefully so that the researcher can predict similar results across cases, or predict contrasting results based on a theory (Yin, 2003). The researcher is able to analyse and getting better understanding of the situation and each setting by adapting multiple case study approach. In this study, the focus is more on what can be learned from the case in Gerik area where the primary focus is challenges faced by the teachers in achieving LBI KPI. This type of research method has its own strengths and weakness.

Participants

Purposive sampling was used in this study. Purposive sampling was employed because the researcher intended to “discover, understand and gain insights from a sample from which the most could be learned” (Merriam 2009: 79). This set of respondents had been chosen because they fulfilled the characteristics, which the researcher had determined to the study and they also served the research objectives of this study (Dornyei 2007). The participants were selected based on two criteria. The first criteria in determining the population sample of the study is the schools which have failed in achieving the LBI KPI for the year 2018. This is very important as to ensure that this study can be conducted successfully at the selected schools which have failed. Since the schools selected are those who have not achieved the fixed LBI KPI of the year, the selected sample fulfils the first criteria. Another criterion that is used to select the participants of the study is that they represent national schools. The public schooling system in Malaysia is divided into two, namely, Sekolah Kebangsaan and vernacular schools (Sekolah Jenis Kebangsaan Tamil/ Cina). In this research context, national schools will be focused. This research was carried out in national schools in Gerik district.

Data analysis

This study embraced multiple case study approach and thus employed methods that are in line with the study. The research instruments are teacher individual interview and questionnaire. For the questionnaire, the researcher has employed 5-point Likert scale as it allows measuring people’s attitude by requiring them to answer the statements given. The research respondents have answered the questionnaire based on the scale given which are strongly agree, agree, not sure, disagree, and strongly disagree. Statistical Package for the Social Science or known as SPSS were used to collect, analyse, and process the data. Frequency count and percentage were employed to analyse the data collected. The data was processed then using percentage distribution to determine whether training and support as well teaching aids and facilities have impact on the failure of achieving LBI KPI.

The teacher’s role in this study is crucial to see the challenges teachers face on the failure in achieving the LBI KPI. The interview also needed to be carried out in order to explore the answers in this three factors; a) the training and support, b) parents’ commitment and c) guidance from FasiLinus contribute to the issue of failure in achieving the LBI KPI. An individual interview helps to extract detailed and valuable information about the situation and a program. As the teacher has a direct involvement with the issue studied, individual interview is used to gather data from the teacher. The questions were divided into three sections. Section A of the questions require the teacher to reflect on teacher’s background information. The answers for this section give feedback on teacher’s knowledge and teacher’s experience in teaching English Language subject. Section B of the questions focuses on the challenges faced by the teachers in achieving the LBI KPI. The questions in Section C discusses about the other challenges faced by the teachers in achieving the LINUS LBI KPI. Burnard’s method was adapted to categorize and code the transcribed interview data.

Results And Discussion

The findings of this study has indicated that the resources and facilities are unavailable in schools. This was in terms of module, activity books, teaching aids, and special facilities. Besides, lack of training and support was also identified. Through the individual interview, it was identified that attendance, cooperation, and pedagogical knowledge were also equally important and contributing factors in this case.

Does training and support contributes to the failure in the achievement of LBI KPI in Gerik national schools.

This section presents the findings with regards to the first research question (RQ1). In order to answer RQ1, data from the questionnaire were analyzed using frequency counts and percentage distribution. This questionnaire entitled “Resources and Facilities” was administered to all 80 participants based on four subsections. The answers are divided into 3 parts which answers the three subsections; (a) Module

and activity books, (b) Teaching aids facilities and (c) PPD Facilitators. For each subsection, five questions were provided for which Participants were asked to choose if they strongly disagree, disagree, not sure, agree and strongly agree.

Module and activity books

This section of questionnaire is all about modules and the activities books related to Linus LBI screening test. It is stated that 50 percent of the research participants strongly agreed that the Ministry of Education has provided their schools with Linus modules. These modules are crucial as they play a major role in facilitating the pupils' learning in order to achieve all the twelve constructs. On other the hand, it has to be noticed that 38 percent of research participants have strongly disagreed about other Linus modules, there are no other activity books are provided to the schools to help the pupils master the twelve constructs. Besides, number of LINUS modules provided to schools are not sufficient to encounter the number of pupils who did not master the constructs which leads to other problems in conducting the sessions. 54 percent of research participants agreed to this. Total of 21 research participants equivalent to 42 percent strongly disagreed that the content of LINUS modules is based on the twelve constructs. This causes problems to the teachers as they are required to find the content from the module that is suitable for the pupils as well as encompasses the twelve constructs that is intended to be taught to the pupils. The last question in this section is about the effectiveness of the LINUS modules and activity books in improving the pupils' language acquisition. 30 percent of the research participant strongly disagreed for this question.

Teaching aids and facilities

This segment discusses about the facilities and teaching aids that is being used for LINUS purpose. In total of 30 participants disagreed that the gadgets such as computers and printers are provided to the LINUS teachers to serve the purpose of printing sufficient materials to conduct the LINUS session. Corresponding to this question, 42 percent of the research participants strongly disagreed that there are no ICT facilities is being allocated to be used for LINUS session. It can be concluded that ICT is being used at the minimum level in schools. Yet through this questionnaire, it is found that there are still schools that are not well equipped in ICT aspect. Besides, different gadgets that allows the teachers to teach and engage the pupils into the lesson as well as retain the attention towards the lesson must be provided to all teachers especially LINUS teachers. Overusing a component or an aspect might lead to a boring environment as the pupils are being too exposed to it in daily basis. Hence, old-school teaching kits definitely has positive impact on the lesson. 52 percent of the research participants strongly disagree that they are provided with material and teaching aids to be used in LINUS sessions. In other question, 36 percent of research participants agreed that they are solely responsible in producing their own teaching kits for the LINUS sessions.

PPD Facilitator

This segment covers training and support given by the FaciLinus or also known as the PPD LINUS facilitators. Each and every school is assigned with their respective facilitators to administrate and guide the teachers with LINUS screening test. Before the screen test takes place, teachers will be called to attend a briefing session in PPD by the facilitators. On the other hand, 38 percent of the research participants disagreed that all the lower primary school teachers who are involved with LINUS LBI screen test are called to attend the briefing. The LINUS coordinators or the head of panel for English language are called for the briefing and later are required to conduct in house training.

Yet, 50 percent of the research participants consisting 25 of them agreed that the information given by the FaciLinus is clear and precise and its corresponding question about FaciLinus providing proper guidance throughout the LINUS LBI screen test is also agreed by 40 percent of the research participants. The guidance is provided the FaciLinus through their visit to the respective schools. However, the research participants have disagreed the FaciLinus does not accept the result when the

number of the pupils who did not achieve the KPI is higher than the targeted result. There are other factors as well involved in achieving the expected KPI result. The pupils' motivation, involvement, and attendance plays a major role in achieving the LBI KPI. This factors need to be understood by the FaciLinus. The research participants consisting of 40 percent strongly disagreed that the facilitators had provided them with sufficient help in order to plan a proper intervention. Most of the time, the teachers have to figure out and plan out the intervention on their own. Cole (2002) has agreed that training is more of a learning activity to acquire better skills and knowledge need to perform a task. Hence, proper guidance and support will allow the teachers to perform better which directly improves the result. This answers for the first research question, actually concludes that the lack of training and support has direct impact in the achievement of LINUS LBI KPI in the national schools in Gerik district. This answers for the first research question, actually concludes that the lack of training and support has direct impact in the achievement of LINUS LBI KPI in the national schools in Gerik district. Other contributing factors that has been challenge to the teachers were also identified through the teacher's invidual interview.

What are the challenges to the failure in the achievement of LBI KPI in Grade b national schools in Gerik district?

This segment of this research presents the findings regarding to the second research question. Burnard's method of analyzing is adapted to analyze the interview data. The number of research participants are 50 persons. They consist of 30 optionists and 20 non optionists. The research participants have teaching experiences from two years up to seventeen years. All the research participants are directly involved in administrating and conducting LINUS LBI screening test. The answers provided by the research participants are then divided into three different themes; a) Absenteeism b) Cooperation and c) Basic literacy skills

Absenteeism

During the teacher's individual interview session, most of the research participants stated that pupils' absenteeism plays a major role as on the challenges faced by the teacher in achieving the LINUS LBI KPI. Students that attend class regularly are more likely to remember well the information and apply the knowledge effectively throughout their life (Crede, Roch&Kieszczyńska, 2010) Pupils being absent too frequently leads him to be left behind in learning as he has a lot to catch up and eventually he gives up as he is not able comprehend the lesson being taught to him. The research participants stated that pupils' absenteeism caused a lot of problems to them. As they are not able to complete the screening test as well as the pupils are not able to understand the lesson as they have missed a lot of lessons. In order to overcome this problem, the research participants had taken a few measures yet there are no changes in the pupils' attitude. The absenteeism factor doesn't only affect the pupil itself but also the learning environment. Ratnawati and Ismail (2003) pointed out that as they found that negative attitudes lead to class anxiety, low cognitive achievement, and low motivation. The pupils tend to disrupt the class by showing disruptive behavior. They tend to perform silly stunts, disturb friends plus making noises whereby other pupils tend to follow as well. The teacher need to focus on the other pupils as well and teach them before he can personally coach the pupils who had been absent frequently. This also adds the burden to the teacher as he needs to facilitate and manage a lot of things at the same time. The LBI screening test is conducted for the whole class. While the rest of the class manages to complete and master all the twelve constructs, the pupils who are absent frequently fails. Hence, the LINUS LBI KPI is not achievable due to the failure of the pupils' absenteeism. This event links to LINUS coordinator called upon to the PPD to explain about the failure of the LBI achievement.

Cooperation

Cooperation is the second theme that was formed for the interview session. Cooperation mentioned here is about the cooperation among different parties to ensure the programme planned takes place successfully. From the responses given by the participants, it is known that the cooperation level among different parties are still low. The parties who are involved are school administration and parents.

Murphy (1980) and Duch (2005) note that parental involvement is especially significant for young children, children who are less accustomed to entering preschool institutions or primary school, and children in transition from one level to another. Cooperation given by the parents will help the school and the teachers to improve and ensure a programme can be conducted successfully. The first aspect is attendance of the parents to a school programme. A programme all schools have in common is Parent Teacher's Association meeting. The common issue is that the attendance of the parents is at unsatisfactory level. This Parent Teacher's Association meeting provides a platform for the teachers and parents discuss on improving the pupils' performance as well planning programmes where both parties can work on together to help their kids.

What Are The Other Contributing Factors To The Failure In The Achievement Of LBI KPI In Grade B National Schools In Temerloh District?

This interview was administered to all 80 participants. There were 54 optionists and 26 non-optionists. Most of the participants had at least five years of teaching experience. The rest of them were senior teachers who had ten to fifteen years of teaching English experience. They have been administering the LINUS LBI screening test for the past five years. Almost all of them answered and agreed that the LBI KPI is the most difficult to achieve as it was the second language of the pupils. Most of them were not familiar with the vocabulary used and the grammatical rules. The answers for the open ended questions were divided into three parts which answers the three themes; (a) Attendance (b) Cooperation, and (c) Pedagogical knowledge.

Attendance

Most of the participants were expressing that pupils' attendance had a great impact on the failure in the achievement of LBI KPI in grade B national schools in Temerloh district. This statement is derived from the teacher's interview responses. Wadesango, et al., (2011) states that, students who have absenteeism problems are at higher risk of poor performance. The participants have confessed that they faced a serious problem when it comes to pupils' attendance. Their attitude determines the achievement of the KPI. Even though a few measures were taken, there was not any changes in the pupils' attendance. Out of 36 schools, almost 15 schools had this problem

A lot of intervention programs especially to attract pupils' attention and make them interested in going to school was carried out. For example, giving out free food coupon, star badges, RM 1 per day, 30 minutes play-time and so on. The findings also support the findings of other researches that Malaysian students are more extrinsically motivated than intrinsically motivated (Ainol Madziah and Isarji 2009). Some schools had meetings with the parents, Parents Teachers Association members and representatives to come up with a solution for this problem. However, some pupils were still not interested in going to schools. Their negative attitude has a great impact on this issue. This was supported by Ratnawati and Ismail (2003), as they found that negative attitudes lead to class anxiety, low cognitive achievement, and low motivation. The Participants added that this issue was discussed in all levels, especially in school meetings, PPD meetings and LINUS meetings. Yet, there was not a definite solution that solved this problem. The blame was still on the teachers.

Pupils' attendance has a great impact on the achievement of LBI KPI. The consequences of poor attendance can be far reaching. Neill (1979) found that lack of school attendance could lead to permanent intellectual damage to students, as gaps in students' knowledge bases would be likely to arise. Even though the rest of the pupils achieve all the twelve constructs, the attendance problems of some

pupils could still result in the failure of LBI KPI achievement. This happened mostly in Year 2 and Year 3 classes. The pupils were needed to master all twelve constructs by the end of Year 3. The failure of the achievements resulted in headmasters of the schools being called to the PPD.

Cooperation

Parents too, should play active role in encouraging their children to do well in the language (Siti & Melor 2014). The parents' cooperation was beneficial and influential to the overall success of the school (Cotton 2001). This goal could further be achieved when the parents participates fully in their children's educational process by attending their children's school functions such as attending Parent Teacher's Association's (PTA) meetings. First, it was mentioned that some parents care less about the pupils' achievement. They believed that pupils' academic achievement relies solely on teachers. Even when the pupils fail to acquire the skills, the teachers were to be blamed. It was also revealed that, when the school authorities had meetings to clarify issues and find solutions to problems like attendance, academic achievement and moral issue, these parents sometimes, would not attend the meetings. Even when they attend, they do not care about the pupils' progress. Second cooperation scenario that happened with the parents was they do not accept the pupils' progress as it is. When the pupils' were asked to stay for intervention classes, the parents were in a great shock. Only then, they realized that their children's progress need to be improved. However, they went and blame the teachers for it. This happened in most of the schools. It was revealed that the parents' have some issues with their children attending the intervention classes when the other children do not have to. Parents role in monitoring the pupils' achievement as well their attendance and behaviour in school is crucial. Parents need to check on their kids' work often and guide them in learning at home. The common problem is the parents tend to think it is solely the teachers' responsibility to teach the kids and ensure they pass the examination with good grades. Some parents tend to blame the teachers when the kids do not perform well in the school. Ngeow (2006) point out that the involvement of parents affects the conduct and behaviour of children in school, their willingness to learn, and school attendance. Parents need to check on with the school and the class teachers about their kids' progress. The teachers are willing to help the parents as long the parents want to work with them to solve the problem. There are a few scenarios whereby the parents do not want to accept the fact that their kids need to be placed in the intervention class to help them better. They blamed the teachers and refuses to place their kids in intervention class. After explanation was given, the parents are willing to accept the decision. Hence, it is important for the parents to collaborate with school and check on their kids' progress. They need to help the kids at home as well to solve their problem.

Basic literacy skills

Another factor that can be considered as challenges in achieving the LBI KPI is basic literacy skills among the pupils which is low. Literacy is fundamental in pupil's education and has to be given importance. Research suggests that low academic achievement is closely linked to the lackof strong literacy skills, as students with poor literacy skills will struggle not only in school, but also throughout life (Clark & Burke, 2012; National Literacy Trust, 2012). Basic literacy skills will ensure he is able to survive in today's world whereby it is nearly impossible to survive without skills such communication and reading. LINUS LBI actually helps the pupils to know their weaknesses as it designed in such way they are able to help the pupils to master all the twelve constructs. These twelve constructs will help the pupils to build solid basic literacy skills. Yet, when the pupils have failed to master the twelve constructs and he moves on to level 2, it causes problem to him as he only possess very low basic literacy skills.

Implication

Malaysian Education system aimed to produce pupils who are developed holistically and acquire all skills to be globally competent. This is in line with the National Education Philosophy and the New Education Blueprint (2013-2025). In order to be globally competitive, one has to master all the skills. The mastery of skills begins as early as the pupils enter the preschool and it begins with mastery of literacy skills.

Numerous measures were taken by the Ministry to enable the pupils to master the literacy skills. One of them was the LINUS screening test especially LBI which related to shift 2 in NEB. However, there were so many factors and challenges that resulted in the failure of achievement of LBI KPI. This research identified the possible factors and challenges the teachers have faced in achieving the LBI KPI. This had made the teachers aware of the individual needs of the pupils. This will help them in identifying the learning style and the suitable material to be used with each pupil in order to acquire the construct.

Besides, this research has also identified two learner factors that contributed to this issue. They were pupils' attendance and pupils' involvement. These two elements have been the biggest challenge for the teachers in achieving the LBI KPI. This could help the pupils in understanding their role in achieving the KPI set by the Ministry. Even though the pupils involved with this screening test are only Year 1 to Year 3 kids, they should be given explanation on why it is important to master all the literacy skills and how it could be a helping hand for them in the future.

Through this research, the Ministry of Education will be aware of the factors and challenges faced by the teachers which contribute to the issue which will make ways for implementation of new plans and programs that ease teacher's work. It is expected for Ministry to equip teachers with the training, support, facilities and resources which help teachers to improve their teaching method so that it can help learners to acquire the basic literacy skill, especially English Language Literacy skills

This research gave a new look into this problem. The teachers were blamed for the failure in the achievement of the LBI KPI all this while. Yet, the real reasons were identified through this research. This research would be a great help in getting cooperation from the parents, pupils, school administration and the Ministry itself. Besides that, teachers were also in need of training and support. After 5 years of LBI implementation, one of the reasons for the failure in the achievement of LBI KPI was training and support. This was because there was lack of pedagogical knowledge among the non-optionists. Through this research, the Ministry could provide more training and support to these teachers in order to achieve the KPI set by the Ministry.

Recommendation

The findings of this study served as impetus for other researchers to further develop research on the teachers' perception on the failure in the achievement of LBI KPI. In addition, the results of the study shed some light on the direction of future research on the topic of literacy skills and LINUS screening test.

The following are some suggestions that researchers might want to consider for future research. First, this study can be further explored by identifying factors that makes KPI of Malay Language and Numerasi achievable. This could also be explored in terms of cooperation, facilities and support the teachers have been getting which enable them to achieve the LBI KPI.

Second, a multiple researches can be carried out to compare the outcomes of the findings. Future researchers can choose schools with homogeneous or different characteristics. This study only focused on national schools in Gerik district. Studies can be done by comparing different types of schools or schools from different districts and states.

Third, knowledge on pedagogy should allow teachers to manipulate all the teaching method for teaching and learning purposes. Therefore, it is also important to study the teachers' pedagogical knowledge in administering LINUS screening. Preparing in-training teachers for the real classroom is also crucial to meet the challenges of teaching English as non-optionists. In this way, the non-optionists will be equipped with the knowledge on how to overcome that raises in ESL classroom.

Finally, this study could also be expanded on areas of suggestions for improvisation of LINUS LBI screening test administration. This study has only focused on the challenges teachers were facing. Yet, the suggestion for improvisation was not explored. This could help the other teachers to know which method or approach to be used in tackling the challenges. Therefore, future researchers could look into this need.

Conclusion

This research was conducted to investigate teacher's perceptions on failure in achieving LBI KPI in national schools in Gerik District. The findings of the study indicated that lack of training and support contributed to the failure in the achievement of LBI KPI. Teachers too shared the other challenges they faced in achieving the LBI KPI.

All these factors and challenges have contributed to the failure in the achievement of LBI KPI. This can be seen from the questionnaire data and interview data. More resources and facilities together with training and support should be provided. Pupils' attendance, cooperation of the stakeholders and pedagogical knowledge had a higher influence on the issue. The time constraint challenge is crucial because teachers have to juggle between teaching and also administering screening test. In this 4th Industrial Revolution, soft skills are given importance. The basic of soft skills largely depends on the literacy skills. Hence, acquiring the literacy skills, especially English Language is compulsory. In order to achieve the LBI KPI, the factors and the challenges teachers face should be studies in detail. This benefits most of the stakeholders.

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THE IMPACT OF SERVICE QUALITY, CORPORATE IMAGE, PRICE ON CUSTOMER LOYALTY IN THE TAKAFUL INDUSTRY: THE MEDIATING ROLE OF CUSTOMER SATISFACTION

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Abstract: Nowadays, insurance is one of the important things to have in life. It will provide a guarantee to our financial security for ours ought to any unfortunate event happen. Therefore, it is necessary to the insurance provider to prove to their clients that they supply a quality service to their targeted customer. Hence, this study is conducted to examine the effect of service quality, corporate image, and price on customer satisfaction and customer loyalty in the takaful industry. This study also examines the mediating role customer satisfaction between service quality, corporate image, price and customer loyalty in the takaful industry. Questionnaires surveys have been conducted with a total of 101 questionnaires forms were collected back from the respondent through convenience sampling. Ten hypotheses were developed as research model with quantitative approach were used to interpret the data. The final result revealed that all variable are inconsistent with the hypotheses at the beginning among dependent variable and independent variable but the effect has been changed on customer loyalty due to customer satisfaction as a mediating role in the takaful industry.

Keywords: Service Quality, Corporate Image, Price, Customer Satisfaction, Customer Loyalty

Introduction

In the era of globalization today, competition is becoming increasingly fierce among various industrial sectors in Malaysia, particularly insurance institutions. The focus of this study is to provide the best way to takaful provider in order to maintain customer satisfaction and loyalty, which is to give a positive impact on the maximization of profit and wealth in an organization. For a long-term competition, every takaful provider should know the best marketing strategy in providing their services in order to meet customer satisfaction and preference. Nowadays, the takaful industry is full of dynamism with of customer demand variation. For example, service quality, corporate image, and price are a bet in every takaful industry to ensure their customer satisfaction and loyalty. Satisfaction refers to the feeling of happiness or inconvenience that comes to someone by comparing the perceptions of the outcome of a product or service that fulfils their expectations (Mansor, N. and C.H.C.M. Razali, 2010). Hence, satisfaction can be measured by how the product or service is provided by the company fulfil customer expectations. In other words, satisfaction is important to ensure that customers will repurchase takaful products after their first experience. This concept is known as a loyalty which means that particular customers will return or continue to use the same product or service from the same organization, make business referrals, and directly or indirectly offer strong word and mouth references and publicity (Bowen and Shoemaker, 1998). As a result, customer satisfaction and loyalty play a very important role for the takaful provider. Quality of service is one of the most frequently studied topics in service (Zeithaml, 2000). Quality of service represents the majority of the economy today, not only in developed countries but also developing countries around the world. The service quality results from customer comparisons about the expectation of their service competition with their perception of service meetings

(Parasuraman et al., 1993). To provide a quality of service is not the only option anymore. Customers are more demanding and they are the quality judges (Little and Little, 2009). This is demonstrated in many empirical research studies that have investigated the effect of service quality on income variables including customer satisfaction and customer loyalty over the last few decades.

Moreover, customer satisfaction also influences by the corporate image and price. Corporate image is about an asset which gives the opportunities to the organization to differentiate it aiming to maximize their market share, profit, engage a new client, gripping existing ones, neutralizing the competitor's actions, in particular, their success and survival in the market. (Sarstedt et al. 2012). Moreover, a perception of the customer when they satisfy and believe using the product or service, they tend to be loyal towards kind of product. For example, both studies Lovelock (1984), Andreassen and Lanseng (1997), and Andreassen and Lindestad, (1998) in their research state that corporate image is one of the customers buying behaviours in maintaining customer loyalty.

An affordable price is also an important factor that influences customer satisfaction. Perceptions of customers about values reflect the payback from the services on the sacrifice by paying the price. In addition, the marketer used price to provoke the market, either by directly attracting, make the purchase decision and retain clients or fighting against competitors (Boonlertvanich, 2009). Even though the discussion on customer satisfaction and customer loyalty on takaful has been done many years ago, the researcher has emphasized the influence of service quality to the satisfaction and the loyalty of customer in conventional insurance setting from a consumer perspective. Nevertheless, there are insufficient amount of research being conducted especially on the impact and roles of other factors like a corporate image, price in the Malaysian settings. Therefore, the main purpose and significance of this study are comprehensively to examine the effect of service quality, corporate image, price on customer satisfaction and customer loyalty; and to determine the mediating effect of customer satisfaction on the underlying relationship between service quality, corporate image, price, and customer loyalty in the takaful industry. The findings of this study is useful for takaful providers who want to understand more effective on their customer satisfaction and customer loyalty strategies by improving their services, corporate image and prices.

An Overview Takaful Industry in Malaysia

Takaful refers to a sharia-compliant insurance system through that members reciprocally contribute a sum of money, to support one another just in case of loss, injury, or thieving. Takaful in Malaysia has seen encouraging growth as the segment continues to cope with conventional insurance. According to Fitch's Report, 2017, families and general takaful grew by 7.5% and 5.0% respectively, in the first half of 2017, compared to 5.2% and -1.8% respectively in life and general insurance. It noted that Malaysia has 11 takaful operators, with eight of them holding composite license including Syarikat Takaful Malaysia Bhd, which is the only takaful operator listed on the Malaysia Stock Exchange Bursa Malaysia. In that report, takaful Malaysia continues to increasing ground from its conventional counterparts, with family takaful accounting for 30% of the overall life market based on new business premiums in 2017, up 28.8% at end 2016. This specifies that demand for takaful products remain increases every year, consequently there need to increase their quality of products, corporate image and price in order to maintain their customer loyalty.

Literature Review and Hypothesis Development

Customer Loyalty

Takaful providers often face competitive challenges in providing the best service. Therefore, maintaining customer loyalty is very difficult and challenging for any takaful company. However, when customers are satisfied with their products and services, they will tend to be loyal to the company. As a result, companies will grow in a sustainable way. The customer loyalty concept has been studied for decades in the business industry. Loyalty is a customer commitment with respect to certain brands,

stores, and service providers, when there have other alternatives that can be choose (Shankar et al., 2003). It forms a positive attitude by generating repeat purchase behavior from time to time and its shows that there have connections between customer loyalty and company profits. Zeithaml (2000), states that previous research saw customer loyalty as attitude or behavior and they continue to buy and use goods or services (Parasuraman et al., 1988; Zeithaml et al., 1996). Reicheld (2003) shows that the most obvious proof of customer loyalty is the percentage of customers who have high interest in recommending certain benefits or services to their peers. In additional, current customers have a sense of belonging to a particular product or service and commitment to certain types of services. In a similar vein, Baumann et al., (2005) and Day (1969) has introduced the concept of customer loyalty that covers the dimensions of behavior and attitude forty years ago.

Customer Satisfaction

It is important for takaful providers, and the insurance industry to provide the best services in order to maintain a good reputation and provide customer satisfaction. Consequently, customer satisfaction is clearly used as an intermediary variable that will affect takaful customers to the organization. Customer satisfaction is one of the most areas studied in insurance and takaful studies because its importance in determining the success and existence of an ongoing business (Gursoy et al., 2007). Conceptual customer satisfaction has been defined as a feeling of post-user experiencing on their purchases (Westbrook and Oliver, 1991; Um et al., 2006). Compared with the focus of cognitive perception, customer satisfaction is considered an effective response to the product or service (Yuan et al., 2005). Consumers are thought to be satisfied with the experience of a weighted experience that produces a sense of pleasure rather than expectations (Choi and Chu, 2001). In the Takaful industry, customers are willing to pay high premiums to buy the policy as they expect to get service facilities and get high coverage with a rather problematic process to claim due to accidental or any disaster based on their coverage. According to McQuitty, S., A. Finn and J.B. Wiley, (2000), Customer satisfaction is the result of estimating processes and connecting customer expectations before acquiring products or services during and after product execution or service usage experience.

The study by Oliver, R.L., (1980) reinforces the theory of positive customer satisfaction in which it can be translated into customer's attitude in the future whether directly or indirectly. Therefore, this suggestion will lead to the belief that when customers meet the services offered by services companies, they tend to buy other products offered by the same company, and they can also buy the same product for their family as they have a good experience with that companies. Moreover, when customers are satisfied with their company they will be marketing the viral without them knowing. Certain companies to gain better control over their market share (Westbrook, R.A. and M.D. Reilly, 1983). Reflection on customer satisfaction as an emotional response is usually demonstrated via experience provided by organizations that relate to the product or service. All of these experiences can be seen by assessing the feelings of users involved (C. Fornell, 1994 & Homburg, C. and A. Giering, 2001). Customer satisfaction is when products or services benefit to them and the product is not only promising the best when it comes to serving customers but different as what the company guarantees. If the services provided by the companies cannot be matched with the promise given, it is unlikely that the product or service to be accessed or accessed will be among the client's intentions in future dealings. Customer satisfaction is also available if they can motivate future intentions or refuse to accept certain products or services (Swan, J.E. and I.F. Trawick, 1981). Receiving a lot of detailed information about customer satisfaction related to emotional reactions will continue to assist.

Service Quality

Since Parasuraman et al. (1988) began using SERVQUAL with 22 scale items to measure service quality; this model is often used throughout the industry. Gowan et al. (2001), Straughan and Cooper (2002) and Zhao et al. (2002) uses the SERVQUAL model as a measure to estimate the quality of service

provided by the service provider. However, there are many studies on the use of SERVQUAL to measure the quality of services because of the industry's characteristics have differences. The quality of the service as defined by Ducker (1991) as an outgoing customer and ready to pay for what a supplier puts. Zeithaml et al. (1996) have determined the quality of service as a whole customer's impact on vigilance or service sovereignty.

Service Quality, Customer Satisfaction and Customer Loyalty Relationship

Previous studies have found that customer satisfaction plays a role in mediation in the quality of service and customer loyalty relationships. Akbar & Parvez (2009), in their research on telecommunications' industry in Bangladesh has revealed that customer satisfaction is an important intermediary between the quality of service and customer loyalty. Kheng et al. (2010) in their study of 238 bank customers in Malaysia found that satisfaction had affected the quality of service relations and loyalty in the banking industry. Chen and Lee (2008) in his research on 261 non-ship owners and carriers in Taiwan International Logistics Provider industry found that customer satisfaction had a positive impact on the quality of service and customer loyalty relationships. Olorunniwo et al. (2006) in their studies in the hotel industry in the United States found that there have significant on customer satisfaction between service quality and customer loyalty in the hotel industry in the United States.

H1: There is a statistically relationship between Service Quality and customer satisfaction

H5: There is a statistically relationship between Service Quality and customer loyalty

H8: Customer Satisfaction mediates the relationship between service quality and customer loyalty.

Customer Satisfaction and Customer Loyalty Relationship

It is interesting to understand the relationship between customer satisfaction and customer loyalty. Both of these concepts have an important part of success in any business. The concept of customer satisfaction is an important feature to consider when a company seeks to increase customer loyalty and better business performance. According to Dick and Basu (1994), the role of customer satisfaction in loyalty indicates that satisfaction is the key determinant of loyalty. Thus, there is a significant on customer satisfaction and customer loyalty. Both of these concepts must be combined to achieve the desired goal of the company. Satisfaction is a measure of good commitment and repeats purchase behaviour (Woodcock et al., 2003). Customer satisfaction marks customer's feelings when the product or service meets customer expectations. When a product or service element plays a customer's view, the customer is completely abandoned otherwise, the customer is dissatisfied. Unhappy customers can frustrate from trying out a company's products or services. Negative mouth words by customers who are dissatisfied with the company's products or services have damaging effects on the company's image. Chen and Wang (2009) show that satisfied customers are more likely to buy back, reduce their price sensitivity, engage in positive mouths, propose and become loyal customers.

H4: There is a statistically relationship between service quality and customer loyalty

Corporate Image

Corporate images are another important factor in the inclusive quality evaluation of services. Corporate images are defined as organizational perceptions held by customers in their mind. (Young-Ei Kim and Jung-Wan Lee, 2010). Because it functions as a screen the entire company's operations which is perceived value, corporate images replicate the company's reputation and overall status. Aydin and Ozer (2005) state that corporate images occur from the customer's net purchase experience, hence the perception of service quality affects a corporate image. Brown and Dacin (1997) claim that corporate image arises from the perceptions of potential customers and social responsibilities. This corporate

image impacts customers on the quality of service, satisfaction, and loyalty (Andreassen and Lindestad, 1998; Zins, 2001).

Corporate Image, Customer Satisfaction and Customer Loyalty Relationship

Corporate image affects customer ratings on service quality, satisfaction, and loyalty (Kim & Lee, 2010). Reviews by Hanzaee and Farsan (2012) on the impact of brand image and public relations on customer loyalty indicate that public relations are seen to have a positive relationship with customer loyalty and simplified by brand image. Sirapracha and Tocquer (2012) studies of customer experience, brand image, and customer loyalty in telecom services show a significant relationship between on customer experience, brand image, and customer loyalty.

H2: There is a statistically relationship between corporate image and customer satisfaction

H6: There is a statistically relationship between corporate image and customer loyalty

H9: Customer satisfaction mediates the relationship between corporate image and customer loyalty

Price

Margee, H., et al. (2008) suggests that the value or reasonable price is the determinant of customer satisfaction. It is similar to the findings of Rai, K.A., Medha, S. (2013) which represents a strong value of customer satisfaction forecast. On the other hand, the results shown by Dodds and Monroe (1991) suggest that customer value perceptions illustrate the dispute between the benefits derived from the product or service relative to the sacrifice they consider paying the price.

Price, Customer Satisfaction and Customer Loyalty Relationship

Prices play an important factor in determining customer satisfaction and customer loyalty. Singh and Sirdeshmukh (2000) state that price has significant relationship strong impact on consumer satisfaction. In addition, Han and Ryu (2009) also found a significant price influence on customer satisfaction in the restaurant industry. Similar with Jiang and Rosenbloom (2005) also indicate price perceptions have a positive impact on the satisfaction and intentions of consumer behavior. Therefore, when consumers see price fairness from the company, it helps to generate a positive image of companies that bring customer satisfaction and loyalty (Yieh, Chiao, & Chiu, 2007). Both Varki & Colgate (2001) in their studies state that a price is a key to a component that has a significant positive impact on consumer loyalty and customer satisfaction. Hence customer loyalty will help companies to generate high profits from consumers through their products as a result of consistent of customer behaviour to buy from time to time (Jacoby, 1975; Rauyrueen & Miller, 2007). Based on the above literature, it can be resolved that customer loyalty and customer satisfaction are important to all business providers. The literature also revealed that product quality, corporate image and price are important to the customer to make a choice. Unfortunately, there are many studies on conventional insurance area, therefore this studies extends the previous studies by conducting a similar study in the takaful industry.

H3 : There is a statistically relationship between price and customer satisfaction

H7 : There is a statistically relationship between price and customer loyalty

H10 : Customer Satisfaction mediates the relationship between price and customer loyalty

Methodology

This research was explanatory research, with the aim of analyzing the causal relationships among variables of service quality, corporate image, price, customer satisfaction and customer loyalty. This study relied on the above discussion to postulate a theoretical framework model for hypotheses that would lead to answering the study objective. This model is adapted from previous research and has been modified for this study.

Data Collection and Sample

A survey instrument was developed by extensively reviewing works of literature in order to identify scales adopted in the previous studies which are having strong reliabilities and validity (Cronbach Alpha all above 0.7). The preliminary draft of the survey questionnaire was tested by reviewing with takaful buyers and academicians where they were asked to provide comments and suggestions to improve the survey clarity and precision. The reliability of the measures was assessed using the inter-item consistency measure Cronbach's

alpha. If the coefficient is 0.70 or above, the scale used is considered to be reliable (Bektaş and Akaman, 2013). When Table 1 was examined, it is seen that Cronbach α value is over 0.70 for all variables. This indicates that respondents stated participation levels for the proposals in the questionnaire are consistent. Therefore, no item was deleted. The variable with higher standard deviation is Service Quality (SQuality) (3.17) followed by Price (P), Customer Loyalty (CLoyalty), Customer satisfaction (CSatisfaction) and finally, corporate image (2.44). The differences in standard deviation figure for all variables are small which signify that respondents are consistently in their evaluation. Research instrument of this research study consists of three sections. For Section A, the survey was developed using the nominal scale and interval scale to gather respondents' general information. Section B and C the questionnaire used an interval scale to draw the respondent's general opinion. Items for variables include customer service, corporate image, price, customer satisfaction and customer loyalty are measured using five-point Likert scale ranging from 1 to 5, which 1 indicates Strongly Disagree and 5 indicates Strongly Agree. A pilot study was conducted and assessed. The result was evaluated to make sure there was no bias in the feedback obtained. Links to survey websites are distributed to 110 respondents through online google form and 101 were a response. This made up the response rate of 91.82% that is sufficient for Structural equation modelling (SEM).

Table 1. Reliability Coefficient, Mean and Standard Deviation (SD) for the major variables

Construct Name	No. of Items	Cronbach's Alpha (α)	Mean	Std. Deviation (SD)
SQuality	6	0.802	22.22	3.17
CImage	4	0.726	13.99	2.44
Price	5	0.817	17.61	3.14
CSatisfaction	4	0.938	15.04	2.61
CLoyalty	4	0.870	14.83	2.80

Data Analysis Technique

The analysis procedure will be basically carried out in parallel with the types of data collected as well as the objectives of the study. Since the questionnaire will be used as the instrument in data collection, the type of questions used in this questionnaire will be set to be in line with the statistical methods that will be adopted. It is noted that the present study will make use of SPSS 20.0 (Statistical Package for Social Sciences). For the first analysis, the data

were analyzed by a multiple regression statistics and SEM. All measurement items were standardized and missing values were substituted by sample means to test validity, reliability and statistical power. Second, to assess direct and indirect (mediated) relationships among the studied variables, the researchers have performed bootstrapping technique by using PROCESS by Hayes (2018). This analysis is supposed to help us to understand which model fits the data best while presenting a credible assessment of the relationship between dependent variables and independent variables.

Result And Findings

Demographic Profile

The result of the current study shows that the number of female respondents is slightly higher, that is 66 (65.3%) than a male with a number of 35 (34.7%), both 52.5% of respondents are within age bracket 31-40 and 41-50 years. Most of the respondents are well educated, with 1% having a degree of philosophy (PhD), postgraduate studies 39.6%, university degree, 43.6%, undergraduate (diploma) 11.9%, and 4% secondary school. The totals of 71.30% of respondent are working in the government sector, about 21.8 % were working in the private sector, and 5% of them are self-employed and 2% within the category of others. In terms of monthly income, 55.4% of them had an earned income between RM1001 to RM5000, followed by 22 with an earned income between RM5001 to RM9000, about 19.8% with an earned income of RM9000 and above and 3% had an earned income less than RM1000 respectively.

Multiple Regression Analysis

According to Table 2, the R-value = 0.797, R Square = 0.634 and Adjusted R Square = 0.623. R Square shows that 63.4 percent of the customer satisfaction can be explained by service quality, corporate image and price. However, there is 36.6 per cent of the variation in customer satisfaction is explained by other factors. The analysis highlighting the relationship between corporate image, price, and customer satisfaction is statistically significant. Therefore, the researcher can conclude that even though the relation is literally strong but corporate image and price will still affect customer loyalty towards the takaful industry.

Table 2: Result for regression analysis on service quality, corporate image, price to customer satisfaction

β	Unstandardized Coefficient		t	Sig.
		Std. Error		
(Constant)	.534	.290	1.839	.069
SQuality	.049	.108	.454	.651
CImage	.345	.103	3.364	.001
Price	.522	.095	5.495	.000
R = 0.797 R ² = 0.634 Adjusted R ² = 0.623 F value =56.116 Sig F=0.000				

While at the same time revealing that, corporate image and price is most significant variable that contributes to the customer satisfaction and demonstrate that hypotheses H2 and H3 are accurate. However, this shows that service quality is not significant individually in regards to the customer satisfaction. This was concluded as the p-value of customer satisfaction variable was calculated to be more 0.1 of the significant level, whereas the p-value of service quality variable was about 0.651.

Furthermore, significant testing for customer satisfaction and customer loyalty has been done (Table 3). The result indicated that 73.5 per cent variation in customer satisfaction has been explained by customer loyalty and both are significantly and positively correlated and H4 are accepted.

	Unstandardized Coefficient		t	Sig.
	β	Std. Error		
(Constant)	0.745	0.279	2.671	0.009
CSatisfaction	0.788	0.073	10.773	0.000
R= 0.735 R ² = 0.540 Adjusted R ² = 0.535 F value =116.052 Sig F=0.000				

Table 3: Result for regression analysis on customer satisfaction to customer loyalty

Looking at Table 4, tested among service quality, corporate image, and price on customer loyalty it revealed that, $R^2 = 0.593$, which suggest that contribution is substantial (Cohen, 1998). The analysis also highlighting the relationships between triple independent variable on customer loyalty in the takaful industry and it shows that service quality and corporate image are statistically significant, therefore there is support hypotheses H5 and H6. Unfortunately hypotheses H4 not support since price is insignificant on customer loyalty.

Table 4: Result for Regression analysis for service quality, corporate image and price to customer loyalty

	Unstandardized Coefficient			
	β	Std. Error	t	Sig.
(Constant)	0.83	0.329	0.251	0.802
SQuality	0.286	0.108	3.450	0.001
CImage	0.361	0.116	3.107	0.002
Price	0.371	0.123	2.329	0.022
R= 0.735 R ² = 0.540 Adjusted R ² = 0.535 F value =116.052 Sig F=0.000				

Mediating Testing Analysis

Then, further analysis was presented with customer satisfaction plays a mediating role between service quality, corporate image and price to customer loyalty. These models were made based on Baron and Kenny (1986) four steps technique to assess the mediating effects. the mediation effect significance was measured by using Process version 3.2 by Hayes (2018).

Customer Satisfaction mediates the relationship between service quality and customer loyalty

In the Table 5, it is shown that all the path (a,b,c and c') fulfills the requirements of mediation. The findings revealed that service quality is completely and significantly related with customer satisfaction (path a) with $b = 0.7165$, $t = 7.1106$, $p < 0.05$, which shows path a is significant. In the same way, customer satisfaction is positively and significantly intersected with customer loyalty (path b) at value coefficient = 0.5835, $t = 7.0230$, $p < 0.05$, which shows that it also significant. Actual figures are notably absent from service quality and customer loyalty (path c) at value coefficient is 0.8514, $t = 8.3786$, and $p < 0.05$, at the same time, path c', also denote value of coefficient = 0.4333, $t = 4.2322$ and $p < 0.05$. These findings indicate that customer satisfaction is absolutely and significantly mediate the relationship of service quality and customer loyalty.

Table 5: Path Analysis H8

Paths	Coefficients	SE	t	p
Path a	0.7165	0.1008	7.1106	0.0000
Path b	0.5835	0.0831	7.0230	0.0000
Path c	0.8514	0.1016	8.3786	0.0000
Path c'	0.4333	0.1024	4.2322	0.0001

Notes: $p < .05$; All presented effects

are unstandardized; a is effect of service quality on customer satisfaction; b is effect of customer satisfaction on customer loyalty; c is direct effect of service quality on customer loyalty and c' is total effect of service quality on customer loyalty.

For the verification of mediating role of customer satisfaction using Sobel Test are calculated as:

$$z = \frac{ab}{\sqrt{(b^2 SE_a^2) + (a^2 SE_b^2)}}$$

Where a is the regression coefficient for the relationship between the independent variable and the mediator, b is the regression coefficient for the relationship between the mediator and the dependent variable, SEa is the standard error of the relationship between the independent variable and the mediator, and SEb is the standard error of the relationship between the mediator variable and the dependent variable. Based on the calculation above, customer satisfaction is significantly mediate the relationship of service quality and customer loyalty with $z = 4.9954$ and $p < 0.05$ which support the hypotheses H8 which was formulated as "Customer Satisfaction mediates the relationship between service quality and customer loyalty".

Customer Satisfaction mediates the relationship between corporate image and customer loyalty

The mediation test reveals that the H9 as shown in Table 6 also indicate that customer satisfaction can mediate that the relationship between corporate image and customer loyalty indirectly as depicted in the analysis by value of coefficient = 0.4128, $t = 4.0133$ and $p < 0.05$ indicating that H9 is accepted. These analysis proved by Sobel test, where the value of z is 4.6913 and $p < 0.05$ which support the hypotheses H9.

Table 6: Path Analysis H9

Paths	Coefficients	SE	t	p
Path a	0.7548	0.0754	10.0054	0.0000
Path b	0.5130	0.0966	5.3095	0.0000
Path c	0.8000	0.0819	9.7703	0.0000
Path c'	0.4128	0.1029	4.0133	0.0001

Notes: $p < .05$; All presented effects are unstandardized; a is effect of corporate image on customer satisfaction; b is effect of customer satisfaction on customer loyalty; c is direct effect of corporate on customer loyalty and c' is total effect of corporate image on customer loyalty.

Customer Satisfaction mediates the relationship between price and customer loyalty

The relationship between price and customer loyalty was mediated by customer satisfaction showed that all the path (a,b,c,c') full fill all the condition of partial mediation. Based on Table 7, the value of coefficient between price and customer (path a) satisfaction was significant as 0.7883 and $p < 0.05$. Likewise, customer satisfaction also significantly link up with customer loyalty (path b) at coefficient value 0.5224 and $p < 0.05$. For the path c and c' also shown significant where coefficient value each of them is 0.7755 and 0.3637 and $p < 0.05$, meanwhile Sobel test also appear $z = 4.492$ and $p < 0.05$, overall the findings revealed that customer satisfaction is absolutely mediating the relation of price and customer loyalty which support the hypotheses H10.

Table 7: Path Analysis H10

Paths	Coefficients	SE	t	p
Path a	0.7883	0.0680	11.5890	0.0000
Path b	0.5224	0.1072	4.8740	0.0000
Path c	0.7755	0.0804	9.6403	0.0000
Path c'	0.3637	0.1114	3.2662	0.0015

Notes: $p < .05$; All presented effects are unstandardized; a is effect of price on customer satisfaction; b is effect of customer satisfaction on customer loyalty; c is direct effect of price on customer loyalty and c' is total effect of price on customer loyalty.

Discussion & Conclusion

Relationship between Service Quality, Corporate Image, Price and Customer Satisfaction

The results show that corporate image and price has p-value 0.001 and 0.000 (less than $\alpha = 0.05$) and coefficient 0.345 and 0.522, which is signified that there is a positive and significant direct effect on customer satisfaction in takaful industry. It is because of the effect of the price and corporate image on customer satisfaction that made the customer willing to pay more and favour to that particular takaful provider. However, it is surprising that service quality has an insignificant direct effect on customer satisfaction which contrasting with the previous research. It is interesting to note that service quality has no influence on customer satisfaction in the takaful industry. This variation may be due to customer's indifference and ignorance to the product of takaful as it does not affect them directly.

Relationship between Customer Satisfaction and Customer Loyalty

Customer satisfaction affects customer loyalty. It can be explained by the analysis that has a positive relationship with p-value of 0.000 (less than $\alpha = 0.05$) and the coefficient value of 0.788. It shows that customer who feel satisfaction intend to repeat and continue purchasing the takaful product and most likely will recommend to others. The result of this study is in line with previous study conducted by Ashraf, Ilyas, Imtiaz, & Ahmad, (2018).

Relationship between Service Quality, Corporate Image, Price and Customer Loyalty

The findings of this study provide us with an understanding of the key drivers of customer loyalty. From the analysis service quality and corporate image is a statistically significant and positive relationship on customer loyalty and we can say that good service quality and corporate image not only help the takaful provider to attract customers but will also exercise a positive influence on the customer loyalty towards their organizations. On the contrary, price showed the insignificant impact on customer loyalty in the takaful industry. This is surprising since the price was enjoyed the most satisfaction by the product of

takaful. Therefore the takaful providers should aware with the varied customer and believe that satisfaction is essential but not a sufficient condition of loyalty in the takaful industry.

The Mediating Effect of Customer Satisfaction on the Underlying Relationship between Service Quality, Corporate Image, Price, and Customer Loyalty

This study was continuing to examine the role customer satisfaction between service quality, corporate image, price and customer loyalty. The result shows that and customer satisfaction as a role of mediating. Based on the result, all the hypotheses are accepted, therefore, takaful provider should focus on enhancing service quality, corporate image, and price in order to satisfy customers and maintaining customer loyalty thereby helping them to gain more profit to their institutions.

This study also has limitations. In terms of methodology, this study uses the questionnaire as measurements tools for the sake of efficient time and resources. However, a respondent has its own limitation such as bias in answering the questions. There is possibility didn't answer the questions truthfully or they only give their answer based on the expected ideal condition (not the real one). It may cause the measurement used don'ts represent the variable in real settings. To overcome these limitations, future research should be conducted with expanded other variables that affect customer loyalty in the takaful industry.

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THE MODERATING ROLE OF TECHNOLOGY AWARENESS IN THE BEHAVIOURAL INTENTION TO USE ACCOUNTING SOFTWARE: A PILOT STUDY

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Abstract: *The literature suggested that accounting graduates need to place greater emphasis on both professional and generic skills to prepare them for employment. The employers, however, felt that graduates' ability to use IT, such as accounting software applications, is still inadequate. As a result, higher institutions are moving towards preparing their students with such skill to meet the employers' expectations. Nonetheless, the state to which the students are ready to fulfil this expectation, especially in regards to their ability to use accounting software, is still unknown. Studies have shown that the intention to penetrate the technology is higher when people are aware of it. The present study, therefore, aims to examine the moderating role of technology awareness in the students' behavioural intention to use the accounting software. The research model of this study was developed based on the technology acceptance model (TAM) and theory of planned behaviour (TPB). Technology awareness, defined as a user's raised self-consciousness of and interest in knowing about the technology, was hypothesised to moderate the relationship between perceived usefulness, ease of use, attitude, subjective norms, perceived behavioural control, and behavioural intention to use. Data were gathered via survey questionnaires established using instruments from prior studies to adequately reflect the underlying theoretical factors identified. The questionnaires went through pretesting and pilot testing before the actual distribution took place. In this paper, we present the initial finding of the pilot study from the surveys distributed to 32 accounting students at Universiti Utara Malaysia (UUM). The results of the Cronbach alpha coefficient values suggested that all constructs had good internal consistency.*

Keywords: *Technology Awareness, Accounting Software, Undergraduate, Accounting Students.*

Introduction

A report published by The Association of Chartered Certified Accountants (2016) with regards to the accountant professional skills revealed that many professional accountants lack of technology and non-technology skills that relate to their daily tasks. Accordingly, higher education institutions have seen that a strong emphasis should be placed in preparing their students with various technical and soft skills for them to be ready in the job market upon graduation. Among others, the application of the accounting software for accounting students. Such skill is considered to be a pre-requisite for being an accountant at a junior level (Amirul, Mail, Bakar, & Ripain, 2017). Sithole (2015) argued that although students are well trained in word-processing and communications software skills, the employers expect the accounting graduates to have the ability to use accounting packages.

Given that the higher institutions are now moving forward to prepare their students with such skills, the state to which the students are ready to fulfil the employers' expectation in regards to their ability to use the accounting software is still unknown. In this context, students should be exposed to various applications in accounting either in financial accounting, management accounting, auditing, taxation, and financial reporting which will lead to their intention to use the applications in the future. Prior studies have shown that the intention to penetrate the technology is higher when people are aware of it (Ilesanmi, 2012). The present study, therefore, attempts to fill the gap by examining the moderating role of technology awareness in the students' behavioural intention to use the accounting software. Specifically, this study presents the preliminary results of pilot survey.

This paper is structured into six sections. Following this section, the literature review is presented. The third section describes the research model and hypotheses, followed by the methodology used in section four. Section five explains the results of pilot survey while the last section concludes the paper.

Literature Review

Many studies have examined the need for academics to continuously enhance the academic performance and the level of the graduates' skills (Borges, Santos, & Leal, 2014). Jackling and De-Lange (2009), for instance, stated that graduates need to place greater emphasis on professional skills (including IT skills) and generic skills (e.g., communication skills) in preparing them for employment in accounting. On top of the generic skills, the other area that practitioners felt inadequate was their ability to apply accounting software applications (Chen, 2013). Machera and Machera (2017), in their study of computerised accounting software at Botho University Gaborone Campus, Maun and Francistown, found that majority of the accounting students who were on the internship period, faced accounting software challenges. Amirul et al. (2017) discovered that knowledge and skills in accounting software, accounting system, database concept and analysis, project management, and business process were essential for the accounting graduates.

As accounting has moved from the paper ledgers of departmental accountants to high-speed computers (Lee, 1997), the accountant's job seems to be more challenging. Traditionally considered as a score-keeper and a corporate cop (Siegel, 2000), they are now being regarded as a professional with a strong sense of leadership, transparent, and ability to deal with people (Jones & Abraham, 2009). Employers are now seeking varied skills and attributes in new accounting graduates (Wells, Gebrie, Kranenburg, & Bygrave, 2009). For instance, employers expect that new accounting graduates would be capable to use financial spreadsheets, word processing, presentation, audit, tax preparation, database management systems, accounting, and communication software at the expert level (Chen, Damtew, Banatte, & Mapp, 2010).

Various studies examining behavioural intention to use technology have employed technology acceptance model (TAM) (e.g., Tarhini, Hassouna, Abbasi, & Orozco, 2015) and theory of planned behaviour (TPB) (e.g., Wang, Fan, Zhao, Yang, & Fu, 2016). Some studies found inconsistent findings on the relationship between the tested constructs and the behavioural intention, hence, the test of moderation effect is suggested (AbuBakar & Ahmad, 2013).

Understanding the role of technology awareness in the decision to accept or reject the technology usage is important (Dinev & Hu, 2007). A study by Yaqub et al. (2013), for instance, believed that the reason for slow adoption of e-payment in Nigeria is due to lack of awareness on the system's advantages. As far as the authors are concern, studies on examining the relationship between technology awareness and behavioural intention, especially in the Malaysia context, is scant (Abubakar & Ahmad, 2013). This study, therefore, addresses the gap by examining the moderating effect of technology awareness on the behavioural intention to use the technology. Specifically, the present study investigates the role of technology awareness in moderating the relationship between perceived usefulness, ease of use, attitude, subjective norms, perceived behavioural control, and student's behavioural intention to use accounting

software. The result of this study could shed light on understanding an individual behavioural intention to use the technology.

Research Model and Hypotheses

The model of this study is developed based on the TAM and TPB. Aboelmaged and Gebba (2013) suggested that the use of both TAM (see, for example, Davis, 1989; Davis, Bagozzi, & Warshaw, 1989; Venkatesh & Davis, 2000; Venkatesh, Morris, Davis, & Davis, 2003) and TPB by Ajzen (1988, 2002) could provide a strong empirical support to understand the technology adoption. The research model of the study is illustrated in Figure 1.

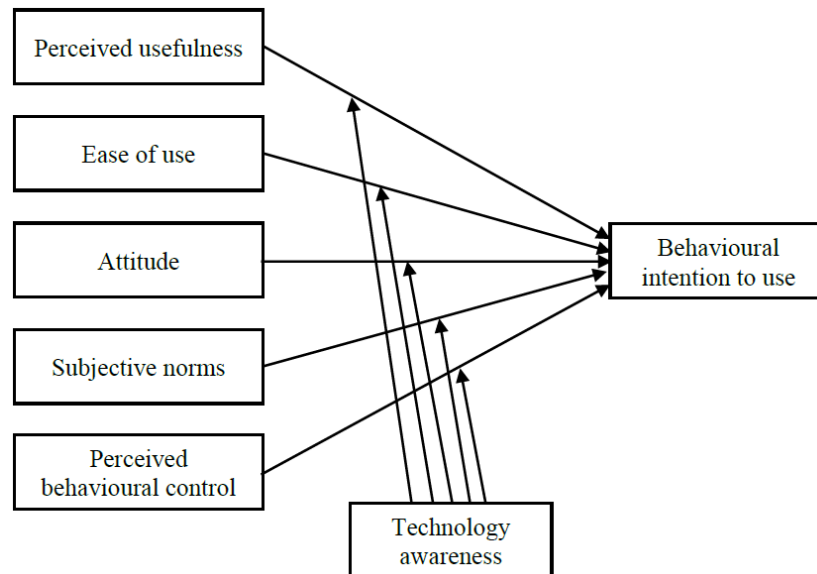


Figure 1: Research Model

This study focuses on the behavioural intention instead of the actual use of the system. Ajzen and Fishbein (1980) argued that attitudes towards an object will influence the intentions; intentions will subsequently influence behaviour towards its use.

Perceived Usefulness

Perceived usefulness refers to the degree to which a user believes that using the technology would enhance his/her work performance (Davis et al., 1989). Previous studies (see, for example, Sriwidharmanely & Syafrudin, 2012) found perceived usefulness as one of the main determinants in understanding people behavioural intention in using new technology. People tend to use the technology if they believe it will help them perform their job better. Therefore, the following hypothesis is proposed:

- H1 : Perceived usefulness is positively associated with the student's behavioural intention to use accounting software.

Ease of Use

Similar to perceived usefulness, the role of perceived ease of use in understanding people intention to reject or accept technology is also important in the TAM model. Davis et al. (1989) defined ease of use as the extent to which the user believes that usage will be effortless. In this context, the easier the technology that the user perceives, the greater the user's intention to use the technology. Hence, this study postulates that:

- H2 : Ease of use is positively associated with the student's behavioural intention to use accounting software.

Attitude

Venkatesh, Morris, and Ackerman (2000) asserted that the attitude of an individual towards using a technology reflects instrumentality and extrinsic motivation to use the technology. Attitude refers to a person's judgment about whether it is good or bad to perform a behaviour of interest. A positive attitude would lead to positive intention towards performing such behaviour. In this context, this study proposes the following hypothesis:

- H3 : Attitude is positively associated with the students' behavioural intention to use accounting software.

Subjective Norms

Subjective norms refers to the perception of an individual of the people that she/he thinks important would approve or disapprove a certain behaviour. The influence of subjective norms on forming intention has been cited in many previous studies (see, for example, Tarhini, Hone, Liu, & Tarhini, 2017; To & Margaret, 2018). The studies suggested that favourable subjective norms could lead to greater behavioural intention towards using the technology. The following hypothesis is then proposed:

- H4 : Subjective norms is positively associated with the students' behavioural intention to use accounting software.

Perceived Behavioural Control

Similar to attitude and subjective norms, the TPB also considers perceived behavioural control to have an effect towards intention. Perceived behavioural control is defined as the extent to which the individual believes that he or she has control over personal or external factors that may facilitate or limit behavioural performance (Ajzen, 1991). In this regards, perceived behavioural control forms a behavioural intention, which depends on an individual perception of his/her ability (e.g., skills) to perform a specific behaviour towards using the technology. It is, therefore, proposed that:

- H5 : Perceived behavioural control is positively associated with the students' behavioural intention to use accounting software.

Technology Awareness as a Moderator

Technology awareness refers to a user's raised self-consciousness of and interest in knowing about accounting software (Khalil & Nasrallah, 2014). Previous study (see, for example, Dinev & Hu, 2017) found a strong relationship between technology awareness and behavioural intention towards the use of the protective information technologies. In this context, it can be posited that an individual who has a general knowledge (i.e., aware) about the features and benefits of such technology would incline towards adopting the technology. Therefore, technology awareness is examined as a moderating variable to understand the relationship between the perceived usefulness, ease of use, attitude, subjective norms, and perceived behavioural control towards the student's behavioural intention to use accounting software. Thus, the following hypothesis is postulated:

- H6a - e : Technology awareness moderates all relationships among variables in the research model and the students' behavioural intention to use accounting software.

Methodology

Data were collected through survey questionnaires of undergraduate accounting students at the Universiti Utara Malaysia (UUM). All students of the third semester and above were selected as key informants. In their first year of study, these students completed two basic accounting courses, namely, Accounting Foundation and Accounting Information Systems (AIS). Therefore, they are expected to have a fundamental knowledge of accounting and AIS, and accurately understand and answer the survey questions.

The questionnaire was developed by consolidating established instruments from prior related studies to adequately reflect the underlying theoretical factors identified. For each variable, a Likert-type scale of seven points ranging from 1 (strongly disagree) to 7 (strongly agree) was used. Seven lecturers from the AIS Unit, UUM have tested the questionnaire. On the basis of their comments, minor amendments were made to clarify the wordings.

Results of Pilot Study

Data were analysed using the IBM Statistical Package for the Social Sciences (Version 23). Pilot testing was conducted with 32 accounting students on 8 April 2018 (see Table 1 for the demographic profiles of the respondents). Majority of the respondents were female (78.12%) and Malay (87.50%). More than half were 21 years old and below (56.25%). Seventeen of them (53.12%) were from the Bachelor of Accounting (B.Acct.)(Hons) while fifteen (46.88%) were from the Bachelor of Accounting (Information Systems) [(B.Acct.)(IS)(Hons)]. The means and standard deviations of each item of the constructs are presented in Table 2.

Table 1: Undergraduate Students' Background

		No.	%			No.	%
Gender	Male	7	21.88	Race	Malay	28	87.50
	Female	25	78.12		Chinese	1	3.13
	Total	32	100		Indian	1	3.13
Age	Below 22	18	56.25		Others	2	6.24
	22 – 23	12	37.51		Total	32	100
	Above 23	1	3.12	Programme	B.Acct.	17	53.12
	Not specified	1	3.12		B.Acct.(IS)	15	46.88
	Total	32	100		Total	32	100

Table 2: Mean and Standard Deviation

Construct	Item	N	Mean	SD	Construct	Item	N	Mean	SD
PU	PU1	32	5.94	1.014	SN	SN1	32	5.16	1.322
	PU2	32	5.97	.861		SN2	32	5.25	1.107
	PU3	31	5.90	.700		SN3	32	5.03	1.121
	PU4	32	6.03	.897		SN4	32	5.38	1.185
	PU5	32	5.97	.933		SN5	32	5.31	1.281
	PU6	32	5.97	1.031		SN6	32	5.72	1.085
EOU	EOU1	32	5.44	.982	PBC	SN7	32	5.53	1.135
	EOU2	32	5.50	1.016		PBC1	32	4.81	1.256
	EOU3	32	5.47	.950		PBC2	32	4.66	1.578
	EOU4	32	5.44	.948		PBC3	32	4.34	1.473
	EOU5	32	5.63	.942		PBC4	32	5.62	1.070
	EOU6	32	5.44	1.105		PBC5	32	5.59	.875
ATT	ATT1	32	6.16	.847		PBC6	32	5.62	1.070
	ATT2	32	5.75	.916		PBC7	32	5.09	1.088
	ATT3	32	5.97	.822	TA	TA1	32	4.34	1.578

Construct	Item	N	Mean	SD	Construct	Item	N	Mean	SD
BI	ATT4	32	5.78	.870	TA	TA2	32	4.03	1.596
	BI1	32	5.50	.842		TA3	32	3.91	1.445
	BI2	32	5.41	.875		TA4	32	3.97	1.534
	BI3	32	5.31	.859		TA5	32	4.03	1.596
	BI4	32	5.59	.875					

Note: PU – perceived usefulness; EOU – ease of use; ATT – attitude; SN – subjective norms; PBC – perceived behavioural control; TA – technology awareness; BI – behavioural intention to use; SD – standard deviation

This study presents the results of the pilot testing (Table 3). Pilot testing is a preliminary study conducted to evaluate the reliability of the instrument, especially its scale, to improve the study's design prior to the actual distribution of the survey questionnaire. The reliability of the instrument is assessed by looking at the internal consistency of its items (i.e., the Cronbach alpha coefficient) to determine whether the items that make up the scale are measuring the construct.

Table 3: Cronbach Alpha Coefficient

Construct	No. of Items	Cronbach Alpha
PU	6	.883
EOU	6	.886
ATT	4	.853
SN	7	.895
PBC	7	.691
TA	5	.949
BI	4	.822

The Cronbach alpha coefficient values of perceived usefulness, ease of use, attitude, subjective norms, technology awareness, and behavioural intention to use exceed the recommended value of .70 (Pavot, Diener, Colvin, & Sandvik, 1991) suggesting good internal consistency reliability. Perceived behavioural control, on the other hand, has a Cronbach alpha coefficient of .691 which is below than the threshold value. However, the coefficient value of the perceived behavioural control is still close to .70, suggesting that all the perceived behavioural control items should be maintained in the final survey questionnaire.

Progress of the Study

This study has, to-date, completed the data collection stage. The analysis of the final data (i.e., 438 responses), using the partial least square structural equation modelling technique (PLS-SEM, version 2), indicates that the loading of all items of the constructs exceed .70. This result justifies earlier decision made at the pilot stage to keep all the items (including the perceived behavioural control items) in the final survey questionnaire.

Conclusion

The objective of the study is to examine the moderating role of technology awareness in the students' behavioural intention to use the accounting software. Drawing on the TAM and TPB, technology awareness is hypothesised to moderate the relationship between perceived usefulness, ease of use, attitude, subjective norms, perceived behavioural control, and behavioural intention to use.

Data are collected through survey questionnaires distributed to accounting students in UUM. The questionnaires have gone through pretesting and pilot testing procedures prior to the actual distribution. This study presents the results of the preliminary study of the pilot testing. Pilot testing is a preliminary study to assess the reliability of the instrument, in particular its scale, in order to improve the design of the study before the actual distribution of the survey questionnaire takes place. Thirty-two undergraduate accounting students participate in the pilot testing. The results suggest that all constructs (i.e., perceived usefulness, ease of use, attitude, subjective norms, perceived behavioural control,

technology awareness, and behavioural intention to use) have good internal consistency. Hence, all items are maintained in the final survey questionnaire.

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JAY-CUSTOMERS' BEHAVIORS IN THE RESTAURANT INDUSTRY

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Abstract: *The customer is always right* was a famous maxim widely accepted by academic and business fields. However, customers may experience jay customers' behaviors due to their own reasons or external environment. Blindly considering from the customer side does not guarantee to bring benefits or reputation to the organization. The purposes of this study were to explore sub-categories jay-customers' behaviors and to identify the significant types of jay-customers in inducing employees' job stress in the restaurant industry. The field survey was conducted targeting employees who are working for restaurants in South Korea. Using the data collected from 302 restaurant employees, exploratory factor analysis was conducted to categorize jay-customers, and structural equation modeling analysis was conducted to investigate the jay-customers' behaviors in influencing employees' job stress. The result demonstrates that the sub-dimensions of jay-customers behaviors are categorized into oral abuse, physical abuse, and sexual harassment. Moreover, all sub-dimensions of jay-customers behaviors have significant influences on restaurant employees' job stress. Based on these findings, we contribute to the current knowledge of jay-customer behaviors by establishing a theoretical model to measure employees' perception of jay-customer behavior behaviors in the restaurant industry.

Keywords: *jay-customers' behaviors; employees' job stress; restaurant industry*

WARUS (ENTREPRENEUR COMPULSORY PROGRAM) AS CREATIVE AND INNOVATIVE SOLUTION FOR IMPROVING HUMAN RESOURCE QUALITY IN 3T REGIONS

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Abstract: *The aim of this paper is to provide a program in 3T regions (the frontier, outermost and lest development regions) in Indonesia with entrepreneur compulsory program, called as WARUS (Wajib Wirausaha). Based on research by Orange Book FEM Bogor Agricultural Institute (2010), the world has entered the 4th civilization as the creative era which take a creativity and innovation as the driving force of economic growth. In the future, economics of Indonesian will grow stronger due to one of the impacts of demography bonus. Therefore, it could be an opportunity for government to develop the nation. Not only focusing in big city but whole areas of Indonesia, including the 3T regions. It also related by the vision of Joko Widodo as the president in strengthening the position of 3T regions. The potential of various uniqueness in each region as the frontline of Indonesian be the reason for serious handling by the government. WARUS as form of education entrepreneur implementation in the 3T regions will have a good impact on the community.*

There will be two approaches to implement this program. The first is theory approach, by creating a curriculum of entrepreneur compulsory on senior high school level. Secondly, practice approach, by providing independent economy program for each community based on its potential region. On other hand, it is as the follow up program for theory approach. The Method used is literature study approach, by comparing with related research and policy in certain countries that succeed on it. The result of this paper is show that there will be significant improvement in 3T region in Indonesia, based on the quality of human and natural resources.

Keywords: *Entrepreneur, Human Resource, 3T*

Introduction

One of the targets of Jokowi's goal called as Nawa Cita in strengthening the position of the 3T (left behind, leading, outermost) regions in Indonesia still be running. The government and several social institutions in this case implement a number of programs within the 3T region. The program includes the SM3T's Teacher, "Bidikmisi", 100-School movement, and so on. These programs are designed as communities empowerment in remote area. If further analyzed, those programs tend to conduct formal education system. Even though there are many other sectors that can be developed or applied to the community in the 3T area, one of the most important is the economic sector. Based on characteristics of the 3T area is a region that has the potential to become a source of economic for the community and the country. The potential for various uniqueness in each region to the role of the 3T region as the frontline of the Indonesia. Therefore, it is the reason for the serious handling of the government in the 3T region. However, various programs that have been running should be evaluated to create better program. Programs which established by the government and related institutions have not been fully generalized throughout the 3T regions of Indonesia. This statement is according to the Minister of village, development disadvantaged regions and transmigration of Indonesia, Eko Putro Sadjojo that

"the efforts made by the government cannot be done as quickly as lightning due to the government realizes that the goal of strengthening the 3T area is not only aimed to the village's infrastructure but also its human resources" (Sindo News, 2018). In the end of the day, if the supporting infrastructure has been established but is not properly used by the competent people, then development will also be useless.

Strengthening human resource is in line with the condition of Indonesia that will face demography bonus in 2030. Demography bonus is a phenomenon in which the population structure is very beneficial in terms of development due to the population of productive age is very dominated, while the proportion of young people is getting fewer and the proportion of elderly still be normal. Based on this condition, the government's way to strengthen the position of the 3T region should be linked to the creation of quality human resources in the midst of society. The improvement of quality human resources can be realized by strengthening the character of the youth. Ideally, youth has a creative, innovative character, passionate, and hard work. These character can be reflected in an entrepreneur figure in running his business. Kerr, et al. (2017) in his journal said that "the researchers hypothesized that in the context of business ventures, an entrepreneur might be interested in a changing environment and new challenges. Individuals who develop new challenges and environments are those who present creative solutions, business models, and products, and openness of entrepreneurs can help these functions". Youth with entrepreneurial mentality will be highly expected when the demographic bonus. The cultivation of entrepreneurial character needs to be implemented in programs run by the current government to the 3T regions. The 3T regional potential will be maximally used by youth with entrepreneurial mentality and the creation of economic independence is the ultimate goal of a series of empowerment programs. Based on the explanation and theory described above, it is necessary to have an entrepreneurial character building program for youth in the 3T region as an effort to maximize the potential regions of Indonesia in the present and future. This program is realized through WARUS (entrepreneur compulsory program) for Indonesian youth, especially in 3T region. Warus will be a character building program and entrepreneurial mentality in Indonesian youth.

Literature Review

Entrepreneurship Definition

According to Hisrich (1990) in Eroglu (2011) defines that a must be entrepreneurs characterized as a person who showed initiative and it is the idea creative ways to cope with, capable of being the mechanisms used in the become an ordinary organization as social and economic infrastructure to change a source of power and one situation to practical account, and he received and welcomed there is very little risk and a failure to. This opinion indicates that in; a attended by entrepreneurs to its environment and innovative opportunities to see illustrat resource that has been found. It is also in harmony with Zimmerer's opinion was quoted as saying by Winardi (2003: 17) in Diana, et al. (2014) that define entrepreneur was a who created a new business , by facing risk and the uncertainty, and aimed at achieving profit growth through identification and opportunities through a combination of resources needed to get the benefits.

That skill then been concluded a formulation of named SCCOPPED by Frances McGuckin (2006: 18 in Diana, et al . (2014) that in addition to the technical ability, a entrepreneurs also have 8 basic skills used every day, as for skill are, 1) Motivation and self discipline 2) Trust 3) Conversation skills 4) Organization 5) Passion and a positiveness 6) Diligence and tenacity. Opinions raised by some experts is getting suggests that entrepreneurial characters are characters ideal for youth currently to face indonesia future

Definition and Programs in the 3T Regions

According to the documents Development Acceleration National Strategy for Disadvantaged (STRANAS PPDT) such as those set out in the regulation of minister for the state of development for disadvantaged number 07/PER/M-PDT/III/2007, it is stated that what is meant by disadvantaged district is the region who communities and the area relatively less developed than those in other regions on a national scale. The government every five years set some areas that are part of disadvantaged based on the criteria, indicators, and local sub-indikator up until now the government had set 122 local part of disadvantaged Indonesia and then called 3T (outpost, the outermost and left).

Huruswati, et al. In 2009 the fact that of a number of 14 types of people with social welfare problems worked in identification in five research locations namely Banten, Riau Islands, Garut, West Nusa Tenggara and District in West Papua, the very poor families were the type of the findings people in social welfare by the number of the most significant and relative stands out in almost all areas in an appeal with the issue of people with the types of other people with social welfare. Poverty is a result of various problems common attacked our society still underdeveloped and left include the quality of human resources low, government policies economy less in favor of the poor, jobs are limited lack of planning and budgeting process shopping who favors for the poor, infrastructure less supportive made the development of economic activity minimal.

There are some areas that is geographically potential to grow in the economy, but have to be involved in the lead down as a result the conflict social or through a chance accident the policy-making before. This indicates that it is vital to the areas which economic 3t that needs to be overcome by various parties.

Huruswati, et al. (2009) explained that the program program that has been running in the 3T can be split into two groups rescue program that can function in the short and the development of which long-term program. Programs are running down is directing development programs many people in sector education as teachers the front line, Affirmation Bidikmisi, #100sekolah, while sector economics gets important things that is supposed to dominate to form the program based on the outcome of the findings people in social welfare has been discussed above. What is going on at the moment is lack of coordination among related institutions. This can be led to overlapping or contradiction programs and policies that is between agencies.

Natário, et al. (2015) the study of creation, reform, and development of new business and companies, in the suburbs, and the border in particular (often very low tech) are rare. Some program has been running as KUBE (Kelompok Usaha BEsama) joint business group, the mutual village, and some other programs in fact still not sustainable and coordinated set to form the community economic independence. Making the program if needed to consider factors that may lead to the development of human resources (Huruswati, Purwanto, and ; Belanawane, 2009). Ence, with the 1) Character ideal owned by entrepreneurs 2) Regional characteristics 3T 3) Social problems that happening in the area 3T 4) Evaluation which has been running before finally got into the or base in the formation of high quality human resources in the 3T through the WARUS (Wajib Wirausaha) program.

Warus Program (Wajib Wirausaha)

Indonesia is the land which rich in resources, both in terms of human resources and its natural. Of sabang up to merauke stretched wide wealth which is particularly beneficial for the state. As the world largest archipelagic state, indonesia has asset highly prized its existence the local yard indonesian to then called the 3T regions (outpost, widest, and underdeveloped). Billington (1966: 25) out in the medical journal Barbier and Bugas (2003) defines the regional 3T regions "Geographical region that borders to the parts of a continent that is not quiet in which the ratio of man, land which is low and natural resources of one who is profuse, not exploited, provide opportunities remarkable for social and economic improvement to an individual which has the property of small". The existence of this it is highly necessary to regional 3T much supported by good quality human resource. Talk about human resources, when viewed from the number, more than 230 million people rode for our country. The existence of this

it is highly necessary to regional 3T much supported by good quality human resource. Talk about human resources, when viewed from the number, more than 230 million people rode for our country. It is main asset and largest for indonesia if they in people with the quality of being kind. It can be said assets in pt tugu pratama an important person and largest because if it is assumed that when the community in the region 3T that is the frontline indonesia is they soul creative and innovative, would not have salt there is the crisis, behind scarcity of food to importing materials that is supposed to be available in our own nation.

In addition, the region has characteristic 3T this will make economy unstable. The opinion put forward by Irawan (2015) empowerment that regional development or behalf provided important priority in the development of the future. This regional development need to pay attention to three key points that (1) form of contribution from real from the expected by the central government in the process of the development of basic; (2) own aspirations of local communities especially priority depicted in regional development programs and (3) program links between regions in the economy and politics (Usman, 2006). In the same source, Irawan also expressed cause to increase the economy that is a tendency 3T regions as the population and the mastery of the regional PDRB was a growth that is not same between areas of cities and remote villages, will cause the more timpangnya development between a region characterized by the low accessibility of facilities and infrastructure services economic and social especially people in rural, isolated areas, the border and regions left behind. The gap between urban and rural areas indicated by the low welfare levels of the village community, with the development of backward rural implementation of electronic road to the urban areas, and the high dependency rural areas to urban areas. Some incident was caused by lack of access to capital, employment, information, supporting technology production and marketing of products in rural areas. Even further, Irawan (2015) expressed lameness happened between regions 3T and urban areas caused by urbanization and the process of a conglomerate that has been very quick. That is why it is to see far fore, regional development in the 3T not only focus on resources, but also to see the benefit of the human soul creative and innovative need to embedded in the people of Indonesia. So no more cases like plagiarism often undertaken by the people of indonesia as a reflection of the lack of the innovation and creativity in the community Indonesia.

According to research in Simatupang (2007) the world had entered fourth civilization that puts creativity and innovation as engine of economic growth. Soul creative and innovative is closely relation with the character being owned by a entrepreneurs. It had become for you can never do this as well as entrepreneurs to have the skills in the event that made by well and would result in the ability of his side league clash against a real challenge in sporting in the country and public an uncertain future (Nieuwenhuizen & Groenewald, 2008). In a mental entrepreneurs will be encouraged to take the risk, able to compete and thinking as a strong inventor. Barbier and Bugas (2003) out in the medical journal his said that "Economic development based the border very prevalent in many areas had grown at the world , who still have more lands, woodlands especially, dust and other natural resources". Coaching people berwirausaha be the right choice for economic development media. This is supported with Henry, Hill and Leitch (2004: 99) stated that "Innovative approaches to solving a problem, high readiness for change, confidence and creativity - all is the attribute of being relating to entrepreneurship - serves as a platform who deserves to economic development in the community which anything".

If considering program that existing at the present time, formal closer to the education sector. The community formed in order to have a good literasi in matters of knowledge. On the other side the economic sector which promises less become the object of the development of. Assistance to community economic development then capital and training to carry short. Natário, et al. (2015). Bring the study of the creation of, the renewal of, and development of of the new business and the company found it , on the periphery of the, and bordering areas of in particular (often frustrating probing of the very low tech) revenues from the divestment were rare. The movement of business in indonesia focused on big cities and the less developed in the region such as the area 3T marginal. Assistance teams for this young

entrepreneurs have become the governor and vice governor 2018 elected through the *One Kecamatan One Center of Entrepreneurship (OK OCE)* program. This program very well in order to develop the as well as entrepreneurs to the scope more small because him who built it would be more persuasive. Look on some assistance which has been running as previously the, the program will much the better if throughout the entire country especially local special handling to develop the region 3T also received special assistance by the government to an entrepreneur just starting business and are doing business.

Assistance entrepreneurial traits that thorough in indonesia can be should be implemented by adapting programs in other countries, as in south korea. If the south korean their youth must undergo compulsory military service in an effort to foster the love against the country and train, discipline but it is not impossible if in indonesia is conducted similar programs compulsory military service but in the self-help or entrepreneurs must be identified. Assistance in the form of compulsory entrepreneurs will make them far more engineering techniques in entrepreneurial and understand and manage mental entrepreneurs as expected.

The idea is obliged to entrepreneurs is adopted from the concept of kampung england which is located in the village to Pare, Kediri East Java. Any a village presented many programs learning english, so their was attributed known by the public at large, the area can produce income enough to support the local community. Output after the introduction of a mandatory program is connected his entrepreneurial workers in the 3T productive potential in developing local region in the future. Wajib wirausaha to be run will be integrated education entrepreneurs who now been deployed in high level. The young people who will be the main target of this is compulsory in entrepreneurial students / equivalent vocational high school graduates who has an interest in berwirausaha but have not had the opportunity to continue their studies and work. The theory had been teaching entrepreneurship during both in school is going to applied in practical in this program.

Form to entrepreneurs and engagement assistance will be done in gradually:

1. **Theoritic step.** The introduction of entrepreneurial norms or it can be said about entrepreneurial material in theory both in school (senior high schools the equivalent level), so that they not only proficient in practices but have the basis to anything they do. Of those who will get material in a sustainable way. At the rate of one (class 10) taught how to the rudiments of entrepreneurship, levels of two on the scope of micro entrepreneurs in as elements in the form of the product to gain a share of. And on a level three, start in the creation of the product, at the macro level business, cooperation and others.
2. **Practice step.** The practice will be implemented during the transition bench high school graduation. The practice will be done the following:
 - a) Research. They will be brought to recognize the potential in every area they. After recognize her, they are nurtured to can develop potential does. By doing so, will indirectly growing innovative spirit in their hearts.
 - b) Making products. The theory that has been obtained in the bench school will put into practice at this stage, after carrying out a study so youth will guided to realize the product in its design.
 - c) Marketing, the distribution of and monitoring and evaluation. After going through the process of provisioning that long, they will be installed directly to start their efforts by continue to be done its periodical monitoring and evaluation.

Development by gradual and sustainable as is the case in over , it would be very significant impact for indonesian youth personality , they will not fear to set up a venture because it will be guided him who is competent in their field . The program also has been confirmed to be supported by ongoing about the university educate the 3T (SM3T), currently has been established, so that young people are no longer required to seek the education outside its territory but can be directly learn as much as knowledge in the area. It will facilitate their area for students to expand their directly in touch with their surroundings.

Not stop until there, after they complete entrepreneurship, basic education they would be taught further information about business in professional. Learning on partnership with other companies to get access to capital, business to digital which is currently takes place as part of the industrial revolution 4.0. The program will be different with programs before because warus make the 3T not only as huge supplier of the center of economic development but also its closest for hard. After the training is successful in this area , to represent only once rowing two to three islands exceeded , the program for the regions will 3t very successful done because the infrastructure sector that is ripe also supported by a youth creative and innovative in to activate the economy in its community.

Conclusion

Nawacita to strengthen the 3T (left behind , outpost , the outermost) had need to be taken seriously by various parties. Preparation can be done in looking at are the most needed that need to be coached in visionary. Hundreds of millions of human resources that owned by indonesia should be able to be valued as it was vital that need to be well managed supported a program of accelerated infrastructure. Basically any change does need a long process to truly can finally get where. Of natural resources, human resources of being so much , is not enough if that is all be left in its collections. Has been supposed positive synergy between natural resources and human resources that owned by Indonesia can be indorser in realizing the success of the program of 3T regions. But one of the changes that can be done through entrepreneurial compulsory especially when be integrated into education taken since the high school. For the event is not only creates human resources competent , but the management of natural resources in the 3T Indonesia later, which is focus of economic development for each village or region.

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SAHAYA INI TELAH BIASA DALAM ADAT-ADAT INGGERIS': ABDULLAH MUNSHI SEBAGAI WATAK TERTAWAN DALAM TRAVELOGNYA KISAH PELAYARAN ABDULLAH

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Abstract: Kertas kerja ini bertujuan untuk mengenalpasti sikap tertawan Abdullah Munshi dalam karyanya dan menganalisis hubungannya dengan penganugerahan beliau sebagai 'Bapa Kesusasteraan Melayu Moden' oleh Barat. Keberanian Abdullah Munshi mencabar konvensi kesusasteraan yang sedia ada dan memperkenalkan acuan penulisan Barat kepada khalayak Melayu berjaya menobatkan beliau sebagai 'Bapa Kesusasteraan Melayu Moden'. Pengikhtirafan ini mengangkat beliau sebagai tokoh yang paling berwibawa dalam korpus kesusasteraan Melayu menurut perspektif kolonial Barat terutama dengan terkarang travelog pertamanya bertajuk Kisah Pelayaran Abdullah. Abdullah Munshi terus mendapat pengikhtirafan sehinggalah muncul beberapa sarjana yang mempertikai kreadibiliti beliau sebagai tokoh yang tidak selayaknya meraih penobatan tersebut. Abdullah Munshi telah dilabel sebagai individu yang tertawan dengan setiap aspek perlakuan majikan Baratnya sebagaimana yang tergambar dalam karya magnum opus beliau. Bertitik-tolak daripada fenomena inilah, kajian menggunakan kaedah analisis teks terhadap travelog pertama Melayu iaitu Kisah Pelayaran Abdullah berdasarkan konsep watak tertawan oleh Syed Hussein Alatas. Dapatan kajian mendapati Abdullah Munshi menepati konsep watak tertawan oleh Syed Hussein Alatas berdasarkan lima kriteria iaitu watak yang meniru aktiviti Barat dan menganggapnya bermanfaat, watak yang tidak mampu menimbulkan persoalan baharu dalam kehidupan, watak yang menganggap ilmu Barat adalah terbaik, watak yang menerima cadangan Barat tanpa membantah dan watak yang menyanjungi Barat tanpa menyedari dirinya tertawan. Ini bermakna Abdullah Munshi adalah watak yang tertawan dengan Barat sebagaimana yang dijelmakan sendiri oleh beliau menerusi travelognya. Rumusannya, dapatlah dibuktikan bahawa penobatan Abdullah Munshi sebagai 'Bapa Kesusasteraan Melayu Moden' sehingga menyebabkan kesusasteraan Melayu terbahagi kepada dua periodisasi merupakan agenda terbaik Barat untuk merelevankan kehadiran mereka di tanah jajahan khususnya Alam Melayu.

Keywords: Autobiografi, watak tertawan, Kisah Pelayaran Abdullah, Hikayat Abdullah, Syed Hussien Alatas

Pengenalan

Abad ke 19 Masihi terpahat dalam catatan sejarah sebagai zaman penjajahan kolonial Barat di Alam Melayu. Abad ini menyaksikan kedatangan kuasa-kuasa kolonial Barat yang pada dasarnya bermatlamat untuk menguasai bahan-bahan mentah di Alam Melayu (Leur 1955; Vlekke 1965; Bastin 1965; Andaya & Andaya 2015). Dengan matlamat ini, kolonial British kemudiannya berupaya menguasai kepentingan ekonomi di Tanah Melayu. Demikian juga dengan kolonial Belanda di Sumatera, Pulau Jawa dan

sekitarnya. Dalam konteks ini, apa yang lebih menarik ialah strategi yang diguna pakai oleh kedua-dua kuasa kolonial itu dalam merealisasikan matlamat penjajahan mereka. Kuasa-kuasa kolonial pada ketika itu berpendirian bahawa matlamat untuk menguasai bahan-bahan mentah dapat dicapai dengan mudah dan berkesan, jika mereka turut menguasai politik dan sosial khususnya kebudayaan peribumi yang dijajah (Al-Attas 1969; Milner 1995; Cohn 1996; Ungku Maimunah Mohd.Tahir 2009). Pendirian ini kemudiannya melahirkan strategi-strategi kolonial yang bertujuan untuk ‘melembutkan’ matlamat bagi mendapatkan bahan-bahan mentah (Gullick 1995). Dengan kata lain, penjajahan oleh kolonial British dan Belanda di Alam Melayu distategikan secara sistematik, supaya peribumi sendiri menganggap penjajahan itu sebagai ‘satu kebaikan’ yang patut berlaku ke atas mereka (Alatas 1972; Stockwell 1982). Bagi menjayakan “misi kudus” itu, para pegawai kolonial British khususnya yang berkhidmat di Alam Melayu dituntut untuk mendalami kebudayaan Melayu. Tuntutan ini dengan sendirinya mendorong mereka untuk mempelajari bahasa dan kesusasteraan Melayu. Maka muncullah beberapa guru bahasa Melayu yang bertanggungjawab mengajar bahasa dan kebudayaan Melayu kepada para pegawai kolonial termasuklah Abdullah bin Abdul Kadir Munshi (selepas ini dikenali sebagai Abdullah Munshi sahaja) (Wilkinson 1907; Milner 1995; Putten 2006; Ungku Maimunah Mohd.Tahir 2009).

Ternyata proses pemahaman budaya Melayu di kalangan para sarjana kolonial ini menyebabkan mereka terjebak untuk mengenali kesusasteraan Melayu. Maka muncullah sarjana seperti Wilkinson (1907) yang menyifatkan kesusasteraan Melayu sebagai karya yang ‘tiada nilai sastera’ apatah lagi jika diteruskan oleh masyarakat Melayu akan menyebabkan mereka semakin jauh daripada arus ketamadun bangsa. Sehubungan itu, gaya penulisan Barat perlu diperkenalkan kepada masyarakat tanah jajahan iaitu penulisan yang menitikberatkan realiti dalam hasil pengkaryaan. Untuk menyahut cabaran inilah, pada 27 Mac 1838, Abdullah Munshi menghasilkan sebuah travelog pertama Melayu bertajuk *Kisah Pelayaran Abdullah* yang merakamkan pengembaraannya ke Kelantan. Karya ini berteraskan idea realisme dalam penulisan sebagaimana pesanan Alfred North seorang mubaligh Amerika kepada Abdullah Munshi bahawa, “[...] whatever of interest [...] their rajas, laws and whatever Europeans would like to be informed of” (Skinner 1978: 481). Berteraskan kepada skema penulisan inilah, Abdullah Munshi didapati begitu kritikal melahirkan pendapatnya kepada raja dan masyarakat Melayu sehingga dipuji sebagai, “[...] a work of singular interest in beautiful Malay, and in all respects a new thing in the language”, yang akhirnya membawa kepada penobatan beliau sebagai ‘pengasas Kesusasteraan Melayu Moden’ oleh R.J.Wilkinson pada 1907 (Wilkinson 1907:60). Kemudian, R.J. Wilkinson yang merupakan setiausaha kepada Residen Perak mengangkat Abdullah Munshi sebagai ‘the pioneer of Modern Malay Literature’ menerusi penulisannya dalam *Papers on Malay Subjects* pada tahun 1907. Karya Abdullah Munshi terus dijadikan ‘model’ oleh sarjana pada zaman kolonial yang lain dalam usaha memahami *world view* dan etos masyarakat yang dijajah. Akhirnya pada tahun 1959, Abdullah Munshi dinobatkan secara rasminya sebagai ‘Bapa Kesusasteraan Melayu Moden’ yang menandakan bermulanya pemisahan kesusasteraan Melayu kepada dua periodisasi iaitu tradisional dan moden (Skinner 1959).

Permasalahan kajian

Pengikhtirafan Abdullah Munshi sebagai ‘Bapa Kesusasteraan Melayu Moden’ menurut Skinner (1959:6) adalah disebabkan oleh kesedaran tokoh ini untuk menyeru masyarakatnya agar membuang sikap, ‘katak di bawah tempurung’ yang diwarisi dalam kesusasteraan dan kebudayaan Melayu sekian lama. Secara tidak langsung, beliau mengharap pengarang Melayu agar maju ke hadapan dan berusaha untuk ‘keluar’ daripada konvensi kepengarangan tersebut. Alasan Skinner (1959:6) untuk mengangkat ketokohan Abdullah Munshi diperkuatkan oleh hujah beliau bahawa Abdullah mengarang dengan gayanya yang tersendiri tanpa model atau ikutan daripada individu Melayu terdahulunya. Tetapi, bagi pengarang Melayu selepas Abdullah, mereka mempunyai seorang ‘role model’ untuk diteladani. Berteraskan kepada faktor inilah, Abdullah Munshi selayaknya dinobatkan sebagai agen pembaharuan dalam Kesusasteraan Melayu. Pendapat Skinner dikembangkan oleh Ismail Hussein (1974) meletakkan

pembahagian tradisional-modern dalam kesusasteraan Melayu berteraskan kepada pengenalan alat percetakan. Bagi beliau, alat percetakan bukan sahaja memberi perubahan kepada kesusasteraan Melayu tetapi turut merevolusikan konsep kesusasteraan Melayu itu. Bertepatan dengan inilah penobatan tersebut selayaknya dianugerahkan kepada Abdullah Munshi kerana beliau merupakan ‘Bapa Percetakan Melayu’ (Gallop 1990). Bermula di sinilah nama Abdullah Munshi harus dinobatkan sebagai pengasasnya kerana hubungannya dengan percetakan. Nama sarjana lain yang memperakui penobatan Abdullah Munshi berdasarkan gaya, “*individual, presenting a personal point of view and is one of the earliest expressions of the encounter between East and West*” adalah seperti A. Bakar Hamid (1979), Johns (1979), Yahya Ismail (1987) Kassim Ahmad (1981), Mohd. Taib Osman (1988) dan beberapa yang lain (sekadar menyebut beberapa nama).

Walaupun Abdullah Munshi berjaya memperkenalkan satu perspektif baharu dalam dunia kesusasteraan Melayu sehingga dinobatkan sebagai ‘Bapa Kesusasteraan Melayu Modern’ namun sumbangan beliau tetap diragui malah ditolak penobatannya. Barisan sarjana ini juga turut memperkenalkan tokoh-tokoh lain yang menurut mereka lebih layak merangkul penobatan itu seperti Hamzah Fansuri, Mohamad Salleh Perang dan beberapa yang lain kerana eratnya hubungan pengarang dan karyanya dengan masyarakat. Misalnya penolakan oleh Syed Muhammad Naquib al-Attas (1971), Sweeney dan Phillip (1975), Sweeney (1980), (Ras 1985), Watson (1989), Ungku Maimunah Mohd. Tahir (1997) dan beberapa yang (sekadar menyebut beberapa nama). Rentetan daripada sinilah terdapat segolongan sarjana yang berpendapat bahawa Abdullah Munshi diangkat sebagai pelopor sastra modern kerana kekaguman serta tertawannya beliau kepada Barat (Siti Aisah Murad 1996). Ini disokong oleh Sweeney (2005) yang turut melabelkan Abdullah Munshi sebagai ‘tali barut Barat’ serta Noriah Taslim (2016) yang merincikan puji-pujian Abdullah Munshi terhadap Barat sebagai masyarakat berakal, elok budi pekerti dan bertamadun jauh daripada yang dikecapi oleh masyarakat Melayu. Oleh itu, adakah Bapa Kesusasteraan Melayu Modern ini hakikatnya tertawan dengan Barat sehingga menganggap setiap yang diperkenalkan oleh Barat adalah terbaik bagi masyarakatnya? Adakah beliau sendiri merupakan ‘watak tertawan’ dalam travelognya? Jika benar, apakah hubungan ‘tertawannya’ beliau dengan penobatan berprestij ini? Bertitik-tolak daripada inilah, kajian dilakukan terhadap travelog Melayu pertama oleh Abdullah Munshi bertajuk *Kisah Pelayaran Abdullah* yang diselenggarakan oleh Kassim Ahmad (1970) dengan dua objektif iaitu untuk mengenalpasti watak tertawan Abdullah Munshi dalam karyanya dan menganalisis hubungannya dengan penganugerahan beliau sebagai ‘Bapa Kesusasteraan Melayu Modern’ oleh Barat.

Metodologi

Kajian ini menggunakan kaedah analisis teks terhadap karya *Kisah Pelayaran Abdullah* (1970) dengan berfokuskan kepada empat aktiviti bagi menyelesaikan dua objektif kajian masing-masing. Bagi menyelesaikan objektif pertama iaitu untuk mengenalpasti watak tertawan Abdullah Munshi dalam karyanya, aktiviti yang dijalankan adalah seperti berikut:

- i. Menghuraikan konsep ‘watak tertawan’ menurut perspektif sarjana
- ii. Menghubungkan konsep tersebut dengan watak Abdullah Munshi dalam karya travelognya

Bagi menyelesaikan aktiviti 1 iaitu menghuraikan konsep ‘watak tertawan’ menurut perspektif sarjana, didapati hanya sarjana tersohor Syed Hussein Alatas (2005) sahaja yang melakukan kajian berhubung konsep ini terhadap masyarakat Melayu. Beliau yang terpenggil untuk memperbetulkan kajian-kajian Barat yang kebanyakannya berprasangka negatif terhadap masyarakat Melayu. Isu ‘peribumi malas’, ‘bebalisme’ dan ‘minda tertawan’ diangkat dalam kajian beliau (Syed Hussein Alatas 2005). Menerusi konsep ‘minda tertawan’ maka lahirlah ‘watak tertawan’ yang tidak sanggup bercanggah secara ilmiah

dengan aliran daripada pihak Barat (Syed Hussein Alatas 2005). Rentetan itu, beliau telah menggariskan lima aspek 'watak tertawan' khususnya kepada Barat iaitu:

- i. Watak yang meniru aktiviti pihak Barat yang dianggap bermanfaat
- ii. Watak yang tidak mampu menimbulkan persoalan baharu dalam kehidupan
- iii. Watak yang menganggap ilmu Barat adalah terbaik
- iv. Watak yang menerima cadangan Barat tanpa membantah
- v. Watak yang menyanjungi Barat tanpa menyedari dirinya telah tertawan

Sehubungan itu, bagi menyelesaikan aktiviti 2, kerangka 'watak tertawan' oleh Syed Hussein Alatas akan dihubungkan dengan watak Abdullah Munshi dalam karya travelog Melayu pertamanya iaitu *Kisah Pelayaran Abdullah* (1970). Ini seterusnya akan membawa kepada penyelesaian objektif kedua iaitu, menganalisis hubungan 'watak tertawan' Abdullah Munshi dengan penganugerahan beliau sebagai 'Bapa Kesusasteraan Melayu Moden' oleh Barat.

Keputusan Kajian

Menurut Syed Hussein Alatas (2005:1), 'watak tertawan' dalam masyarakat muncul kesan kolonialisasi tanah jajahan oleh Barat. Pendapat ini diperakui oleh Azhar Ibrahim Alwee (2009) dan Zaharahanum Kamarudin (2015) yang berpendapat bahawa 'watak tertawan' berlaku dalam masyarakat yang pernah dijajah kerana menganggap setiap tindakan pihak Barat adalah tepat, benar serta wajar dicontohi tanpa memikirkan kesesuaian serta kesan tindakan tersebut. Justeru, meneliti *Kisah Pelayaran Abdullah* (1970), kajian ini dapat membuktikan adakah pengarangnya iaitu Abdullah Munshi merupakan 'watak tertawan' dalam hasil karyanya sendiri? Apakah 'tertawannya' tokoh ini kepada Barat merupakan pencetus kepada penganugerahan beliau sebagai 'Bapa Kesusasteraan Melayu Moden' oleh Barat juga? Konsep 'watak tertawan' Syed Hussein Alatas (2005) (selepas ini dikenali sebagai Alatas sahaja) akan memperjelaskan fenomena ini.

- i. Watak yang meniru aktiviti pihak Barat yang dianggap bermanfaat

Menurut Alatas (2005), sifat peniru dalam diri individu terbahagi kepada dua iaitu peniruan rasional dan peniruan yang tidak rasional. Peniruan rasional ini terjadi apabila seseorang mengikuti unsur budaya luar dengan sebab-sebab tertentu yang dianggap rasional. Seterusnya, peniruan yang tidak rasional pula berlaku apabila seseorang terpengaruh dengan unsur budaya luar dan langsung menerima budaya tersebut tanpa melakukan pertimbangan sama ada ianya perlu atau tidak. Meneliti *Kisah Pelayaran Abdullah* (1970), didapati Abdullah Munshi sebagai watak utama dalam travelognya itu sentiasa memuji setiap perbuatan dan perlakuan yang dilakukan oleh pihak Barat. Malahan, beliau turut mencontohi dan menerapkannya dalam kehidupan seperti petikan di bawah:

"[...] Hatta, ada-lah kira2 sa-jam lama-nya sahaya di-situ, lalu bermohon-lah hendak kembali ka-perahu. Maka lalu turun-lah sahaya berjalan-jalan melihat-lihat kampung dan pasar di-situ. Maka banyak-lah orang berkampong, beratus-ratus mengikut sahaya. Maka sahaya menulis-lah sa-panjang jalan itu, karena mengambil ingatan apa2 yang bertemu dan yang di-lihat. Maka itu-lah menjadi suatu heran kapada mereka itu, karena menulis sambil berjalan. Sahaya dengar kata mereka itu, "Pandai sunggoh orang timor ini; tahu bahasa orang puteh dan lagi boleh menulis sambil berjalan dan berdiri" [...]"

(*Kisah Pelayaran Abdullah* 1970: 81)

Perlakuan mencatat apa sahaja yang difikirkan penting untuk diingati merupakan sesuatu yang amat janggal dalam budaya masyarakat Melayu. Apatah lagi ‘menulis sambil berjalan’ merupakan satu perlakuan yang dianggap ‘menunjuk-nunjuk’ bagi masyarakat Melayu. Walau bagaimanapun, masyarakat Barat menganggapnya sebagai satu perlakuan yang positif dan cintakan ilmu sebagaimana pujian yang diberikan oleh Abdullah Munshi kepada Stamford Raffles yang suka mencatat tidak kira di mana pun beliau berada serta sentiasa duduk dengan berfikir. Keadaan ini menjadi satu kebanggaan buat Abdullah Munshi yang mendorong beliau untuk meniru perbuatan masyarakat Barat tersebut. Aspek pujian dan peniruan yang paling menonjol dalam *Kisah Pelayaran Abdullah* yang membawa kepada watak tertawan Abdullah Munshi adalah menerusi kritikan yang dilakukan oleh Abdullah Munshi itu sendiri. Sikap Abdullah Munshi yang terlalu berani menegur dan mengkritik secara tajam terhadap raja-raja Melayu menggambarkan betapa pemikiran beliau terpengaruh dengan cara masyarakat Barat yang mementingkan terus-terang dan kritikal dalam penulisan seperti petikan berikut:

“[...] Shahdan, jikalau di-sampaikan Allah kira-nya hikayatku ini ka-dalam tangan raja2, maka apabila di-dengar-nya perkataan yang benar ini, maka hubaya2 jangan-lah kira-nya tuanku murka akan patek. Maka jikalau kira-nya murka juga tuanku, ada-lah seperti perumpamaan: Sa-ekor kuman di-benua China kelihatan pada mata-nya, tetapi sa-ekor gajah bertenggekk di-atas hidong-nya ia tiada sedar, adanya. Dan lagi, sahaya memohonkan ampun; maka ada-lah sahaya ini telah biasa dalam ‘adat2 Inggeris. Maka ‘adat itu meluluskan yang boleh sahaya menegorkan kelakuan raja2 yang tiada berpatutan, dengan tiada kena hukum bunoh atau rampas, ada-nya [...]”.

(*Kisah Pelayaran Abdullah* 1970: 110)

Berdasarkan petikan teks tersebut menunjukkan Abdullah Munshi meniru gaya kritikan ala Barat. Abdullah Munshi mengakui bahawa beliau mengkritik raja-raja Melayu berlandaskan cara penulisan Barat yang secara tidak langsung menggambarkan watak tertawan Abdullah Munshi yang terlalu kuat terhadap Barat. Hal ini demikian kerana, beliau tidak malu untuk mengakui bahawa dirinya lebih mengikuti budaya Barat daripada Melayu itu sendiri yang lebih telus dan kritikal. Nyata bahawa Abdullah Munshi mempraktikkan peniruan rasional sebagaimana yang dinyatakan dalam konsep ‘watak tertawan’ oleh Alatas (2005) kerana manfaat yang boleh diperolehi oleh masyarakatnya jika diamalkan dalam kehidupan.

ii. Watak yang tidak mampu menimbulkan persoalan baharu dalam kehidupan

Menuurt Alatas (2005), watak ini tidak mampu menimbulkan persoalan baharu yang diperlukan oleh lingkungan hidupnya sebaliknya hanya meneruskan apa sahaja perkara yang telah ditimbulkan oleh pihak Barat. Misalnya menurut Alatas (2005), persoalan mengenai penjagaan alam sekitar yang ditimbulkan oleh Barat kepada masyarakat Melayu setelah merdeka. Isu ini tidak pernah diendahkan malah dianggap penting oleh masyarakat Melayu tetapi setelah dibangkitkan oleh pihak Barat tentang pentingnya penjagaan alam sekitar barulah masyarakat Melayu mula merasi kepentingannya. Meneliti *Kisah Pelayaran Abdullah* (1970) mendapati bahawa ‘watak tertawan’ Abdullah Munshi dari aspek kepentingan terhadap perkara yang diamalkan oleh Barat terserlah melalui pandangannya terhadap masyarakat Melayu. Melalui pemerhatian Abdullah Munshi, beliau menyimpulkan masyarakat Melayu akan terus jauh dari ketamadunan jika mereka masih melakukan perkara yang berfaedah dalam kehidupan sehari-hari. Ini dibuktikan menerusi kritikannya terhadap masyarakat Melayu seperti petikan berikut:

[...] Maka ada-lah sebab sangkanya yang salah, saperti yang tersebut itu tadi, mendatangkan beberapa ribu orang yang tiada tahu membacha surat dan menyurat dan dudok dalam bodoh dengan buta mata-nya; kayu di-katakan-nya batu dan langit hendak di-chapai-nya dengan tangan-nya. Maka bukan-kah beberapa banyak guna-nya jikalau kita pandai dalam bahasa basahan sa-hari²? Maka apabila kebanyakan kelak orang yang telah pandai dan mengetahui kesedapan bahasa dan rahasia-nya, maka bertambah-tambah pula beberapa keelokan dan tertib serta adab pada barang kelakuan-nya, istimewa pula bagi segala raja² dan orang besar² dan pegawai² memelihara bahasa itu serta ia mengusahakan mengajarkan dia kepada segala kaum keluarga-nya dan ra'yat sakai-nya. Maka jikalau kira-nya banyak anak² raja² dan orang yang pandai menulis dan membacha serta mengetahui akan erti-nya, dan mengarang, bukan-kah kemuliaan besar, ada-nya [...]”.

(*Kisah Pelayaran Abdullah* 1970: 37-38)

Berdasarkan perikan dalam *Kisah Pelayaran Abdullah* di atas, aspek kepentingan terhadap perkara yang dilakukan oleh Barat adalah berdasarkan pandangan dan kritikan Abdullah Munshi terhadap masyarakat Melayu yang tidak mementingkan ilmu. Sebagai individu yang berada di bawah pentadbiran kolonialisasi Barat, Abdullah Munshi berpendapat bahawa masyarakat Melayu tidak bertamadun dan dianggap bodoh kerana tidak mahu belajar dan mencintai ilmu. Masyarakat Barat amat mementingkan ilmu yang mendorong mereka menjadi suatu bangsa yang maju dan moden. Menurut Abdullah Munshi, hegemoni kuasa terhadap Tanah Melayu dengan membawa budaya mereka dalam kehidupan masyarakat Melayu termasuklah kepentingan menuntut ilmu adalah sesuatu yang patut dicontohi oleh masyarakat Melayu. Walau bagaimanapun, cara Abdullah Munshi mengkritik masyarakat Melayu yang tidak belajar ilmu dianggap melampaui batas kerana dalam kehidupan masyarakat Melayu untuk menegur perlu mengikuti cara yang betul dan tidak menggunakan kata-kata sensitif seperti yang dinyatakan oleh Abdullah Munshi dalam *Kisah Pelayaran Abdullah*. Keadaan ini disebabkan oleh tertawannya Abdullah Munshi terhadap ilmu yang dibawa dari Barat iaitu kritikan secara terus terhadap sesuatu perkara. Oleh itu dalam *Kisah Pelayaran Abdullah*, ‘watak tertawan’ Abdullah Munshi dapat dilihat melalui kepentingan ilmu oleh Barat. Ampuan Haji Ibrahim Ampuan Haji Tengah (2000: 127) berpendapat bahawa sikap Abdullah Munshi yang terlalu memandang tinggi akan cara kehidupan dan pemikiran Barat sehingga beliau berani memandang rendah dan memburuk-burukkan raja yang merupakan penangku kuasa bagi masyarakat Melayu. Melalui kritikan tersebut menunjukkan bagaimana Abdullah Munshi yang terlalu mementingkan ilmu dan memihak kepada Barat yang dianggap berilmu berbanding masyarakatnya sendiri.

Berdasarkan petikan yang menunjukkan kepentingan ilmu dan ekonomi dalam *Kisah Pelayaran Abdullah* aspek watak tertawan ini memenuhi kriteria watak tertawan oleh Syed Hussien Alatas. Kriteria tersebut ialah di mana watak tertawan tidak mampu menimbulkan persoalan baru yang diperlukan dalam lingkungan hidupnya. Begitu juga, sikap Abdullah Munshi yang digambarkan dalam karyanya itu di mana beliau hanya mementingkan dan meneruskan perkara yang dibawa oleh Barat. Kenyataan ini disokong oleh Zahir Ahmad, Mohd Taufik Arridzo Mohd Balwi dan Madiawati Mustaffa (2007: 232) yang menyatakan Abdullah Munshi mahu mengubah pemikiran lama orang Melayu kepada pemikiran dengan menceritakan perubahan pesat yang berlaku di pusat-pusat bandar kolonial. Keadaan ini membuktikan sikap Abdullah Munshi yang tidak mampu menimbulkan persoalan yang diperlukan dalam lingkungan hidupnya.

Contoh petikan daripada *aberkait* rapat dengan penobatannya sebagai ‘Bapa Kesusasteraan Melayu Moden’ berdasarkan ketertawannya kepada Barat. Hal ini demikian kerana, Abdullah Munshi mengkritik masyarakat dan raja-raja Melayu. Pada masa yang sama, beliau memuji Barat secara berlebihan. Selain itu, karya Abdullah Munshi diterima oleh Barat dan dianggap sebagai laporan mengenai kehidupan masyarakat Melayu. Bertepatan dengan pendapat Sweeney (2005: 13) yang

menyatakan catatan Abdullah Munshi diterima oleh Barat sebagai ‘laporan orang Barat’ mengenai masyarakat Melayu yang digambarkan tidak bertamadun serta hidup dengan tidak berilmu. Kenyataan ini disokong oleh Hassan Ahmad (2010: 60) menyatakan kehidupan masyarakat Melayu yang suka melakukan perkara sia-sia seperti menyabung ayam, menembak itik serta menembak monyet untuk tujuan suka-suka sahaja. Keadaan ini mendorong Abdullah Munshi digelar sebagai ‘Bapa Kesusasteraan Melayu Moden’ oleh Barat kerana beliau menunjukkan keakrabannya terhadap Barat dalam karya tersebut. Penobatan ini juga disebabkan Barat melihat Abdullah Munshi mempunyai ilmu pengetahuan yang tinggi berbanding masyarakatnya dan penting untuk diberi pengikhtifaran sewajarnya.

iii. Watak yang menganggap ilmu Barat adalah terbaik

Menurut Alatas (2005), fenomena ini berlaku apabila watak mendapat pendidikan secara langsung daripada instituti pendidikan di Barat atau mempelajari bahan bacaan dari Barat. Keadaan ini jelas menunjukkan seseorang itu merupakan ‘watak tertawan’ tanpa mereka sedari. Misalnya, fenomena di mana mereka mula merasakan bahawa perlunya mempelajari bahasa Inggeris, menggunakan bahan bacaan dari Barat serta melanjutkan pelajaran di Barat untuk menjadi seorang yang berjaya dalam kehidupan. Individu yang tertawan dengan Barat akan mempunyai keinginan yang kuat untuk mempelajari ilmu Barat yang dipandang tinggi berbanding bahasa Melayu sendiri. *Kisah Pelayaran Abdullah* memiliki aspek ini yang mengukuhkan lagi watak tertawan Abdullah Munshi. Watak tertawan ini timbul apabila Abdullah Munshi sangat menginginkan ilmu Barat untuk dipelajarinya. Abdullah Munshi tidak menunjukkan kesungguhannya untuk mempelajari bahasa lain kecuali bahasa Inggeris sahaja. Kesungguhan ini mendorong beliau sanggup melakukan apa cara sekali pun supaya beliau dapat memahami bahasa tersebut. Meneliti *Kisah Pelayaran Abdullah*, didapati beberapa episod yang memenuhi aspek watak tertawan iaitu keinginan menggunakan bahan bacaan serta belajar di Barat. Misalnya episod Abdullah Munshi sebagai seorang yang fasih berbahasa Inggeris dan Melayu menarik minat pihak kolonila Barat untuk bersama-sama belayar ke kawasan Pantai Timur Tanah Melayu. Meskipun, berada di kawasan masyarakat Melayu yang tidak tahu berbahasa Inggeris, namun beliau tetap menyerlahkan watak tertawannya terhadap bahasa Inggeris menerusi petikan tersebut:

“[...] Maka pada ketika itu, dengan sa-boleh-boleh-nya kita keluarkan segala hutang-piutang itu, satu pitis pun tiada boleh hilang; dan kalau ia hidup, sa-kali2 tiada boleh hilang. Dan lagi sekarang segala sampan pukut itu pun sudah keluar, tiada tinggal lagi dalam sungai, melainkan ada sa-buah di-kuala hendak berlayar. ‘Maka segala perkataan Raja Bendahara itu pun semua-nya sahaya sampaikan kapada Grandpre dengan bahasa Inggeris’ [...]”.

(*Kisah Pelayaran Abdullah* 1970: 71)

Berdasarkan petikan dalam *Kisah Pelayaran Abdullah*, meskipun tidak menunjukkan aspek penggunaan bahan bacaan terus dari Barat ataupun belajar di Barat, namun Abdullah Munshi tetap menggunakan bahasa Inggeris bagi menunjukkan kesungguhannya yang berjaya mempelajari dan memahami bahasa Inggeris dengan baik. Keadaan ini timbul apabila, Abdullah Munshi yang mempunyai kepentingan dalam pelayaran ke Kelantan iaitu sebagai penterjemah kepada pegawai Barat iaitu Grandpre. Ini jelas menunjukkan watak tertawan Abdullah Munshi di mana beliau menunjukkan sikap bangga apabila menterjemah segala kata-kata Raja Bendahara dalam bahasa Inggeris kepada Grandpre. Petikan tersebut jelas menunjukkan bahawa Abdullah Munshi telah mempelajari bahasa Inggeris dengan bersungguh-sungguh sehinggakan beliau dapat memahami setiap perkataan serta fasih berbahasa Inggeris.

Berdasarkan ciri-ciri watak tertawan yang digariskan oleh Alatas (2005) menepati aspek watak tertawan Abdullah Munshi mengenai keinginannya mempelajari bahasa Inggeris. Aspek watak tertawan yang aspek watak tertawan tersebut ialah pada ciri yang ketiga iaitu watak tertawan ini mendapat

pendidikan langsung di institusi Barat dan menggunakan semua bahan bacaan dari Barat. Meskipun Abdullah Munshi tidak mendapat pendidikan di Barat, namun beliau tetap menggunakan bahan bacaan dari Barat sebagai rujukan untuk mempelajari bahasa Inggeris sehingga beliau fasih dan memahami bahasa tersebut yang memperjelaskan lagi ‘tertawannya’ beliau terhadap pihak Barat.

Melalui aspek watak tertawan yang ketiga ini menegaskan lagi penobatan Abdullah Munshi sebagai ‘Bapa Kesusasteraan Melayu Moden’ diberikan oleh Barat. Hal ini demikian kerana, petikan di atas menjelaskan kesungguhan Abdullah Munshi yang ingin mengetahui bahasa Inggeris serta banyak merujuk bahan bacaan dari Barat adalah disebabkan oleh pergaulannya dengan orang Barat. Kesediaan orang Barat mengajar Abdullah Munshi berbahasa Inggeris serta memberi beberapa buku dari Barat menunjukkan bahawa mereka sangat senang bergaul dengan Abdullah Munshi. Penguasaan dalam bahasa Inggeris menyebabkan Abdullah Munshi amat dibanggakan oleh sarjana kolonial Barat sehingga membawa kepada penobatan beliau sebagai ‘Bapa Kesusasteraan Melayu Moden’. Tambahan pula, sikap Abdullah Munshi yang menceritakan segala kebaikan orang Barat di dalam karyanya mengukuhkan lagi kenyataan bahawa penobatan tersebut berkait rapat dengan Barat.

iv. Watak yang menerima cadangan Barat tanpa membantah

Alatas (2005) menyifatkan kriteria ini sebagai watak yang menikmati keselesaan sepanjang keberadaan di bawah naungan Barat sehingga tidak menyedari dirinya tertawan. Apatah lagi watak ini tidak lagi kritikal terhadap apa sahaja yang diperkenalkan atau dicadangkan oleh Barat itu. Misalnya, istilah institusi yang diwujudkan oleh Barat sebagai simbol pusat pendidikan masih digunakan sehingga hari ini. Watak tertawan tidak akan menimbulkan sebarang istilah baharu bagi menggantikan istilah institusi dan mereka tidak mahu mencabar diri mereka itu untuk menentang perkara tersebut. Aspek ‘watak tertawan’ ini terdapat dalam diri Abdullah Munshi apabila beliau menerima sepenuhnya apa-apa istilah atau konsep yang diberikan oleh Barat. Malah beliau tidak pernah membantah atau cuba untuk menyanggah setiap perkara yang disajikan oleh Barat kepada masyarakat Melayu. Perkara ini dapat dibuktikan melalui hasil karyanya dalam *Kisah Pelayaran Abdullah* yang menggambarkan tentang kebebasan dalam kehidupan yang tidak pernah dikecapi selagi bergelar ‘Melayu’ seperti petikan berikut:

“[...] Demikian-lah hal sahaya semua-nya dudok dalam negeri Melayu, seperti dudok dalam neraka. Maka terlalu-lah suka hati sahaya semua-nya hendak pindah ka-negeri orang puteh supaya boleh senang dan bebas. Bagaimana, tuan, kalau raja orang puteh di-suroh-nya bekerja akan ra’yat-nya, ada-kah di-beri-nya upah atau tidak?’ Maka jawab sahaya, ‘Jangankan raja² di-sini, dan kalau sultan Inggeris itu sa-kali pun, jikalau ia hendak menyurohkan barang sa-suatu pekerjaan-nya melainkan di-tentukan-nya upah-nya dahulu; kalau tidak, orang tidak mau kerja. Dan lagi, sahaya orang dudok dalam negeri Inggeris saperti raja juga, boleh kita dudok bersama-sama dengan raja. Maka jikalau kita kaya, boleh kita membuat rumah atau memakai barang pakaian seperti raja, tiada menjadi larangan atau kesalahan ada-nya. Dan lagi ‘adat orang puteh itu, jikalau ra’yatnya menjadi kaya atau membuat barang pekerjaan yang boleh mendapat untong, ia suka juga [...]’.

(*Kisah Pelayaran Abdullah* 1970: 104)

Petikan dalam *Kisah Pelayaran Abdullah* menjelaskan ‘watak tertawan’ Abdullah Munshi dari aspek kebebasan dalam negeri yang diberikan oleh Barat. Perkara ini dapat dilihat menerusi penjelasan yang diberikan oleh Abdullah Munshi terhadap perkara tersebut kepada masyarakat Melayu Kelantan yang berkaitan ekonomi. Abdullah Munshi menerangkan bagaimana konsep kebebasan dalam negeri yang diwujudkan oleh Barat pada fikirannya memberi kesenangan dan kebaikan kepada masyarakat Melayu di negeri Selat. Perbandingan ‘kebebasan’ berada di bawah naungan raja Melayu dan ‘raja putih’

memperjelaskan ‘tertawannya’ Abdullah Munshi kepada Barat. Beliau menyatakan kerterikatan masyarakat Melayu dengan konsep ‘daulat, tulah dan derhaka’ antara rakyat dan pemerintah menyebabkan kekangan kepada kebebasan individu. Ternyata, Abdullah Munshi amat mengaguminya dan terus tertawan dengan konsep kebebasan Barat yang dianggapnya bermanfaat kepada masyarakat Melayu. Sebagaimana pendapat Siti Aisah Murad (1990: 79) mengenai Abdullah Munshi yang menurut beliau sentiasa menyokong setiap perkara yang dilakukan oleh Barat walau terpaksa membantah arahan bapanya agar tidak belajar dengan paderi Inggeris di Anglo-Chinese College. Perkara ini menyebabkan orang Barat sentiasa kagum dengan keterbukaan fikiran Abdullah Munshi yang dianggap ‘berfikiran moden’. Oleh itu, penobatan ‘Bapa Kesusasteraan Melayu Moden’ kepada Abdullah Munshi memperlihatkan kewajarannya kerana perkara-perkara positif yang sentiasa dirakam oleh beliau mengenai Barat dalam karyanya.

v. Watak yang menyanjungi Barat tanpa menyedari dirinya telah tertawan

Aspek ‘watak tertawan’ yang terakhir ialah perbuatan menyanjungi pihak luar tanpa menyedari keadaan diri yang sudah tertawan. Menerusi *Kamus Dewan* (2007: 1389), ‘menyanjungi’ bermaksud sangat menghargai sesuatu tokoh atau masyarakat yang dianggap baik dan berani serta meletakkan tokoh tersebut pada kedudukan yang mulia dan memuji mereka. Aspek watak tertawan yang menyanjungi Barat tanpa menyedari keadaan diri tertawan merupakan aspek paling ketara dalam *Kisah Pelayaran Abdullah*. Aspek ini juga yang mendorong Abdullah Munshi untuk menghasilkan karya yang bersifat realisme mengikut konvensi kepengarangan Barat yang begitu menyimpang dengan konvensi kepengarang Melayu. Selain itu, penulisan beliau yang begitu menyanjungi Barat dan mengkritik masyarakat Melayu merupakan aspek ketertawanan yang ada dalam diri Abdullah Munshi tanpa disedari. *Kisah Pelayaran Abdullah* memperlihatkan watak tertawan yang ketara dalam diri Abdullah Munshi iaitu:

“[...] Shahdan, maka berfikir-fikir-lah sahaya sendiri sambil sahaya bandingkan, lalu terkenang-lah sahaya akan hal dan ‘adat’ dan kesenangan orang yang dudok di-bawah perintah Inggeris; karena ada-lah hal orang itu masing2 saperti raja juga ada-nya, dengan tiada sa-orang takut akan sa-orang, dan tiada boleh sa-orang menganiayai akan sa-orang, sebab segala perintah dan hukum-nya itu menuju kapada suatu perkara yang besar, yaitu kesenangan hati bagi segala ra’yat-nya juga [...]”.

(*Kisah Pelayaran Abdullah* 1970: 45)

Berdasarkan petikan di atas, menunjukkan aspek watak tertawan yang sudah ada dalam diri Abdullah Munshi tanpa beliau sedari. Petikan di atas menunjukkan bagaimana Abdullah Munshi yang memerhati kehidupan masyarakat Melayu yang dianggap tidak bertamadun, sentiasa membuang masa dengan perkara sia-sia berbanding kehidupan di bawah pemerintahan Barat yang dianggap lebih baik. Abdullah Munshi yang selesa dengan pemerintahan Barat menyanjung dan menyatakan kesyukurannya kerana tidak ditakdirkan hidup di bawah pemerintahan raja Melayu yang menganiayai kehidupan rakyatnya. Bertepatan dengan pendapat Mohd. Yusof Hasan (2012: 240) di mana pada akhir pelayaran tersebut, Abdullah Munshi berasa lega apabila sampai kembali Negeri Selat serta menyatakan betapa bertuahnyanya beliau berada di bawah naungan Inggeris yang aman serta tidak merasa seksa dan sengsara.

Kisah Pelayaran Abdullah juga menunjukkan bagaimana hormatnya Abdullah Munshi kepada ‘raja putih’ yang merupakan majikannya. Gelaran ‘secara tidak langsung menunjukkan ketaksuban Abdullah Munshi kepada Barat sehingga membawa kepada ketertawanan beliau. Petikan di bawah membuktikan pernyataan ini:

“[...] Kalakian, sa-telah itu, maka di-sediakan dua buah sekochi-sa-buah sekochi **Tuan Scott** yang bernama Maggie Lauder, dan sa-buah sekochi **Tuan Boustead** yang bernama Waterwitch. Maka ada pukul empat petang, datang Baba Po Eng ka-rumah sahaya memanggil sahaya, kata-nya, ‘Ada satu pekerjaan boleh mendapat untong besar; sahaya sekalian hendak menyurohkan encheh pergi ka-Kelantan membawa surat kepada raja2 Kelantan.’ [...] karena sahaya dalam pekerjaan **Tuan North dan Tuan Travelli**; maka boleh sahaya memberitahu kepada tuan2 kedua itu.’ jikalau ia kasi izin boleh-lah sahaya pergi, ada-nya [...]”.

(*Kisah Pelayaran Abdullah* 1970: 24)

Watak tertawan dari aspek menyanjungi Barat tanpa menyedari keadaannya yang sudah tertawan bersesuaian dengan watak tertawan yang dinyatakan oleh Alatas (2005). Aspek watak tertawan tersebut ialah merupakan aspek yang paling menonjol iaitu watak tertawan ini tanpa menyedari bahawa keadaan mereka yang tertawan. Mohamad Daud Mohamad dan Zabidah Yahya (2005) bersetuju dengan pandangan Alatas (2005) di mana watak tertawan yang mencapai tahap tidak menyedari akan keadaan mereka yang sudah tertawan merupakan satu masalah besar. Hal ini demikian kerana, mereka tidak lagi menganggap bahawa orang Barat sebagai masyarakat asing dan selesai menjalani kehidupan di bawah pemerintahan Barat.

Begitu juga dengan penobatan sebagai ‘Bapa Kesusasteraan Melayu Moden’ yang sangat berkait dengan Barat. Aspek terakhir yang dilihat pada watak Abdullah Munshi dalam *Kisah Pelayaran Abdullah* menonjolkan pembaharuan atau penyimpangan yang dilakukan oleh beliau atas dasar kekaguman terhadap Barat. Keadaan ini memberi peluang kepada Barat untuk mengukuhkan kedudukan di Tanah Melayu agar dipandang mulia oleh masyarakat Melayu dengan sanjungan yang diberikan oleh Abdullah Munshi karya *magnum opus*nya itu.. Bagi membalas sanjungan yang diberikan oleh Abdullah Munshi, pihak Barat memberi gelaran kepadanya sebagai ‘Bapa Kesusasteraan Melayu Moden’ atas penghasilan karya *Kisah Pelayaran Abdullah* walau penobatan Abdullah Munshi sebagai ‘Bapa Kesusasteraan Melayu Moden’ tidak disokong oleh kebanyakan sarjana Melayu. Hashim Awang (1996: 134) menyatakan bagaimana Abdullah Munshi dianggap sebagai ‘pengampu’ Inggeris sekali gus menolak karya-karyanya yang mendedahkan keburukan Melayu. Tertawannya Abdullah kepada dalam karya-karyanya terutama *Kisah Pelayaran Abdullah* (1970) membuktikan wujudnya ‘kesendengan’ dalam penobatan anugerah tersohor itu kepada Abdullah Munshi yang diterima sehingga kini.

Kesimpulan

Penobatan Abdullah Munshi sebagai tokoh yang memisahkan kesusasteraan Melayu kepada dua periodisasi perlulah dikaji semula secara ilmiah. Seorang tokoh yang dinobatkan perlulah mewakili masyarakatnya. Apatah lagi ‘watak tertawan’ Abdullah Munshi yang ditonjolkan dalam karyanya jelas membuktikan beliau sendeng kepada Barat. Sebagaimana pendapat Ungku Maimunah (1997:186) bahawa masyarakat Melayu terpaksa menerima ‘Bapa Kesusasteraan Melayu Moden’ yang telah ‘menyinggung’ konvensi sastera Melayu (Ungku Maimunah 1997:186). Apatah lagi penganugerahan Abdullah Munshi ini melunakkan kehadiran Barat ke tanah jajahan sebagai satu kuasa yang mampu memberi kebaikan kepada peribumi. Ini bersesuaian dengan pendapat Cohn (1996:46) bahawa pihak penjajah sentiasa dalam muslihatnya iaitu memastikan kehadiran mereka di tanah jajahan disenangi selaras dengan motto, ‘*Knowledge is Power*’. Ini dibuktikan menerusi pengalaman British di India iaitu, “*To appear legitimate in the eyes of the Indians, the British thought they had to demonstrate respect and interest in those Indians and institutions that were the carriers of the traditions*”. Maka, tidak hairanlah jika formula ini diteruskan oleh mereka ketika menjajah Tanah Melayu. Manakala bagi sebahagian sarjana yang menolak penobatan Abdullah mempercayai bahawa pengarang ‘moden’ yang hebat adalah pengarang yang kembali bertanggungjawabnya kepada khalayaknya. Misalnya pendapat Wang Gungwu yang dipetik oleh Hadijah Rahmat (2001:57) bahawa, “[...] *the sense of community or*

social responsibility is stronger than a writer's sense of individualism, and in fact the writer's studied invariably present the perceived need to hold on to one's culture in the face of change". Nyata, berdasarkan kajian ini konsep 'watak tertawan' oleh Alatas (2005) sangat menepati Abdullah Munshi dalam karyanya. Oleh itu, kajian-kajian lain yang mampu mencabar apa yang diwarisi sejak zaman kolonial ini perlulah diteruskan agar sesuatu yang benar dan telus dapat dihidangkan demi manfaat tanahair tercinta.

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AMALAN PENTAKSIRAN KEMAHIRAN PROSES SAINS OLEH GURU SAINS SEKOLAH MENENGAH DI NEGERI JOHOR

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Abstract: *This study aims to examine the practice of the Science Process Skills (SPS) assessment conducted by science teachers in secondary schools in Johor. A total of 254 teachers became survey respondents who answered 28 questions on the assessment methodology practiced in assessing the skills of the student science process skills in the classroom. In this study, four most commonly used assessment methods were selected based on the initial studies conducted. The four methods of assessment are oral questioning, test papers, worksheets and practical work. The information in this study was obtained through survey method using questionnaire instrument. Respondents made the choice of practice form of SPS assessment used by respondents in the classroom by frequency. The reliability index of the respondent is 0.90 showing a high and very good value with Cronbach Alpha value of 0.93. The findings of the study show that the method of worksheet is the most commonly used method with average measurements of -0.32 followed by practical work method (-0.19), oral questioning method (0.21) and most commonly used for estimating SPS is the test paper method (0.24). Although the range of each method is very small, it shows the four methods used by the teacher consistently during the assessment of SPS.*

Keywords: *Science Process Skill, Classroom Assessment, assessment practice*

Pengenalan

Pembelajaran sains mengutamakan kaedah inkuiri dan penyelesaian masalah, di mana kemahiran saintifik dan kemahiran berfikir digunakan. Kemahiran saintifik merupakan kemahiran yang penting untuk menjalankan sebarang aktiviti mengikut kaedah saintifik seperti menjalankan eksperimen dan projek. Kemahiran saintifik ini terdiri daripada kemahiran proses sains dan kemahiran manipulatif. Kemahiran proses sains adalah proses kognitif yang berlaku semasa murid menjalankan penyasatan dan berbeza dengan kemahiran manipulatif yang berbentuk psikomotor (Gott & Dugan, 1995). Kemahiran proses sains ialah kemahiran yang membolehkan murid menjalankan penyasatan dan mencari jawapan terhadap sesuatu fenomena atau kejadian secara bersistem (Harlen, 2000). Kemahiran proses sains setiap murid perlu diukur dan dinilai bagi membuktikan proses pembelajaran yang telah dijalankan berkesan atau tidak. Pelbagai cara dan kaedah pentaksiran digunakan oleh guru bagi mengesan perkembangan pembelajaran dan pencapaian akademik murid (Stiggins & Bridgeford, 1984). Cara dan kaedah pentaksiran juga bergantung pada tujuan sesuatu pentaksiran itu dijalankan (Ng, 1991).

Kemahiran Proses Sains

Kemahiran proses sains boleh dibahagikan kepada dua iaitu kemahiran proses sains asas dan kemahiran proses sains bersepadu (Padilla, 1980). Kemahiran proses sains asas (KPSA) merangkumi memerhati, mengelas, mengukur dan menggunakan nombor, membuat inferens, meramal, berkomunikasi dan menggunakan perhubungan ruang dan masa. Manakala kemahiran proses sains bersepadu (KPSB) pula merangkumi mentafsir maklumat, mendefinisi secara operasi, mengawal pembolehubah, membuat hipotesis dan mengeksperimen. Memerhati adalah satu proses utama dalam menjalankan

penyiasatandengan menggunakan deria penglihatan, pendengaran, sentuhan, rasa atau bau untuk mengumpulkan maklumat tentang objek dan fenomena. Mengelas adalah proses, mengasingkan dan mengumpulkan objek atau fenomena berdasarkan persamaan dan perbezaan yang dikenal pasti melalui proses pemerhatian yang telah dijalankan. Kemahiran mengukur dan menggunakan nombor adalah kemahiran yang membolehkan murid mengira dan membandingkan bilangan item dalam kumpulan yang berlainan, mengenali pola dalam jadual, menggunakan skala dan menerangkan nisbah dan lain-lain operasi melibatkan pengiraan dan menggunakan alat pengukuran. Inferens ialah kesimpulan awal yang dibuat untuk menerangkan sesuatu kejadian berdasarkan pengumpulan data dan pengalaman lalu untuk membuat kesimpulan dan menerangkan sesuatu peristiwa. Meramalkan adalah proses membuat jangkaan tentang sesuatu peristiwa berdasarkan dari pemerhatian yang ekstensif dan teliti serta ukuran yang jitu. Kemahiran berkomunikasi merangkumi kebolehan menggunakan perkataan, simbol grafik seperti jadual, graf, rajah atau model untuk menerangkan tindakan, objek atau peristiwa serta mendengar idea orang lain dan bertindak balas terhadap idea tersebut. Menggunakan perhubungan ruang dan masa pula adalah kemahiran untuk memperihalkan perubahan parameter seperti lokasi, arah, bentuk, saiz, isipadu, berat dan jisim dengan masa (PPK, 1994). Semua kemahiran asas tersebut mesti dikuasai oleh murid bagi membuktikan proses pembelajaran sains adalah berkesan (Roadranga *et al.* , 1996).

Pentaksiran Pendidikan

Pentaksiran pendidikan didefinisikan sebagai proses mengumpul, mensintesis dan mentafsir maklumat bagi membantu guru membuat kesimpulan terhadap tahap pencapaian dan proses pembelajaran yang telah dijalankan (Black, 1998). Payne (2003), mentafsirkan pentaksiran sebagai gabungan dari proses pengujian, pengukuran dan juga penilaian. Pentaksiran merangkumi proses pengujian, pengukuran dan penilaian serta proses mengesan kelemahan dan akhirnya disusuli dengan langkah penambahbaikan (Abu Bakar & Bhasah, 2008). Pentaksiran pendidikan sentiasa berkembang mengikut peredaran masa dan persekitaran. Penstrukturan semula sistem pentaksiran dilakukan agar dapat menyediakan hubungan yang lebih kuat antara pengajaran, pembelajaran dan pengukuran (Sedlacek, 2004; Sadler, 1989). Pentaksiran moden dikategorikan kepada 3 bahagian iaitu Pentaksiran Untuk Pembelajaran (PUP), Pentaksiran Sebagai Pembelajaran (PSP) dan Pentaksiran Tentang Pembelajaran (PTP) (KPM, 2018). PUP dikenali sebagai pentaksiran formatif yang merupakan sebahagian daripada proses PdP. Maklumat yang diperoleh daripada PUP boleh digunakan untuk merancang strategi atau langkah seterusnya dalam pengajaran ke arah meningkatkan pembelajaran murid dan tahap penguasaan mereka. PUP juga dikenali sebagai pentaksiran diagnostik. PSP berlaku apabila murid membuat refleksi dan menilai perkembangan pembelajaran masing-masing melalui pentaksiran sendiri dan pentaksiran rakan sebaya. Murid akan lebih memahami tujuan pembelajaran dan apa yang patut dilakukan bagi menguasai objektif pembelajaran. PSP memberi petunjuk kepada murid tentang tahap penguasaan mereka dalam pembelajaran. PTP dijalankan pada akhir sesuatu tempoh atau tajuk pembelajaran seperti ujian sumatif. PTP juga boleh dijalankan dalam bentuk pembentangan hasil projek dan lain-lain. Dapatan data pentaksiran bukan bertujuan untuk membandingkan antara murid tetapi digunakan untuk membantu meningkatkan tahap penguasaan murid (KPM, 2018).

Amalan Pentaksiran

Amalan pentaksiran adalah aktiviti yang biasa dilakukan atau sering dipraktikkan oleh guru dalam proses mengumpul maklumat tentang pembelajaran murid (Mohamad Azhar & Shahrir, 2007). Dalam kajian ini amalan pentaksiran adalah tertumpu hanya kepada kaedah bagaimana guru menjalankan pentaksiran terhadap kemahiran proses sains murid di dalam bilik darjah semasa proses pengajaran dan pembelajaran berlangsung. Kaedah pentaksiran boleh dibahagikan kepada dua kategori iaitu kaedah tradisional dan kaedah autentik. Kaedah tradisional adalah ujian yang menggunakan pensil dan kertas manakala kaedah autentik pula adalah pelbagai seperti kuiz, kertas kerja, kerja amali, soal selidik dan sebagainya (Doran *et al.* 1994). Antara kaedah yang biasa diamalkan semasa pentaksiran dalam bilik

darjah adalah ujian bertulis, pemerhatian dan penyoalan lisan (Abu Bakar Nordin, 1986; Airasian, 2008; Stiggins & Bridgeford, 1984). Memberi latihan dan kerjarumah juga merupakan satu amalan pentaksiran yang sering dilakukan oleh guru (Airasian, 2008). Kaedah pentaksiran lain yang boleh diamalkan terutama bagi mata pelajaran sains adalah ujian amali, kertas kerja, projek, soal selidik, inventori, perbincangan, senarai semak, skala sendiri, portfolio, dan temu bual (Alias, 2001). Dalam kajian ini, empat kaedah pentaksiran yang paling kerap diamalkan dipilih berdasarkan kajian awal yang telah dijalankan. Empat kaedah tersebut adalah penyoalan lisan, kertas ujian, lembaran kerja dan kerja amali.

Penyoalan lisan

Penyoalan lisan merupakan kaedah yang boleh membantu dalam proses pengajaran dan pembelajaran yang berkesan (Cimer, 2007). Aktiviti soal jawab antara guru dan pelajar boleh menjadi pengukur kepada keberkesanan proses pembelajaran (Berci & Griffith, 2005; Sahin, 2007). Kaedah penyoalan lisan amat diperlukan dalam proses penyiasatan secara saintifik terutamanya semasa kelas amali (Berci & Griffith, 2005). Penyoalan lisan yang dilakukan dengan teknik yang betul oleh guru mampu merangsang pemikiran pelajar dan mencungkil pengalaman lalu untuk mengetahui dengan lebih lanjut bagaimana untuk mendapatkan jawapan. Proses ini seterusnya akan meningkatkan Kemahiran Proses Sains pelajar semasa aktiviti amali dijalankan (Martin, Sexton, & Franklin, 2009). Pelajar sendiri dapat menilai tahap pemahaman mereka terhadap sesuatu konsep melalui proses soal jawab secara lisan ini (Muijs & Reynolds, 2005). Guru pula boleh menggunakan kaedah penyoalan lisan untuk mendapatkan maklumat tentang tahap pemahaman pelajar terhadap pembelajaran yang dijalankan secara seta merta (Martin et al., 2009). Penyoalan lisan yang dimaksudkan dalam kajian ini adalah soalan yang diucapkan oleh guru bagi tujuan menilai tahap kemahiran proses sains asas murid.

Kertas Ujian

Kertas ujian adalah tugas yang memerlukan murid memberikan respons secara bertulis dalam bentuk objektif atau subjektif (Lembaga Peperiksaan, 2014). Pentaksiran menggunakan alat ujian kertas dan pensel sering digunakan untuk mendapat maklumbalas tentang prestasi pelajar. Ujian boleh dibina samada ujian objektif atau ujian subjektif. Ariston (2007) menyatakan dalam melaksanakan pengukuran tahap pencapaian pelajar, kertas ujian berperanan penting untuk menilai status pemikiran pelajar. Dalam kajian ini kertas ujian yang dibina oleh guru adalah bertujuan untuk menilai tahap kemahiran proses sains asas murid di dalam bilik darjah.

Lembaran Kerja

Lembaran kerja adalah terdiri dari tugas yang memerlukan murid membuat laporan atau dokumen mengikut spesifikasi atau format yang ditetapkan, menghasilkan karya kreatif, ciptaan dan gubahan dalam bentuk tulisan atau bertulis (Lembaga Peperiksaan, 2014). Helaian tugas perlulah mengandungi soalan-soalan latihan untuk merangsang minda, menguji kefahaman dan mengaplikasikan pengetahuan pelatih berdasarkan teori yang telah dipelajari. soalan disediakan merujuk kepada hasil pembelajaran dengan menggunakan pelbagai jenis soalan dan lain-lain kaedah yang bersesuaian dengan tugas seperti kajian kes, perbincangan kumpulan dan sebagainya (Institut Pendidikan Guru, 2011). Dalam konteks kajian ini, lembaran kerja adalah helaian tugas yang diberikan kepada pelajar untuk diselesaikan bagi menilai tahap kemahiran proses sains asas murid.

Kerja Amali

Pentaksiran kerja amali adalah tugas yang memerlukan murid melakukan suatu proses kerja dan/atau menghasilkan sesuatu produk (Lembaga Peperiksaan, 2015). Collete & Chiapetta (1994) menyatakan bahawa kerja amali dapat membentuk sikap positif terhadap sains, sikap saintifik, inkuiri saintifik, pembinaan konsep dan kemahiran teknikal yang penting dalam pembelajaran sains. Pentaksiran kerja

amali di Malaysia bermula sekitar tahun 1972 kepada pelajar tingkatan 4 dan tingkatan 5 sebagaimana peperiksaan amali sains yang dijalankan di Britain (Alias, 2001). Pada tahun 1999, berlaku perubahan kepada sistem pentaksiran sains apabila pentaksiran kemahiran proses sains dijalankan secara formatif melalui kaedah rujukan kriteria yang dilaksanakan oleh guru di dalam bilik darjah yang dikenali sebagai PEKA Sains (Lembaga Peperiksaan, 1999). Dalam kajian ini kerja amali yang dijalankan oleh murid adalah bertujuan untuk menilai tahap kemahiran proses sains asas murid di dalam bilik darjah.

Methodologi Kajian

Kaedah yang digunakan untuk mendapatkan maklumat dalam kajian ini ialah kaedah tinjauan menggunakan instrumen soal selidik kerana ianya dapat mengumpul maklumat yang banyak daripada sampel berskala besar (Fraenkel & Wallen, 2012). Kaedah tinjauan juga membantu memperoleh maklumat yang dapat menerangkan fenomena dengan bertanya kepada individu mengenai persepsi, sikap, tingkah laku atau nilai-nilai (Fraenkel & Wallen, 2012). Kaedah ini sangat sesuai digunakan untuk mengukur pendapat, sikap dan tingkahlaku (Chua, 2011). Penyelidikan yang digunakan dalam kajian ini adalah penyelidikan kolerasi yang merupakan penyelidikan jenis deskriptif (Wan Azlinda, 2013). Penyelidikan korelasi dikelaskan sebagai salah satu daripada kajian kuantitatif. Penyelidikan deskriptif sesuai digunakan untuk mengkaji tentang sesuatu kejadian yang sedang berlaku. Penyelidikan korelasi mencari hubungan antara dua atau lebih pemboleh ubah dengan menggunakan kaedah statistik. Penyelidikan ini mampu menilai kekuatan dan arah hubungan antara pemboleh ubah tetapi tidak boleh digunakan untuk menentukan sebab atau penyebab kepada hubungan tersebut (Graziano & Raulin, 2013).

Kaedah Persampelan yang digunakan dalam kajian ini adalah menggunakan kaedah persampelan rawak kelompok atas kelompok. Populasi kajian ini terdiri dari guru-guru yang mengajar mata pelajaran Sains KBSM di sekolah menengah kebangsaan (SMK) harian biasa di bawah seliaan Jabatan Pendidikan Negeri Johor. Populasi guru yang mengajar mata pelajaran sains menengah rendah adalah di antara 458 orang hingga 687 orang. Bagi memastikan data yang dikumpul mewakili populasi secara optimum nilai maksimum bilangan guru diambil sebagai nilai populasi guru yang mengajar sains menengah rendah di negeri Johor. Berdasarkan jadual persampelan Krejcie dan Morgan (1970), apabila bilangan populasi adalah seramai 700 orang, bilangan sampel yang diperlukan adalah 248 orang dengan tahap keyakinan 95% dan margin ralat 0.05. Sebanyak 55 buah sekolah telah dipilih dengan setiap sekolah diwakili 5 orang guru yang mengajar mata pelajaran sains. Persampelan yang dilakukan untuk memilih sampel sekolah adalah melalui kaedah persampelan rawak kelompok atas kelompok bermula dari peringkat negeri (JPN), daerah (PPD), sekolah (SMK) dan akhirnya menggunakan persampelan bertujuan untuk memilih lima orang guru yang mengajar mata pelajaran sains (Najib, 2003). 256 respon yang boleh digunakan telah diterima dalam kajian ini. Ini bermakna 93.0% instrumen telah dijawab dan dipulangkan semula kepada pengkaji untuk dianalisis. Baki 7.0% lagi instrumen adalah bermasalah sama ada tidak dipulang kembali atau tidak dijawab dengan sempurna oleh responden.

Analisis data kajian adalah berdasarkan Model Pengukuran Rasch. Analisis yang dijalankan menggunakan Perisian Winstep 3.72.3 adalah analisis kebolehppercayaan individu (person reliability), indeks pengasingan (separation index), kesesuaian individu (person fit), kesesuaian item (fit item), ketidaksepadanan item (misfit item), polariti item (item polarity), peta item-individu (item-person map), analisis residual dimensionaliti (analysis of residual dimensionality) dan skala pemeringkatan (rating scale) (Bond & Fox, 2007; Pallant & Tennant, 2007). Data juga akan dianalisis dengan menggunakan perisian Statistical Package for Social Science (SPSS) 22 bagi mendapatkan nilai regrasi dan kolerasi. Analisis Korelasi digunakan untuk menentukan hubungan antara Amalan Pentaksiran Kemahiran Proses Sains (APKPS), terhadap kemahiran-kemahiran proses sains itu sendiri. Terdapat beberapa item statistik digunakan untuk mencari korelasi antara dua pemboleh ubah tersebut seperti Khi Kuasa Dua, Spearman dan Pearson.

Instrumen Kajian

Dalam kajian ini, pengkaji menggunakan kaedah kuantitatif sepenuhnya. Kajian ini dijalankan secara tinjauan (survey) dengan objektif untuk meninjau Amalan Pentaksiran KPS (APKPS). Instrumen yang digunakan adalah instrumen Soal Selidik yang akan diedarkan kepada guru-guru sains Sekolah Menengah Kebangsaan. Instrumen ini yang merangkumi Bahagian Demografi Gurudan Bahagian APKPS. Instrumen ditadbir ke atas 249 orang responden yang terdiri dari guru-guru yang mengajar Sains di SMK di negeri Johor. Soal selidik digunakan bagi membolehkan penyelidik melihat taburan sampel mengikut item dan konstruk yang ditetapkan. 28 item yang merupakan pilihan amalan atau bentuk pentaksiran KPS yang digunakan oleh responden dalam bilik darjah mengikut kekerapan. Berdasarkan kajian awal yang dijalankan, empat amalan yang dipilih adalah penyoalan lisan, lembaran kerja, kertas ujian dan kerja amali (Gronlund, 2006; Stiggins & Conklin, 1992). Skala yang digunakan adalah merupakan skala kekerapan 1 hingga 5 dengan penafsiran seperti berikut:

- 1: Tidak pernah digunakan
- 2: Paling jarang digunakan
- 3: Jarang digunakan
- 4: Kerap digunakan
- 5: Paling Kerap digunakan

Ciri-ciri psikometrik instrumen yang digunakan berdasarkan Nilai Cronbach Alpha adalah 0.93 yang menunjukkan keupayaan instrumen boleh dipercayai dan diterima (Chua, 2006; Jamil, 2010) untuk mengukur konsep kajian dengan sangat baik dan efektif serta mempunyai tahap konsistensi yang tinggi (Bond & Fox 2007). Indeks pengasingan responden adalah 4.02 yang mampu membahagi responden kepada empat tahap sangat tinggi, tinggi, sederhana, dan rendah. Indeks kebolehpercayaan item adalah 0.84 menunjukkan nilai yang tinggi, baik dan boleh diterima. Ini menunjukkan item adalah stabil dan konsisten jika digunakan kepada responden yang lain dengan ciri-ciri yang sama. Indeks pengasingan item adalah 2.33 yang menjelaskan terdapat dua aras kekerapan item yang berbeza dalam kajian ini. Semakin tinggi aras pengasingan item ini maka instrumen pengukuran adalah lebih baik kerana diasingkan dengan kesukaran yang berbeza-beza. nilai maksimum outfit/infit adalah 1.55/1.51 menunjukkan semua item adalah dalam julat kesesuaian. Nilai minimum Outfit/Infit adalah 0.65/0.51 menunjukkan item adalah sesuai atau fit dengan model pengukuran Rasch berdasarkan nilai yang boleh diterima baik.

Dapatan Kajian

Dapatan kajian ini adalah berkaitan analisis demografi responden dan Analisis Amalan Pentaksiran KPS (APKPS).

Analisis Demografi

Jadual 1 menunjukkan demografi responden bagi kajian ini adalah seramai 256 orang yang terdiri dari guru-guru yang mengajar mata pelajaran Sains di sekolah menengah di negeri Johor.

Jadual 1: Analisis demografi responden

Faktor Demografi	Faktor	Frekuensi, n	Peratus, %
Jantina	Lelaki	49	19.1
	Perempuan	207	80.9
Kelulusan Iktisas	Diploma Perguruan	31	12.1
	Ijazah Sarjana Muda	210	82.0
	Sarjana	14	5.5
	Doktor Falsafah	1	0.4
	Sains dan Matematik	237	92.6
Bidang/Opsyen Iktisas	Sains Kemasyarakatan	5	2.0
	Bahasa	1	0.4
	Teknik dan Vokasional	11	4.3
	Kurang dari 5 tahun	109	44.3
	5 ke 10 tahun	62	24.2
	10 ke 15 tahun	40	15.6
Pengalaman Mengajar	15 ke 20 tahun	31	12.1
	Lebih 20 tahun	4	1.6
	Pernah	169	66.5
	Tidak pernah	85	33.5
	Pernah	113	52.6
	Tidak pernah	118	47.4

Responden terdiri dari 49 orang lelaki dan 207 orang perempuan. Ini bermakna 80.9% responden adalah dari kalangan guru perempuan. Responden yang terlibat dalam kajian ini keseluruhannya mempunyai kelulusan iktisas dalam bidang pendidikan bagi melayakkan mereka mengajar di sekolah menengah. Golongan yang paling ramai adalah guru yang mempunyai kelayakan peringkat Ijazah Sarjana Muda seramai 210 (82.0%) diikuti oleh guru berkelulusan Diploma Perguruan 12.1%, Sarjana Pendidikan 5.5% dan seorang guru berkelulusan Doktor Falsafah bidang pendidikan mewakili 0.4%.

Responden yang terlibat dalam kajian ini hampir keseluruhannya dari bidang/opsyen iktisas Sains dan Matematik. Walaubagaimanapun terdapat 4.3% guru sains dari bidang Teknik dan Vokasional, 2% dari bidang Sains Kemasyarakatan dan 0.4% dari bidang Bahasa yang merupakan guru yang mengajar di luar opsyen masing-masing. Pengalaman mengajar responden kajian ini dibahagikan kepada lima kategori iaitu kurang lima tahun, lima hingga 10 tahun, 10 hingga 15 tahun, 15 hingga 20 tahun dan lebih 20 tahun. Hasil dapatan mendapati golongan paling ramai yang mengambil bahagian sebagai responden adalah yang mempunyai pengalaman mengajar kurang dari lima tahun mewakili 44.3%, diikuti guru berpengalaman lima hingga 10 tahun 24.2%, berpengalaman 10 hingga 15 tahun 15.6%, berpengalaman 15 hingga 20 tahun 12.1%, guru baru kurang dari tiga tahun pengalaman 10.5% dan guru berpengalaman lebih 20 tahun 1.6%.

Didapati 33.5% responden terdiri dari guru yang menjalankan pentaksiran terhadap pelajar tidak pernah menghadiri Program Peningkatan Profesionalisme yang berkaitan tentang pentaksiran. Walaubagaimanapun 66.5% daripadanya pernah menghadiri program tersebut. Bagi kehadiran ke Program Peningkatan Profesionalisme yang berkaitan tentang Kemahiran Proses Sains pula, didapati 52.6% responden yang terdiri dari guru mata pelajaran sains pernah menghadirinya, manakala 47.4% lagi tidak pernah menghadiri program tersebut. Didapati juga 102 orang guru pernah menghadiri kedua-dua Program Peningkatan Profesionalisma yang berkaitan pentaksiran dan KPS, 67 orang pernah menghadiri Program Peningkatan Profesionalisma yang berkaitan pentaksiran sahaja, 17 orang pula menghadiri Program Peningkatan Profesionalisma yang berkaitan KPS sahaja manakala 70 orang lagi tidak pernah menghadiri mana-mana Program Peningkatan Profesionalisma yang berkaitan pentaksiran atau KPS.

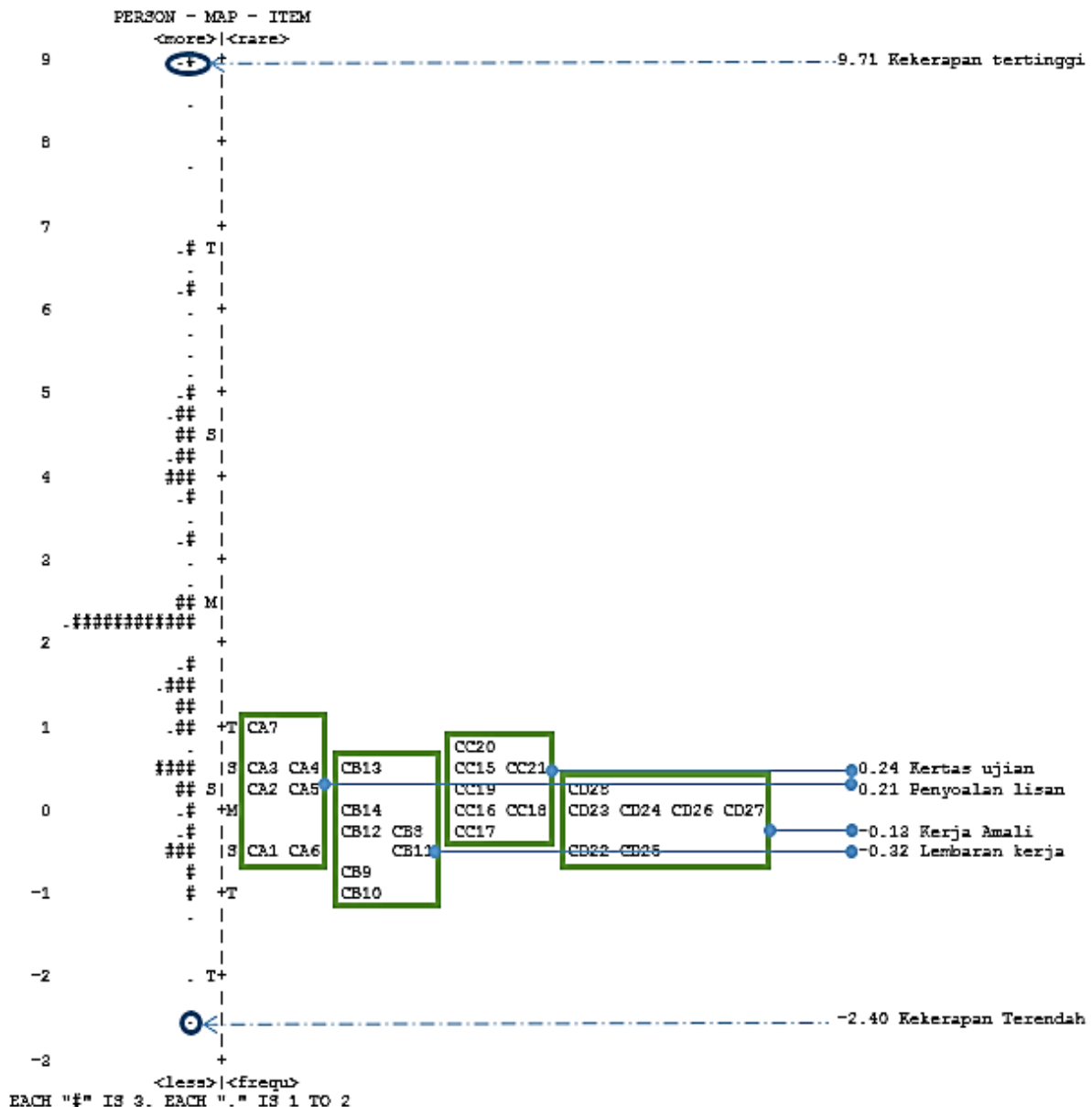
Analisis Amalan Pentaksiran KPS (APKPS)

Merujuk Rajah 1, dari peta tersebut dapat dilihat kedudukan lengkuk responden adalah lebih tinggi berbanding item. Ini menggambarkan bahawa responden mengamalkan setiap kaedah pentaksiran dengan kerap. Taburan item-item agak terkumpul pada bahagian tengah peta yang bermaksud item-item mempunyai aras kekerapan yang hampir sama. Ini menunjukkan guru-guru menggunakan pelbagai kaedah semasa menjalankan pentaksiran KPS. Jadual menunjukkan susunan kaedah lembaran kerja adalah kaedah yang paling kerap digunakan 2 dengan ukuran purata -0.32 diikuti dengan kaedah kerja amali (-0.19), kaedah penyoalan lisan (0.21) dan yang paling jarang digunakan untuk mentaksir KPS adalah kaedah kertas ujian (0.24). Walaupun begitu julat antara setiap kaedah adalah amat kecil yang menunjukkan keempat-empat kaedah digunakan oleh guru secara konsisten semasa menjalankan pentaksiran KPS.

Jadual 2: Susunan kaedah pentaksiran mengikut aras persetujuan

Kaedah	Pengukuran	Interpretasi
Lembaran kerja	-0.32	Paling kerap digunakan
Kerja amali	-0.19	
Penyoalan lisan	0.21	
Kertas ujian	0.24	Paling jarang digunakan

INPUT: 256 PERSON 28 ITEM REPORTED: 195 PERSON 28 ITEM 4 CATS WINSTEPS 3.72.3

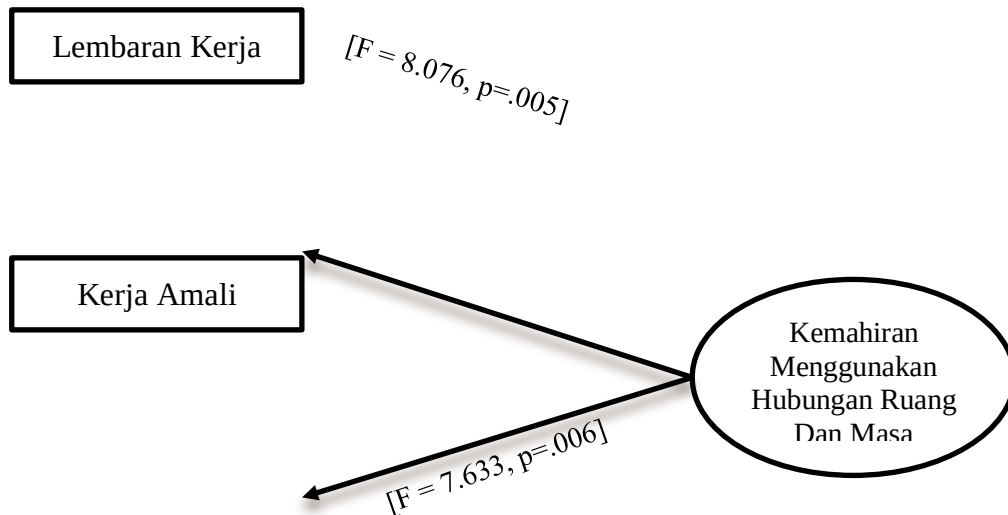


Rajah 1 : Wright Map Taburan Item dan Kebolehan Responden Bagi Item APKPS

Analisis APKPS Terhadap KPS

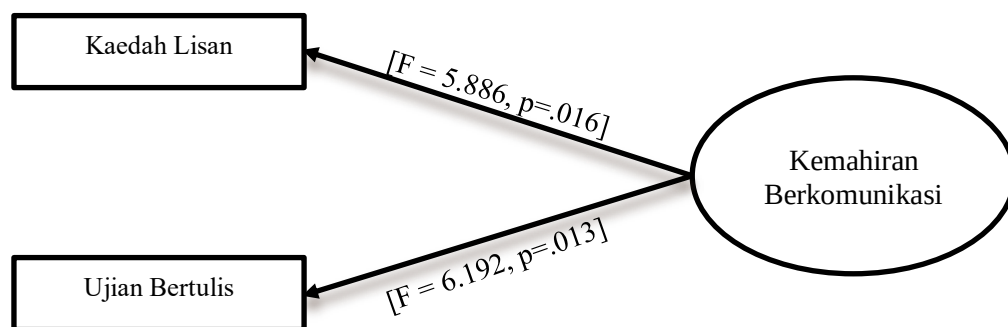
Keputusan analisis regresi pelbagai menunjukkan bagi populasi 254 orang guru sains hanya satu variabel peramal iaitu kemahiran menggunakan hubungan ruang dan masa merupakan faktor peramal kepada amalan pentaksiran KPS menggunakan kaedah lembaran kerja dan pentaksiran melalui kerja amali. Kemahiran-kemahiran proses sains lain bukan merupakan faktor bagi kekerapan penggunaan kaedah pentaksiran menggunakan kaedah lembaran kerja dan kerja amali. Secara signifikan, kemahiran berkomunikasi [$F(1,254) = 8.076, p < .05$] menyumbang kepada 3.1 peratus varian ($R^2 = .031$) dalam kekerapan penggunaan kaedah lembaran kerja. Ini bererti bahawa kemahiran menghubungkan ruang dan masa ($\beta = .18, p < .05$) merupakan petunjuk utama penggunaan kaedah lembaran kerja. Kemahiran berkomunikasi [$F(1,254) = 7.633, p < .05$] juga menyumbang kepada 2.5 peratus varian ($R^2 = .025$) dalam kekerapan penggunaan kaedah kerja amali. Ini bererti bahawa kemahiran menghubungkan ruang dan masa ($\beta = .17, p < .05$) merupakan petunjuk utama penggunaan kaedah kerja amali. Rajah 2 menunjukkan

hubungan faktor peramal kepada amalan pentaksiran KPS menggunakan kaedah lembaran kerja dan pentaksiran melalui kerja amali



Rajah 2 : Faktor Peramal Bagi APKPS Lembaran Kerja Dan Kerja Amali

Bagi amalan pentaksiran KPS menggunakan kaedah lisan dan ujian bertulis pula hanya satu variabel peramal yang merupakan faktor peramal iaitu kemahiran berkomunikasi. Kemahiran-kemahiran lain bukan merupakan faktor bagi kekerapan penggunaan kaedah pentaksiran lisan dan ujian bertulis. Secara signifikan, kemahiran berkomunikasi $[F(1,254) = 5.886, p < .05]$ menyumbang kepada 2.3 peratus varian ($R^2 = .023$) dalam kekerapan penggunaan kaedah lisan. Ini bererti bahawa kemahiran berkomunikasi ($\beta = .15, p < .05$) merupakan petunjuk utama penggunaan kaedah lisan. Kemahiran berkomunikasi $[F(1,254) = 6.192, p < .05]$ juga menyumbang kepada 2.4 peratus varian ($R^2 = .024$) dalam kekerapan penggunaan kaedah ujian bertulis. Ini bererti bahawa kemahiran berkomunikasi ($\beta = .15, p < .05$) merupakan petunjuk utama penggunaan kaedah ujian bertulis. Rajah 3 menunjukkan faktor kepada kaedah ujian lisan dan ujian bertulis.



Rajah 3 : Faktor Peramal Bagi APKPS Kaedah Lisan Dan Ujian Bertulis

Kesimpulan

Hasil dapatan kajian ini menunjukkan bahawa Amalan Pentaksiran Kemahiran Proses Sains yang sering dijalankan di dalam bilik darjah adalah pelbagai bergantung kepada keperluan dan kesesuaian kemahiran yang akan ditaksir. Kaedah pentaksiran yang paling kerap digunakan adalah kaedah lembaran kerja, diikuti dengan kaedah kerja amali, kaedah penyoalan lisan dan yang paling jarang digunakan adalah kaedah kertas ujian. Faktor utama pemilihan kaedah lembaran kerja dan kerja amali adalah pentaksiran kemahiran menghubungkan ruang dan masa manakala faktor pemilihan kaedah pentaksiran lisan dan ujian bertulis pula ialah pentaksiran kemahiran berkomunikasi.

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KESEDIAAN GLOBAL KANAK-KANAK PRASEKOLAH

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Abstrak: Kajian ini bertujuan untuk mengenalpasti kesediaan global kanak-kanak yang berumur enam tahun di prasekolah berasaskan tujuh iaitu (a) kemahiran komunikasi dan kebolehan berbahasa pelbagai (b) kemahiran ICT (c) kepelbagaian budaya (d) kemahiran berfikir aras tinggi (e) kemahiran pemeliharaan alam sekitar (f) kemahiran literasi kewangan dan (g) kemahiran asas keselamatan serta pertahanan diri. Kajian ini menggunakan pendekatan kuantitatif dengan menggunakan soaljawab bertulis berdasarkan gambar dengan melihat beberapa aspek yang diperincikan daripada tujuh aspek yang dinyatakan. Sampel kajian terdiri daripada lapan puluh empat orang kanak-kanak prasekolah dari lima buah prasekolah daerah Mualim, Perak. Data dianalisis dengan melihat perbezaan min dalam Pendidikan Kesediaan Global. Dapatan menunjukkan pengetahuan kanak-kanak yang paling tinggi adalah pengetahuan dalam bahasa (min=.90) dan komunikasi (min=.87) dan pengetahuan kanak-kanak dalam kemahiran pemeliharaan alam sekitar dan keselamatan (min= .90) adalah yang paling rendah daripada kesemua aspek yang dilihat. Dapatan ini menunjukkan kanak-kanak perlu diberi pendidikan dalam kesediaan global untuk menyediakan mereka dengan pengetahuan berdasarkan ketujuh aspek tersebut supaya mereka lebih bersedia menghadapi senario yang sentiasa berubah di peringkat global. Diharap pendidik di peringkat prasekolah dapat merancang aktiviti yang lebih memberi pendedahan kepada kesediaan global kanak-kanak di peringkat prasekolah.

Kata kunci: pendidikan, kesediaan global, pengetahuan

Pengenalan

Global membawa makna dunia seagat dan juga merujuk kepada sesuatu yang luas serta tidak terbatas kepada sesuatu perkara (Kamus Dewan, 2013). Dalam konteks tanpa sempadan, global merangkumi aspek sosial, budaya, ekonomi dan politik (UNESCO, 2015).

Pendidikan di Malaysia adalah suatu usaha berterusan ke arah memperkembangkan lagi potensi individu secara menyeluruh dan bersepadu untuk mewujudkan insan yang seimbang dan harmonis dari segi intelek, rohani, emosi dan jasmani. (Pelan Pembangunan Pendidikan Malaysia, 2012). Sistem pendidikan dunia telah berkembang secara pesat dalam menongkah arus revolusi dunia. Pelbagai penambahbaikan dilaksanakan dan sistem pendidikan di Malaysia berkembang seiring dengan perubahan dan isu semasa. Pembangunan dan pengukuhan sistem pendidikan ini bertujuan untuk mencapai hasrat pendidikan yang berkualiti.

Dalam Kurikulum Standard Prasekolah Kebangsaan elemen kelestarian Global merupakan salah satu elemen merentas kurikulum yang menjadi nilai tambah dan perlu diterapkan dalam proses pengajaran dan pembelajaran selain yang ditetapkan dalam standard kandungan. Elemen ini

bermatlamatkan melahirkan murid berdaya fikir lestari yang bersikap responsive terhadap persekitaran dalam kehidupan harian dengan mengaplikasikan pengetahuan, kemahiran dan nilai yang diperoleh melalui elemen Penggunaan dan Pengeluaran Lestari, Kewarganegaraan Global dan Perpaduan. Pengetahuan global penting dalam menyediakan murid bagi menghadapi cabaran dan isu semasa di peringkat tempatan, negara dan global. Elemen ini diajar secara langsung dan secara sisipan dalam mata pelajaran yang berkaitan.

Latar Belakang Kajian

Sistem pendidikan di Malaysia menerima konsep kemahiran abad ke-21 iaitu perkembangan sendiri, identiti budaya dan keantarabangsaan, kemahiran media dan komunikasi, warganegara partisipatif, bertanggungjawab terhadap persekitaran, menitikberatkan kesihatan diri dan masa depan yang lestari (Pelan Pembangunan Pendidikan Malaysia, 2012). Konsep kemahiran abad ke-21 ini diadaptasi agar bersesuaian dengan konteks tempatan dalam melahirkan pelajar holistik di peringkat global.

Setiap elemen dalam kelestarian global dibangunkan bertunjangkan konsep, tema dan kemahiran yang relevan dengan keperluan semasa untuk menghadapi cabaran Abad Ke-21. Kelestarian global yang mencakup elemen penggunaan dan pengeluaran lestari, kewarganegaraan global serta perpaduan sejagat (KPM, 2016) dilaksanakan melalui aktiviti pengajaran dan pembelajaran serta kokurikulum.

Pertubuhan Bangsa-Bangsa Bersatu (PBB) telah melancarkan tujuh belas matlamat global iaitu Sustainable Development Goals (SDGs) bertujuan untuk membasmi kemiskinan, memelihara bumi dan memastikan kesejahteraan sejagat. Matlamat global ini turut menyelitkan agenda baharu yang berfokus kepada pendidikan. Satu daripada tujuh belas matlamat SDGs ialah Pendidikan 2030 mempromosikan pendidikan berkualiti yang inklusif dan saksama serta peluang pembelajaran sepanjang hayat untuk semua.

Kandungan Pelan PPPM 2013-2025 adalah selari dengan deklarasi SDG 4 dan hasrat kurikulum kebangsaan bagi memastikan generasi akan datang dapat menyumbang kepada pembangunan ekonomi, sosial dan alam sekitar secara lestari. Kesediaan global dalam kajian ini adalah selari dengan Kelestarian global yang mencakupi elemen yang telah dinyatakan tetapi dalam kesediaan ini aspek yang dilihat adalah bersesuaian dengan kanak-kanak untuk memberi pendedahan awal kepada mereka tentang isu dan masalah global yang berlaku di persekitaran mereka dan negara-negara luar.

Literature Review

Pemahaman tentang pertumbuhan dan perkembangan kanak-kanak segi domain perkembangan kanak-kanak dan kesediaan sekolah telah berubah seiring dengan revolusi semasa. Oleh hal demikian, kurikulum yang digubal berasaskan kemahiran abad ke-21 harus dilaksanakan dengan sewajarnya agar sesuai dengan kehendak dan fitrah kanak-kanak. Pendidikan kesediaan global merangkumi aspek (a) kemahiran komunikasi dan kebolehan berbahasa pelbagai (b) kemahiran ICT (c) kepelbagaian dan multikulturalisme (d) kemahiran berfikir aras tinggi (e) kemahiran pemeliharaan dan pemuliharaan alam sekitar (f) kemahiran literasi kewangan dan (g) kemahiran asas keselamatan serta pertahanan diri.

Keperluan pendidikan kesediaan global seiring dengan Puchta (2012) bahawa menghubungkan dengan kehendak dunia alaf baru menuntut pengetahuan mengenai kesediaan global yang merangkumi perbezaan budaya, teknologi, kecekapan, kemahiran berfikir alam sekitar dan kecerdasan emosi. Bagi menghadapi cabaran pendidikan Abad ke-21, maka pelajar tidak seharusnya memandang enteng impak pelaksanaan elemen kelestarian global melalui aktiviti pengajaran dan pembelajaran. Komponen kesediaan global sewajarnya diterapkan ke dalam kurikulum tradisional yang merangkumi dimensi fizikal, sosial, emosi, moral, dan kreativiti. (Rohaty, 2013; Rohaty dan Hamidah, 2014).

Hal ini adalah kerana, elemen kesediaan global ini menjadi tunggak perkembangan sendiri, identiti budaya dan keantarabangsaan, kemahiran media dan komunikasi, warganegara partisipatif,

bertanggungjawab terhadap persekitaran, menitikberatkan kesihatan diri dan masa depan yang lestari. Pembangunan kesediaan global ini amat sinonim dengan konsep Local Agenda 21 (LA21) yang mula diperkenalkan pada Persidangan Earth Summit di Rio de Janeiro, Brazil pada 3 hingga 14 Jun 1992. LA21 merangkumi 40 bab yang menjelaskan keperluan pembangunan kesediaan global. Malaysia merupakan salah satu daripada 78 negara negara yang menandatangani LA21.

Bagi menyokong dasar ini, maka Malaysia telah melaksanakan pembangunan sebuah bandar pentadbiran dengan konsep lestari. Pelaksanaan bandar pentadbiran ini sejajar dengan matlamat LA21 dan merupakan perintis dan ikon pembangunan. Konsep lestari ini turut mengambilkira aspek pentadbiran konsep hijau, sistem penilaian lingkungan, penyimpanan 10 peratus tenaga dan penggunaan air pada bangunan kerajaan serta garis dasar pelepasan karbon yang berfokuskan pada elemen kemahiran pemeliharaan dan pemuliharaan alam sekitar dalam modul kesediaan global.

Kemahiran abad ke-21 merangkumi ketahanan, kemahiran komunikasi dan teknologi maklumat, kemahiran berfikir, kemahiran *teambuilding*, perasaan ingin tahu dan kreativiti. Konsep kesediaan global dapat difahami dengan lebih baik dengan penggunaan teknologi maklumat yang hebat, memperluas kemahiran dan komunikasi tanpa sempadan lantas menjadikan pendidikan dan kesediaan global menjadi lebih interaktif dan bersifat saling bergantung.

Pertubuhan Bangsa-Bangsa Bersatu (PBB) telah melancarkan tujuh belas matlamat global iaitu Sustainable Development Goals (SDGs) bertujuan untuk membasmi kemiskinan, memelihara bumi dan memastikan kesejahteraan sejagat. Matlamat global ini turut menyelitkan agenda baharu yang berfokus kepada pendidikan. Sustainable Development Goals (SDGs) mendukung matlamat pelaksanaan Modul Kesediaan Global Kanak-kanak Prasekolah yang menekankan pendidikan berkualiti sebagai asas dan tunjang kepada pembangunan kesediaan global. Natijah daripada kurangnya pendidikan berkualiti, lebih 265 juta kanak-kanak sedang keluar sekolah dan 22% daripadanya adalah usia sekolah rendah.

Pendidikan kurang kualiti merangkumi aspek infraskruktur bangunan sekolah, isi ekuiti dan masalah akses air dan elektrik yang menyukarkan pengalaman pengajaran yang optima. Pendidikan inklusif merupakan kunci kepada masyarakat tempatan untuk meningkatkan kualiti hidup dengan mengembangkan kemahiran berfikir aras tinggi dalam elemen kesediaan global.

Metodologi

Kajian ini dijalankan secara kuantitatif. Instrumen yang digunakan ialah satu set soalan berulis untuk mengenalpasti pengetahuan kanak-kanak dalam kesediaan global berdasarkan tujuh aspek iaitu (a) kemahiran komunikasi dan kebolehan berbahasa pelbagai (b) kemahiran ICT (c) kepelbagaian dan multikulturalisme (d) kemahiran berfikir aras tinggi (e) kemahiran pemeliharaan alam sekitar (f) kemahiran literasi kewangan dan (g) kemahiran asas keselamatan serta pertahanan diri.

Populasi dalam kajian ini adalah terdiri daripada kanak-kanak prasekolah di daerah Muallim Perak. Seramai 84 orang kanak-kanak prasekolah telah dipilih secara rawak daripada lima buah prasekolah sebagai sampel kajian. Instrumen diedarkan kepada kanak-kanak dan mereka menjawab berdasarkan pengetahuan mereka terhadap tujuh aspek yang dilihat dalam kesediaan global

Dapatan Kajian

Dapatan kajian dihuraikan berdasarkan analisis secara min untuk menunjukkan kesediaan global kanak-kanak dalam ketujuh aspek yang telah dinyatakan. Setiap aspek mempunyai soalan yang berkaitan kesediaan global kanak-kanak selari dengan standard pembelajaran dalam Kurikulum Standard Prasekolah

Jadual 1.
Perbandingan Min Mengikut Item Kesediaan Global.

Item	Min	Sisihan Piawai
Komunikasi	.87	.22
Kepelbagaian Budaya	.88	.19
Kemahiran Berfikir	.80	.26
Kemahiran ICT	.79	.25
Kemahiran Literasi	.69	.26
Kewangan		
Kemahiran penjagaan alam sekitar	.69	.26
Keselamatan	.89	.17

Berdasarkan dapatan daripada analisis kesediaan global kanak-kanak prasekolah terhadap tujuh aspek yang dilihat menunjukkan aspek keselamatan mempunyai min yang tinggi iaitu .89. Aspek keselamatan yang dilihat ialah pengetahuan dalam seni mempertahankan diri, kesedaran tentang bahaya di persekitaran dan keselamatan diri.

Aspek kemahiran berfikir mempunyai min yang sederhana daripada ketujuh aspek lain iaitu .80. Dalam aspek kemahiran berfikir yang dilihat ialah kemahiran kanak-kanak menyelesaikan masalah, keupayaan membuat ramalan, kemahiran memberi jawapan kreativiti dan mempunyai rasa ingin tahu yang tinggi.

Aspek yang paling rendah dengan min .69 ialah kemahiran literasi kewangan dan kemahiran ICT. Kemahiran literasi kewangan melihat pengetahuan kanak-kanak mengenai matawang dan nilai wang, pengetahuan tentang tabungan dan sikap positif dalam pengurusan wang. Aspek ICT adalah berkaitan kemahiran dan pengetahuan kanak-kanak menggunakan komputer, pengetahuan dan kemahiran mengakses laman web dan mengenali logo untuk enjin carian.

Perbincangan, Cadangan dan Implikasi

Dapatan kajian kesediaan global kanak-kanak menunjukkan kanak-kanak diperingkat prasekolah perlu didedahkan dengan pengetahuan dalam kesediaan global untuk memenuhi keperluan dalam kesinambungan dunia yang semakin mencabar dengan isu-isu global seperti perbezaan budaya, teknologi, ICT, kemahiran berfikir, pengetahuan tentang alam sekitar dan kecerdasan emosi (Puchta, 2012). Dapatan menunjukkan pengetahuan kanak-kanak dalam literasi kewangan dan kemahiran ICT sangat rendah di peringkat prasekolah. Pengetahuan tentang pengurusan kewangan dan pengetahuan tentang nilai wang dalam dan luar negara sangat penting untuk mereka di masa akan datang. Pengetahuan dalam literasi kewangan akan membantu kanak-kanak untuk mengurus kewangan di peringkat awal dengan baik untuk jaminan masa depan yang cerah. Persekitaran ekonomi dan sosial berubah pada kadar yang semakin meningkat di bandar-bandar besar di seluruh dunia. Oleh itu masalah kewangan dari pelbagai lapisan masyarakat untuk menjana peluang pekerjaan dan meraih kekayaan adalah isu globalisasi yang kian meningkat. Generasi muda perlu diberi pendidikan dan kesediaan global bagi menghadapi masalah yang mencabar yang melibatkan isu kewangan. (Lee & Law, 2011)

Kebanyakan bilik darjah prasekolah tidak menyediakan kemudahan komputer dan capaian internet untuk memudahkan kanak-kanak mengakses maklumat berkaitan aspek global di bilik darjah. Hampir kebanyakan guru prasekolah menggunakan komputer riba milik sendiri untuk mencari bahan pengajaran dan pembelajaran dan kegunaannya adalah secara peribadi. Oleh itu kanak-kanak kurang didedahkan dengan penggunaan ICT kecuali kanak-kanak yang datang daripada golongan berkemampuan mampu memiliki semua kemudahan ini di rumah. Selari dengan dunia globalisasi, pengetahuan ICT sangat penting didedahkan diperingkat awal secara terkawal untuk melahirkan generasi celik teknologi di masa akan datang kelak.

Pengaruh media seperti televisyen dan telefon mudah alih telah memberi peluang kepada kanak-kanak untuk mempelajari bahasa luar negara seperti Korea, Mandarin dan Bahasa Inggeris dengan mudah. Mereka boleh mengecam ayat-ayat mudah dalam bahasa negara-negara tersebut kerana sering melihatnya dalam televisyen atau “Youtube”. Menurut Fan, Liberman, Keysar dan Kinzler (2015) pendedahan kepada persekitaran yang mempunyai social dalam aspek kepelbagaian budaya dapat memberi impak kepada komunikasi kanak-kanak di peringkat awal

Kesimpulan

Perbincangan menunjukkan pengetahuan dalam kesediaan Global kanak-kanak prasekolah perlu dilaksanakan dalam pengajaran dan pembelajaran di prasekolah untuk meningkatkan pengetahuan kanak-kanak dalam tujuk aspek dalam kesediaan global bagi menyediakan kanak-kanak yang kompeten di peringkat global selari dengan perubahan masa. Selain itu, pengetahuan dalam Kesediaan Global di peringkat awal ini banyak memberi kesan atau impak kepada mereka untuk menerus atau berdepan dengan dunia yang semakin mencabar dan dapat melonjakkan prestasi kanak-kanak dalam pendidikan selari dengan kanak-kanak di seluruh dunia.

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KEPELBAGAIAN PENGHASILAN WARNA LICAU: KAJIAN EKSPERIMENTASI PENGGUNAAN PELBAGAI JENIS BAHAN SEMULAJADI DI SABAH

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Abstrak: *Seramik merupakan objek seni yang tertua sekali pernah dihasilkan oleh manusia sejak zaman pra sejarah lagi. Keramik terhasil dari tanah liat atau tembikar dan akan bertukar karakter apabila didedahkan pada suhu yang tinggi melebihi 1200 darjah celsius (°C). Produk seramik diliputi dengan lapisan kaca yang lebih dikenali sebagai licau dan mempunyai ketahanan yang tinggi terhadap suhu atau haba. Penyelidikan ini adalah bertujuan untuk mendokumentasikan penghasilan warna licau secara sistematik menggunakan jenis sampel ujikaji iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang pada permukaan jasad spesimen yang dihasil menggunakan kaolin. Selain itu, penyelidikan ini juga bertujuan untuk mengenalpasti tindakbalas sampel ujikaji menggunakan campuran peratusan yang berbeza menggunakan formula “Triaxial Line Blend” terhadap permukaan kaolin yang melibatkan aspek bahan, jenis pembakaran dan teknik-teknik dekorasi. Penghasilan warna licau menggunakan bahan semulajadi iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang yang terdapat di sekitar Ranau, Kota Kinabalu, Sabah merupakan satu pembaharuan dalam penghasilan warna bersumberkan bahan semulajadi serta usaha bagi memajukan industri seramik di Malaysia. Ia lebih kepada penghasilan bahan semulajadi yang telah mengalami proses penghasilan sehingga mengeluarkan warna licau yang baru. Kajian awal menggunakan sampel dari agen warna seperti batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang telah dijalankan secara eksperimen. Penyelidikan tersebut merangkumi penyediaan dan formulasi licau dengan menggunakan bahan tersebut sehingga ia berjaya mengeluarkan warna mengikut tindak balas suhu dan jenis pembakaran yang telah dilaksanakan. Selain itu, kajian ini juga bertujuan untuk mengkaji kesesuaian warna licau pada permukaan produk seramik seperti kaolin. Kesimpulannya, melalui kajian yang dilakukan kita akan lebih memahami tentang proses-proses serta cara bagaimana untuk menghasilkan warna licau dalam industri seramik dengan menggunakan bahan semulajadi yang terdapat di persekitaran. Melalui kajian ini juga, ia dapat mengenalpasti bahan mineral yang terdapat dalam bahan ujikaji yang mempengaruhi tindakbalas dalam penghasilan warna licau seramik.*

Kata Kunci: *Licau, Kaolin, Triaxial Line Blend, Bahan Semulajadi, Oxide*

Pengenalan

Sejarah seni seramik bermula dengan pembuatan barangan tembikar. Keramik bermaksud Keramos (tanah liat) iaitu berasal daripada perkataan Greek yang digunakan untuk pembuatan barang keperluan harian. Perkataan Keramos juga membawa maksud tembikar namun, perkataan seramik lebih sesuai digunakan berbanding tembikar kerana sifat dan cara penggunaannya pada zaman tersebut. Keramik merupakan salah satu peninggalan sejarah seni tertua yang pernah dihasilkan oleh masyarakat pada zaman dahulu. Penghasilan produk seramik memerlukan suhu pembakaran yang tinggi iaitu 600°C sehingga 1200°C sebelum menukarkan sifat tanah liat menjadi kaca (seramik).

Ciri-ciri produk seramik adalah sangat sensitif dan mudah pecah serta permukannya bersifat porous. Para pengkaji seramik telah melaksanakan kajian berkenaan cara untuk mengenalpasti punca retakan pada produk seramik serta usaha meningkatkan kekuatan bahan seramik. Permasalahan tersebut adalah berpunca daripada kecuaihan semasa menghasilkan produk seramik seperti gagal memastikan

tiada kandungan udara pada liang pori yang terdapat pada jasad tanah liat. Zarah kasar atau liang udara pada jasad tanah liat dapat memberi kesan buruk pada produk seramik kerana ia dapat menyumbang kepada risiko pecah atau retak semasa proses pembakaran (biscuit firing).

Rekabentuk seramik boleh dilakukan dengan sempurna dengan mengambil kira beberapa pertimbangan yang khusus sebelum pelaksanaannya. Pendekatan-pendekatan rekabentuk seramik adalah langkah-langkah penting yang perlu diambil kerana setiap satunya mempunyai kepentingannya sendiri. Semenjak itu, rekabentuk seramik telah berjaya dan berkembang maju.

Di Malaysia, perkembangan industri produk seramik secara besar-besaran kini semakin menggalakkan. Pada tahun 80-an, produk seramik telah diusahakan oleh beberapa syarikat ternama iaitu Franklin Porcelain dari Amerika Syarikat dan syarikat tersebut telah berjaya menubuhkan beberapa kilang di kawasan perindustrian, kulim. Beberapa tahun berikutnya, syarikat Franklin Porcelain telah melebarkan perniagaannya dengan meningkatkan kemahiran pekerja dalam bidang seramik serta meningkatkan pasaran produk dari syarikatnya. Kesan positif dari perkembangan industri seramik tersebut, pengusaha-pengusaha dari negara lain seperti Jepun telah mengorak langkah dengan menjalankan perniagaan berasaskan produk seramik dan sehingga kini industri seramik telah berkembang ke serata dunia.

Selain daripada industri pembuatan, kerajaan Malaysia telah menggalakkan perkembangan dan pembelajaran seni seramik ini melalui institusi pengajian tinggi awam. Contohnya, Universiti Malaysia Sarawak. Di Universiti Malaysia Sarawak, kelengkapan seperti studio, bilik pembakaran dan juga peralatan seperti mesin “*throwing*” dan sebagainya disediakan. Selain itu, pengajian tinggi awam di seluruh negara juga telah menyediakan tenaga pengajar yang mahir dalam bidang seramik. Hal ini demikian kerana pengusaha seramik perlu meningkatkan ilmu berkaitan industri tersebut bagi memperoleh hasil produk yang unik dan berkualiti. Selain itu, usaha tersebut dapat menyemarakkan lagi perkembangan seni seramik di kalangan golongan muda di Malaysia.

Penyelidikan ini adalah bertujuan untuk mendokumentasikan penghasilan warna licau secara sistematik menggunakan jenis sampel ujikaji iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang pada permukaan jasad spesimen yang dihasil menggunakan kaolin. Selain itu, penyelidikan ini juga bertujuan mengenalpasti tindakbalas sampel ujikaji menggunakan campuran peratusan yang berbeza menggunakan formula “*Triaxial Line Blend*” terhadap permukaan kaolin yang melibatkan aspek bahan, jenis pembakaran dan teknik-teknik dekorasi. Penghasilan warna licau menggunakan bahan semulajadi iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang yang terdapat di sekitar Ranau, Kota Kinabalu, Sabah merupakan satu pembaharuan dalam usaha memajukan industri seramik di Malaysia. Ia lebih kepada penghasilan bahan baru yang telah mengalami proses penghasilan sehingga mengeluarkan warna licau yang baru. Seterusnya, penyelidikan ini bertujuan untuk mengenalpasti bahan mineral yang terdapat dalam sampel ujikaji menggunakan ujikaji makmal Radioaktif iaitu kaedah *X-Ray Powder Diffraction* (XRD). *X-ray powder diffraction* (XRD) merupakan teknik analisis yang digunakan terutamanya untuk mengenalpastian fasa bahan kristal dan dapat memberikan maklumat mengenai kandungan mineral yang terdapat dalam sampel eksperimen. Penyelidikan ini juga bertujuan untuk mengenalpasti ciri-ciri warna dan corak yang terhasil selepas pembakaran dilaksanakan pada produk seramik.

Kajian awal menggunakan sampel dari agen warna seperti batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang telah dijalankan secara eksperimen. Penyelidikan tersebut merangkumi penyediaan dan formulasi licau dengan menggunakan campuran bahan tersebut sehingga ia berjaya mengeluarkan warna mengikut tindak balas suhu dan pembakaran yang telah dilaksanakan. Selain itu, kajian ini juga bertujuan untuk mengkaji kesesuaian warna licau pada permukaan produk seramik seperti kaolin. Kesimpulannya, melalui kajian yang dilakukan kita akan lebih memahami tentang proses-proses serta cara bagaimana untuk menghasilkan warna licau dalam industri seramik dengan menggunakan bahan semulajadi yang terdapat di persekitaran.

Latar Belakang Kajian

Penyelidikan ini adalah bertujuan untuk mengkaji dan menghasilkan warna licau⁷⁰ menggunakan beberapa jenis bahan semulajadi iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang untuk digunakan dalam proses penghasilan warna licau dalam industri seramik. Penyelidikan ini juga merangkumi penyediaan dan formulasi licau dengan menggunakan teknik-teknik pembakaran dan suhu yang tertentu sehingga memperoleh hasil warna pada permukaan jasad ujikaji yang dihasilkan menggunakan kaolin. Dari keputusan penyelidikan didapati bahawa bahan ujikaji tersebut amat sesuai digunakan sebagai bahan licau. Penyelidik memilih bahan dari sumber alam semulajadi iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang untuk dijadikan bahan utama dalam ujikaji warna licau adalah disebabkan terdapat beberapa bahan mineral yang boleh mengeluarkan warna permukaan jasad ujikaji (test pieces) dan ia begitu sesuai untuk dijadikan *agent pigment colour* dari bahan tersebut. Licau yang terhasil dari batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang ini memberi beberapa kesan istimewa apabila dikenakan keatas jasad seramik serta dapat menambahkan nilai estetika barangan tersebut. Medium penghasilan warna licau ini boleh menjadi sumber bahan pembentuk kaca iaitu silika yang mana merupakan komponen utama dalam penyediaan licau. Tahap matang licau ini ialah diantara 1200-1800 °C dan suhu pembakaran bagi jasad ujikaji adalah 800°C. Kajian ini membolehkan sampel ujikaji dikelaskan sebagai licau bersuhu tinggi serta mempunyai sifat fizikal yang kuat dan keras (Craig. J dan Fillie. R, 1963:54).

Pengkaji menggunakan licau asas dalam ujikaji licau yang berfungsi untuk mencengkam bahan ujikaji serbuk agar ia melekat pada permukaan jasad spesimen kajian. Licau yang dihasil menggunakan batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang ini akan mengeluarkan kesan warna yang berbeza mengikut jenis bahan, teknik pembakaran dan suhu yang digunakan selepas menjalankan proses pembakaran. Memandangkan bahan batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang ini mudah didapati di sekitar perkampungan di Sabah, maka jelas bahawa bahan ini amat ekonomikal dijadikan bahan komponen utama dalam penghasilan warna licau disamping dapat membantu untuk memperluaskan penggunaan bahan semulajadi sebagai *agent pigment colour* dalam penghasilan warna produk seramik.

Licau

Definisi licau adalah sejenis bahan yang akan membentuk lapisan hiasan yang berkaca dan licin apabila dibakar pada suhu 1200°C. Selain itu, licau adalah lapisan perlindungan yang membuat seramik kelihatan menarik, berkualiti dan berguna. Licau juga mempunyai pelbagai bentuk dan fungsi yang dapat memberikan kesan yang cantik, bersih dan meningkatkan ketahanan sesuatu produk tanah liat kerana ia mempunyai permukaan licin dan boleh mengambil pelbagai warna dan tekstur. Selain itu, licau boleh ditakrifkan sebagai lapisan berkaca pada tanah liat, yang telah melalui proses pembakaran yang tinggi iaitu melebihi suhu 1200°C. Pelbagai jenis dan tekstur licau yang terdapat dalam pengusahaan produk seramik seperti warna terang, merah berkilat ke pastel lembut, emas logam untuk satiny, hitam dan sebagainya.

Licau Berunsurkan Bahan Semulajadi

Penghasilan warna licau menggunakan bahan semulajadi iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang adalah untuk menghasilkan warna baru serta mengenalpasti tindakbalas bahan ujikaji terhadap permukaan jasad ujikaji (kaolin). Dalam kajian ini, bahan dari sumber alam semulajadi iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang merupakan bahan ujikaji yang dikenali sebagai *agen pigment colour* yang asli dan ia memerlukan proses ujikaji di bengkel seramik. Ia memerlukan beberapa langkah semasa memproses bahan-bahan tersebut antaranya proses menghancurkan batu Sungai Moyog dan cengkerang bagi mendapatkan serbuk dari bahan tersebut dan

⁷⁰ Licau merupakan satu lapisan nipis kaca (*super-cooled liquid glass*) yang dikenakan ke atas barangan seramik bagi tujuan menambahkan kesan serian serta kekuatan barangan tersebut.

proses membakar kayu, rumpai laut dan keladi untuk mendapatkan abu (ash) dari ketiga-tiga bahan. Maka setiap bahan yang telah diproses akan ditapis dan dimasukkan dalam bekas yang berlainan bagi melancarkan proses seterusnya. Setiap bahan tersebut mempunyai bahan mineral *iron oxide* yang boleh mengeluarkan warna. Namun begitu, ia bergantung kepada jenis bahan dan jenis pembakaran yang telah dilaksanakan.

Penghasilan warna licau menggunakan bahan semulajadi juga dapat memberikan ketahanan pada sesuatu barangan seramik. Hal ini demikian kerana terdapat bahan mineral yang tinggi dan sangat sesuai dijadikan agen warna dalam penghasilan warna licau tersebut. Seterusnya, Mohd Khairi Baharom (2010) telah membuat analisis bahawa penghasilan produk seramik dengan menggunakan bahan semulajadi telah berkembang sejak berabad lamanya. Hal ini dapat dilihat melalui dokumentasi sejarah seramik yang telah mencatatkan bahawa produk bone china pada asalnya dihasilkan oleh orang Inggeris di Britain yang menggunakan tulang lembu yang dikisar menjadi abu⁷¹. Produk *bone china*⁷² telah menjadi satu isu kepada masyarakat Islam tentang bahan yang digunakan seperti yang nyatakan oleh beberapa pihak iaitu penggunaan tulang khinzir. Mungkin bahan yang digunakan oleh industri kini telah mengenalpasti bahawa tulang khinzir mungkin sesuai untuk menghasilkan produk seramik. Tetapi maklumat ini tiada dokumentasi yang wujud dapat diperolehi untuk dirujuk. Sejarah membuktikan bahawa hanya tulang lembu yang sesuai untuk tujuan ini berdasarkan eksperimentasi bahan yang telah dijalankan.

Kaedah Kajian

Penghasilan warna licau dalam produk seramik menggunakan bahan semulajadi seperti batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang dapat menambahkan kepelbagaian dalam kaedah menghias produk seramik bagi meningkatkan daya saing produk seramik di pasaran tempatan dan antarabangsa. Untuk mengelakkan produk-produk seramik yang telah disapu licau melekat pada tanur (*kiln furniture*) setelah dibakar, bahagian kaki atau tapak produk seramik tersebut perlu dibiarkan dalam keadaan tanpa licau. Kesan licau yang terdapat pada tapak atau permukaan seramik sebelum dibakar boleh dihilangkan dengan cara penggunaan span basah. Proses ini perlu dilaksanakan sebelum produk tersebut dibakar bagi mengelakkan ia melekat pada *kiln furniture*. Licau merupakan salah satu aspek yang paling rumit terutama dalam proses penghasilan produk seramik berbanding *engobe*, tetapi ia juga boleh dijadikan salah satu bahan yang dapat memberikan hasil yang sangat cantik mengikut teknik-teknik semasa melakukan dekorasi pada produk tersebut. Hal ini demikian kerana licau akan memberikan kesan tindakbalas kekaca dan berkilat pada permukaan produk berbanding permukaan tanpa licau.

Licau dari bahan semulajadi iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang ini memberi beberapa kesan istimewa apabila dikenakan keatas produk seramik serta dapat menambahkan nilai estetika barangan tersebut. Hal ini demikian kerana ia dapat memberikan kesan tindakbalas yang berbeza mengikut jenis bahan, pembakaran, suhu dan teknik dekorasi yang digunakan. Medium penghasilan warna licau ini boleh menjadi sumber bahan pembentuk kaca iaitu silika yang mana merupakan komponen utama dalam penyediaan licau dengan mencapai tahap matang licau diantara 1200°C hingga 1800°C dan dengan ini membolehkan ianya dikelaskan kedalam licau bersuhu tinggi serta mempunyai sifat fizikal yang kuat dan keras. Memandangkan bahan ujikaji yang digunakan ini mudah didapati di sekitar Sabah, maka jelas bahawa bahan ini amat ekonomikal dijadikan bahan komponen utama dalam penghasilan warna licau serta dapat memperluaskan penggunaan dalam penghasilan barangan seramik.

Pemilihan bahan-bahan yang digunakan adalah berdasarkan bahan semulajadi yang terdapat di sekitar Ranau dan Kota Kinabalu, Sabah. Ujikaji licau dilaksanakan dengan menggunakan teknik campuran 5 komponen berpandukan formula "*Triaxial Line Blend*". Penyelidik juga menjalankan

⁷¹ <http://sculpt2r.blogspot.my/2010/06/sejarah-perkembangan-dan-pengaruh.html>. Muat turun pada 20 September 2017.

⁷² *Bone China* adalah sejenis bahan seramik (porselin) lembut yang terdiri daripada abu tulang, bahan feldspathic dan kaolin.

ujikaji menggunakan suhu dan jenis pembakaran yang berbeza. Penggunaan bahan ujikaji iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang terhadap permukaan seramik menggunakan peratusan bancuhan yang berbeza dapat memberikan tindakbalas warna yang berbeza. Berdasarkan ujikaji yang dilaksanakan, penyelidik dapat melihat hasil warna mengikut kuantiti campuran bahan kimia sama ada ia memenuhi keinginan penyelidik atau sebaliknya.

Selain itu, formula campuran bahan kimia berperanan sebagai panduan yang membantu pengkaji untuk membandingkan resipi yang berada di pasaran dengan resepi yang baru dihasilkan serta menggabungkan jenis yang berbeza dan suhu untuk mengelakkan kualiti produk terjamin. Pengkaji juga dapat membandingkan resipi yang dihasilkan dengan resepi yang selalu digunakan oleh pengusaha produk seramik untuk memastikan pengkaji telah mematuhi beberapa piawaian asas ataupun sebaliknya dalam penghasilan warna licau agar tiada masalah yang bakal dihadapi semasa menggunakan warna tersebut seperti keretakan halus, kualiti warna yang kurang menarik, warna tidak berfungsi dan sebagainya. Selain itu, pengkaji juga dapat menghasilkan satu variasi warna dari campuran kelima-lima bahan ujikaji yang sememangnya setiap bahan mempunyai kandungan elemen kimia yang tersendiri dan ia sangat diperlukan dalam proses penghasilan licau.

Dari segi pengelasan bahan ujikaji pula, pengelasan tersebut amat penting dalam penghasilan warna licau. Hal ini demikian kerana pengelasan bahan ujikaji sangat diperlukan dan dapat memberi maklumat tentang sifat-sifat bahan tersebut serta kandungan mineral yang dapat mempengaruhi warna yang akan terhasil selepas ujikaji dilaksanakan. Licau boleh menukar kroma, nilai, warna dan tekstur permukaan. Pengeringan masa akan bergantung kepada jumlah, ketebalan dan jenis medium yang digunakan dalam penghasilan warna licau dari bahan semulajadi seperti batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang.

Medium tambahan seperti licau asas juga akan digunakan semasa proses ujikaji licau. Penggunaan licau asas sangat diperlukan dalam proses ujikaji kerana ia dapat memberikan tindakbalas yang berbeza pada permukaan jasad yang mempunyai licau asas dan tanpa licau asas. Hal ini demikian kerana pengkaji telah menggunakan licau asas yang tinggi mengikut sukatan iaitu sebanyak 10 hingga 50 peratus (%) kedalam setiap bancuhan kod warna sampel ujikaji. Selain itu, pengkaji juga mencampurkan kelima-lima bahan tersebut bagi mengenalpasti kesesuaian elemen kimia yang terkandung dalam setiap *agent* warna ujikaji.

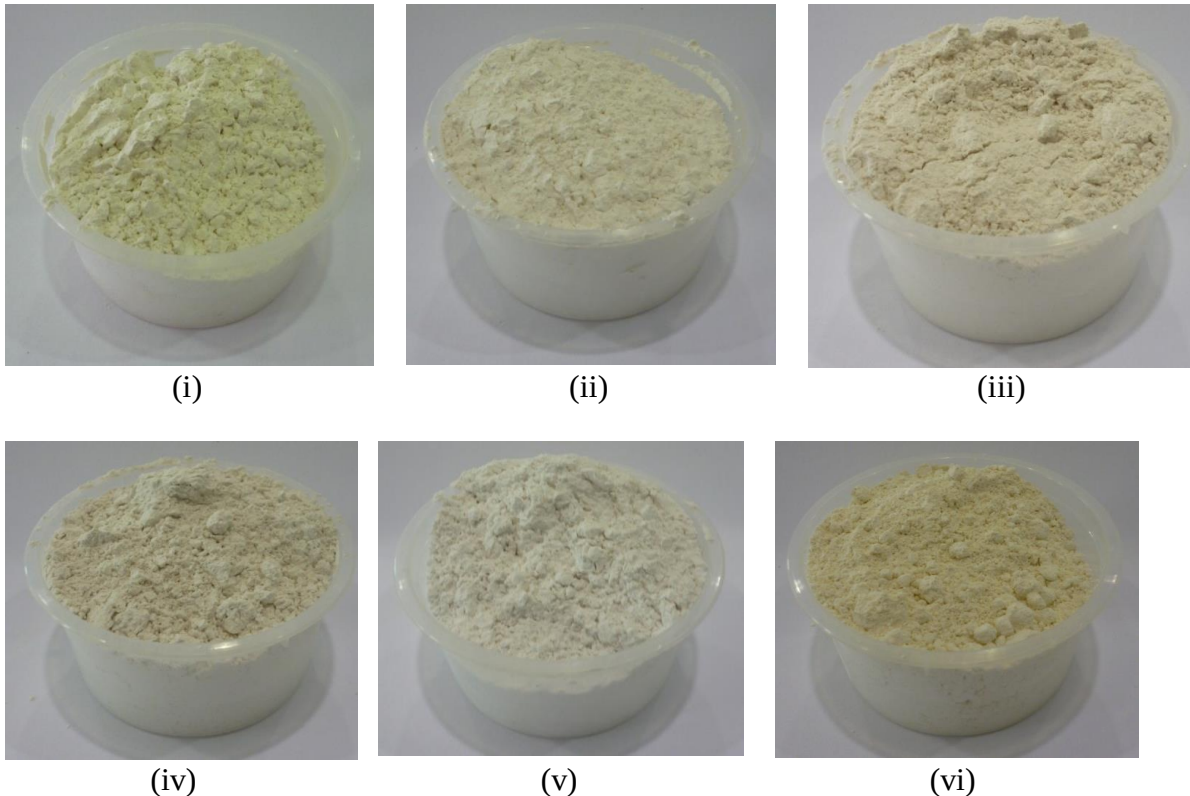
Formulasi licau yang dilakukan dengan penggunaan bahan dari sumber alam semulajadi iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang telah diproses seperti membakar untuk mendapatkan kayu bakau, abu keladi dan abu rumpai laut serta proses menghancurkan bagi bahan lain seperti batu Sungai Moyog dan cengkerang. Kemudian bahan tersebut akan dijadikan *agent* warna dalam proses menghasilkan licau dan engobe. Bahan-bahan ujikaji tersebut perlu mengalami proses bagi mendapatkan Dalam proses ujikaji licau, batu Sungai Moyog sungai menggunakan lima agen warna dari bahan semulajadi iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang yang telah dihancur halus akan dicampurkan bersama-sama bahan asas (licau *transparent*) dengan campuran air yang secukupnya dalam alat pengisar (*ball mill*). Setelah adunan licau ini telah sebat dan halus ia nya ditapis melalui penapis 150 'mesh' dan dikenakan keatas sampel uji jasad seramik (*test pieces*) yang telah disediakan dengan kaedah celupan dan sapuan. Kadar kuantiti bahan tersebut akan ditentukan mengikut kesesuaian dengan menggunakan penimbang. Hal ini demikian kerana ia dapat memberi sukatan yang tepat terhadap campuran tersebut.

Bahan uji ini kemudiannya dibakar dengan menggunakan pembakar elektrik kepada suhu 1200°C sehingga 1250°C dengan 1/2 jam suhu rendaman. Selepas dibakar semua bahan ujikaji dibandingkan keputusannya berdasarkan tekstur, sifat warna dan kesan istimewa yang dihasilkan.

Bahan Licau Asas (*Based Glaze*)

Licau adalah sejenis pewarna seramik atau tembikar yang merupakan satu jenis lapisan kaca yang nipis yang menyelaputi permukaan jasad sesuatu barangan yang diperbuat daripada tanah liat. Terdapat beberapa jenis licau yang sering digunakan antaranya *glossy*, *semi-matt* dan *matt glaze*. Tetapi bagi tujuan kajian ini licau dari jenis *glossy* atau berkilat dan lutsinar digunakan kerana sifatnya yang jelas dan mudah untuk dinilai dan ditafsirkan.

Licau ini juga mempunyai bahan campuran yang tersendiri dan mempunyai nilai tertentu bagi setiap bahan yang terdapat pada bancuhan licau tersebut. Antara bahan yang terdapat dalam campuran resepi licau ini adalah *potash feldspar*, *calcium carbonate*, *ball clay*, *china clay*, *flint* dan *zinc oxide*.



Rajah 1.1: Bahan-Bahan Memproses Licau. i) Potash Feldspar, ii) Calcium Carbonate, iii) Ball Clay, iv) China Clay, v) Flint, vi) Zinc Oxide

Rajah 1.1 (i hingga vi) merupakan jenis bahan yang digunakan dalam memproses licau asas. Kebiasaannya pengkaji menghasilkan licau asas menggunakan bahan tersebut mengikut berat campuran yang terdapat dalam resepi licau (jadual 1.1) bagi menghasilkan licau yang stabil mengikut suhu matang 1200°C.

Jadual 1.1: Resepi Licau Transparent

Bil	Bahan	g
1.	Potash Feldspar	40
2.	Calcium carbonate	15
3.	Ball clay	5
4.	China clay	10
5.	Flint	20
6.	Zinc oxide	10
Jumlah		100g

Jadual 1.1 merupakan jumlah berat bagi setiap bahan tersebut yang digunakan dalam resepi licau. Bagi tujuan kajian ini resepi licau tersebut perlu ditimbang sebanyak 100gram bagi setiap set kajian batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang yang ingin diujikaji. Jumlah berat bagi setiap campuran bahan tersebut perlu sama bagi setiap set kajian yang dibuat supaya keputusannya adalah tepat. Jika berlaku sebarang kesilapan berat kandungan bahan berkemungkinan hasil set kajian tersebut akan rosak dan tidak memberi sebarang nilai untuk dibuat penilaian.

Penyediaan Bahan Kajian

Sebelum kajian dimulakan terdapat beberapa proses penting yang perlu dilakukan terlebih dahulu antaranya proses penyediaan serbuk bahan ujikaji, menyediakan peralatan-peralatan yang akan digunakan, bahan-bahan asas licau *transparent* dan jasad spesimen kajian.

Serbuk Batu Sungai Moyog

Bagi proses penyediaan serbuk batu Sungai Moyog yang merupakan salah satu bahan kajian yang akan melibatkan proses menghancurkan batu keras dengan menggunakan mesin pengisar batu di makmal geologi dan kemudian ditapis untuk mendapatkan serbuk batu Sungai Moyog yang halus.

Dalam kajian ini, serbuk warna batu Sungai Moyog merupakan bahan ejen pewarna yang asli yang perlu diujikaji. Maka, setiap batu Sungai Moyog yang telah dihancurkan perlu diasingkan mengikut warna dan perlu dikeringkan terlebih dahulu jika ia berada dalam keadaan yang basah. Pengerangan perlu bagi tujuan mengeluarkan kandungan air yang terdapat dalam serbuk batu Sungai Moyog tersebut. Sebenarnya, setiap batu tersebut mempunyai bahan mineral *iron oxide* yang boleh mengeluarkan warna. Namun begitu, ia bergantung kepada jenis batu yang dikaji dan antara faktor penting yang menentukan warna tersebut ialah keadaan warna batu itu sendiri. Lebih gelap dan terang warna batu tersebut warna yang bakal dihasilkan juga adalah lebih terang dan jelas. Namun begitu, untuk mendapatkan kesan warna yang menarik serbuk batu Sungai Moyog perlu dicampurkan ke dalam bancuhan licau yang akan dibakar pada suhu 1200°C dan bancuhan slip dengan suhu pembakaran 800°C.



(i)



(ii)

Rajah 1.2 : Kategori Batu Sungai Moyog i) Batu Sungai Moyog yang belum diproses, ii) Batu Sungai Moyog yang telah diproses menjadi serbuk.

(Sumber: Norhayati Ayob, A Preliminary Study of Producing Ceramic Glaze Utilizing Nature Stone: Moyog Stone River, Penampang).

Rajah 1.2 (i dan ii) menunjukkan batu Sungai Moyog yang telah mengalami beberapa proses sehingga menjadi serbuk untuk digunakan dalam ujikaji warna licau. Batu Sungai Moyog tersebut diasingkan mengikut kod warna sebelum dihancurkan. Hal ini dapat memudahkan dalam proses pengasingan serbuk warna batu Sungai Moyog agar kod dan jenis bahan adalah tepat. Dalam proses ujikaji licau,

pengkaji telah menggunakan sebanyak beberapa jenis serbuk batu Sungai Moyog yang akan dicampurkan dengan 4 jenis bahan lain iaitu kayu bakau, rumpai laut, keladi dan cengkerang.

Kayu Bakau

Kayu bakau merupakan salah satu bahan ujikaji yang digunakan dalam proses penghasilan warna licau seramik. Beberapa proses yang perlu dilaksanakan oleh penyelidik bagi mendapatkan serbuk kayu bakau yang halus dan berkualiti. Kayu bakau perlu dikeringkan terlebih dahulu dan dibakar sehingga kayu tersebut bertukar menjadi arang. Seterusnya penyelidik menghancurkan kayu bakau tersebut menggunakan tukul dan lesung batu sehingga ia bertukar menjadi ketulan halus. Sampel ujikaji tersebut seterusnya ditapis menggunakan penapis halus untuk mendapatkan debu-debu dan disimpan ke dalam bekas yang disediakan untuk dijadikan ejen warna licau. Bahan-bahan yang telah mengalami beberapa proses penghasilan akan dibancuh menggunakan licau asas dan diaplikasi pada permukaan jasad spesimen dengan menggunakan teknik celupan dan sapuan serta dibiarkan kering selama beberapa jam sebelum dibakar menggunakan suhu yang tinggi iaitu 1200°C.



Rajah 1.3 : Kayu Bakau i) Kayu Bakau yang belum diproses, ii) Kayu Bakau yang telah diproses menjadi serbuk.

Rumpai Laut

Rumpai laut adalah ejen warna yang ketiga digunakan dalam proses penghasilan warna licau seramik. Cara pemprosesan rumpai laut hamper sama dengan cara pemprosesan kayu bakau dan keladi. Rumpai laut yang telah kering dijemur perlu dibakar terlebih dahulu bagi memudahkan dalam proses membakar sampel ujikaji. Setelah bahan tersebut kering sepenuhnya, ia kemudiannya dibakar dengan menggunakan tong besi yang telah disediakan bagi memastikan bahan ujikaji tidak tumpah atau bercampur dengan bahan lain. Setelah ia dibakar, sampel perlu dikisar menggunakan mesin pengisar dan ditapis sehingga mengeluarkan debu halus. Sampel tersebut disimpan ke dalam bekas kaca dan akan dicampurkan dengan licau asas mengikut jumlah peratusan nisbah bancuhan yang telah ditetapkan.



Rajah 1.4 : Rumpai Laut i) Rumpai Laut yang belum diproses, ii) Rumpai Laut yang telah diproses menjadi serbuk.

Keladi

Sampel ujikaji yang keempat iaitu keladi adalah salah satu sampel yang digunakan dalam penghasilan warna licau seramik. Pemprosesan bahan tersebut sama seperti rumpai laut dan kayu bakau iaitu penyelidik perlu membakar terlebih dahulu sehingga mendapatkan abu daun keladi. Kemudian ia dikisar menggunakan mesin pengisar dan ditapis untuk mendapatkan debu halus. Hal ini demikian kerana penggunaan ejen warna iaitu *oxide* dalam penghasilan warna licau adalah lebih sesuai dalam keadaan debu dan kemudiannya akan dibancuh dengan bahan kimia seperti licau asas ataupun slip (hanya digunakan dalam proses penghasilan *engobe*) yang berperanan sebagai bahan untuk mencengkam sampel eksperimen agar melekat pada permukaan jasad spesimen kajian.



Rajah 1.5 : Keladi i) Keladi yang belum diproses, ii) Keladi yang telah diproses menjadi serbuk.

Cengkerang

Cengkerang juga merupakan salah satu sampel ujikaji dalam penghasilan warna licau seramik. Beberapa langkah yang perlu dilaksanakan dalam pemprosesan cengkerang sehingga bahan tersebut menjadi debu dan digunakan dalam ujikaji penghasilan warna licau. Antara langkah-langkah yang dilaksanakan oleh penyelidik adalah cengkerang perlu di bersihkan terlebih dahulu bagi membuang bendasing yang melekat pada permukaan kulit cengkerang seperti pasir, kulit kayu, habuk dan sebagainya. Kemudian kulit cengkerang yang telah dibersihkan perlu dijemur sehingga kering agar ia tidak melekat atau berketul semasa proses menghancurkan sampel ujikaji. Setelah kulit cengkerang tersebut telah kering, ia dihancurkan menggunakan tukul dan lesung batu. Proses tersebut dilakukan secara berulang-ulang sehingga penyelidik mendapatkan serbuk cengkerang yang halus. Debu kulit cengkerang tersebut kemudiannya di tapis menggunakan penapis halus untuk dijadikan ejen warna licau dan disimpan ke dalam bekas yang telah disediakan.



Rajah 1.6 : Cengkerang i) Cengkerang yang belum diproses, ii) Cengkerang yang telah diproses menjadi serbuk.

Proses Membancuh, Mengaplikasi Dan Membakar Spesimen Kajian

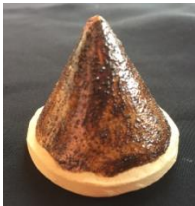
Setelah siap ditimbang semua sampel-sampel kajian tersebut akan di bancuhkan bersama air untuk melarutkan sebatian tersebut. Jumlah air yang digunakan adalah sama kuantitinya bagi setiap sampel kajian yang akan dibancuh iaitu 150ml. Hasil bancuhan hendaklah digaulkan dengan sebatu supaya bahan-bahan tersebut tidak berketul-ketul. Bagi memastikan bahan-bahan tersebut betul-betul sebatu, dan larut gunakan penapis untuk menapis bahan-bahan tersebut. Bahan-bahan sampel kajian yang telah siap dibancuh kemudiannya dibiarkan selama beberapa jam sebelum diaplikasikan terhadap spesimen kajian dengan menggunakan teknik sapuan.



Rajah 1.6 : Sampel ujikaji licau iaitu batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang yang telah di aplikasi pada permukaan jasad spesimen sebelum dibakar

Rajah 1.6 menunjukkan jasad spesimen kajian yang telah siap disapu menggunakan bancuhan lima bahan ujikaji iaitu serbuk batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang menggunakan licau asas mengikut nisbah. Jasad spesimen kajian yang telah siap disapu sampel ujikaji seterusnya akan dibakar untuk mendapatkan keputusan yang diinginkan. Ia perlu dibakar selama 10 jam pada suhu 1200°C. Bagi proses pembakaran ini dapur dari jenis tanur (*kiln*) elektronik digunakan kerana ia lebih mudah untuk dikendalikan.

ANALISA HASIL UJIKAJI LICAU

JENIS SAMPEL	KOD KETERANGAN WARNA LICAU	SAMPEL TIADA CAMPURAN	SAMPEL CAMPURAN
BATU SUNGAI MOYOG			
KAYU BAKAU			

RUMPAI LAUT			
KELADI			
CENGKERANG			

Jadual 1.2: Analisa hasil ujikaji licau

Setelah mendapat keputusan pembakaran kajian licau seramik, pengkaji telah membuat Analisa berdasarkan pemerhatian yang telah dikenalpasti dan mendapati hasil ujikaji yang telah dilaksanakan telah mencapai 100% tahap kematangan pada suhu 1200°C. Semua sampel kajian berada pada paras yang positif dan menunjukkan hasil yang bagus. Terdapat warna yang terhasil dalam empat tahap kecerahan yang berbeza seperti yang digambarkan pada jadual 1.2. ujikaji telah menunjukkan hasil yang sangat bagus kerana terdapat lebih kurang 20% daripadanya mengeluarkan warna yang terang.

Kesimpulan

Berdasarkan hasil dapatan kajian, dapat merumuskan bahawa kajian ini berjaya mencapai objektif sebenar dan dapat membuktikan bahawa batu Sungai Moyog, kayu bakau, rumpai laut, keladi dan cengkerang yang dikaji boleh mengeluarkan warna tertentu. Kajian ini boleh diperluaskan dan digunakan untuk menghasilkan warna pada produk-produk seramik berlicau. Hal ini kerana ia dapat menjimatkan kos pengeluaran warna bahan mentah yang digunakan. Sampel ujikaji juga boleh didapati dari mana-mana kawasan yang berhampiran dan boleh dijadikan bahan mentah yang berguna. Seterusnya, kajian ini dapat memberi manfaat kepada institusi-institusi pengajian tempatan dari sudut sumbangan ilmu kepada kajian yang seterusnya.

Penyelidik yakin kajian ini dapat digunakan sebagai bahan rujukan oleh generasi akan datang selain keunikan produk seramik dapat dikekalkan. Penyelidik percaya pendokumentasi kajian ini perlu dan penting sebagai bahan rujukan memandangkan produk seramik yang semakin dilupakan oleh masyarakat di Malaysia. Penyelidikan ini dapat memberikan kesan positif terhadap generasi muda dalam proses menambah ilmu pengetahuan berkaitan penghasilan licau dalam industri seramik menggunakan bahan semulajadi.

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AMALAN PELBAGAI BUDAYA DALAM KALANGAN SAUDARA BAHARU DI MALAYSIA: SATU TINJAUAN AWAL

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Abstrak: Islam merupakan ad-Din atau agama yang diturunkan kepada semua makhluk sebagai bimbingan dan panduan hidup seluruh manusia yang membawa kepada keesaan dan kepatuhan kepada Allah SWT. Justeru, tidak kira bangsa atau kaum, mereka berhak menerima Islam dan mengamalkannya sebagai cara hidup. Golongan muallaf atau disebut juga saudara baharu di Malaysia merupakan golongan yang diberi perhatian oleh Islam. Sebagai contoh, dari segi hak menerima pembahagian zakat, golongan muallaf merupakan salah satu golongan yang berhak menerima zakat. Sejak akhir-akhir ini, terdapat pertambahan bilangan individu yang memeluk dan menerima Islam. Dalam konteks saudara baharu di Malaysia yang terdiri daripada pelbagai bangsa, kaum dan suku sudah tentu mereka mengamalkan pelbagai adat dan budaya dalam kehidupan harian mereka. Berdasarkan kaedah fiqh Islam “Adat di Akui”, Islam mengiktiraf adat dan budaya yang diamalkan oleh setiap bangsa dan kaum selagi tidak bertentangan dengan prinsip hukum Islam. Hal ini perlu difahami bukan sahaja saudara baharu, malah umat Islam umumnya bagi mengelakkan salah faham dan perselisihan pendapat sesama umat Islam. Justeru, kertas kerja ini akan membincangkan amalan pelbagai budaya saudara baharu di Malaysia dan menganalisis sejauhmana amalan tersebut tidak bertentangan dengan prinsip hukum Islam agar kehidupan mereka diberkati dan diredhai Allah SWT.

Katakunci: Pelbagai Budaya, Saudara Baharu, Muallaf, ‘Urf

Pendahuluan

Islam merupakan ad-Din atau agama yang diturunkan kepada semua makhluk, sebagaimana dinyatakan dalam al-Quran, "Dan tiadalah Kami mengutuskan engkau wahai Muhammad melainkan sebagai rahmat bagi sekalian alam" (Surah al-Anbiyaa', ayat 107). Berdasarkan ayat ini jelas menunjukkan Islam adalah agama yang diturunkan oleh Allah SWT untuk memberi rahmat kepada seluruh manusia dan makhluk. Oleh itu, Rasulullah SAW diutuskan oleh Allah SWT sebagai rahmat kepada sekalian alam. Jelas di sini bermaksud, Islam adalah agama yang diturunkan oleh Allah SWT sebagai bimbingan dan panduan hidup untuk manusia yang akhirnya membawa kepada keesaan kepada Allah SWT. Justeru, tidak kira bangsa atau kaum, mereka berhak menerima dan mengamalkan Islam sebagai cara hidup. Allah SWT berfirman yang bermaksud: “Wahai manusia! Sesungguhnya Kami telah menciptakan kamu dari seorang lelaki dan seorang perempuan, kemudian Kami jadikan kamu berbangsa-bangsa dan bersuku-suku agar kamu saling mengenal” (Surah al-Hujurat, ayat 13). Ayat ini menjelaskan bahawa Allah SWT

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menciptakan manusia daripada pelbagai bangsa dan kaum yang antara lain bertujuan agar kita saling kenal mengenal, berinteraksi dan menjalani kehidupan secara aman, damai dan sejahtera. Sesuai dengan maksud Islam itu sendiri iaitu aman, damai dan sejahtera (Asmawati Suhid, 2009).

Oleh itu, dalam konteks perbincangan dalam kertas kerja ini, ia termasuklah golongan *muallaf* atau disebut juga sebagai saudara baharu yang turut mendapat rahmat di sisi Islam. Maksud perkataan *muallaf* dapat dijelaskan dari segi bahasa dan istilah. Perkataan *muallaf* adalah perkataan yang diambil dari bahasa Arab iaitu *mua' allaf* daripada pecahan (isytiqaq) perkataan *allafah*, *yu'allifu*, *ta' lifan* yang bermaksud yang diikat, yang dijinak atau yang disatukan. Manakala dari segi istilah pula, *muallaf* merujuk kepada orang yang baharu menerima kebenaran agama Islam. *Muallaf* merupakan orang yang dipujuk dan dijinakkan hatinya dengan harapan dapat menguatkan pegangan mereka terhadap ajaran Islam atau orang yang dipujuk supaya tertarik untuk menganut agama Islam. Mereka merupakan antara golongan yang diberi perhatian oleh Islam. Sebagai contoh, dari segi hak menerima pembahagian zakat golongan *muallaf* merupakan salah satu golongan yang berhak menerima zakat. Sebagaimana maksud firman Allah SWT dalam surah al-Taubah, ayat 60, "Sesungguhnya sedekah-sedekah (zakat) itu hanya untuk orang-orang fakir dan orang-orang miskin dan amil-amil dan *muallaf* yang dijinakkan hati-hati mereka dan hamba-hamba yang hendak memerdekakan dan orang-orang berhutang dan untuk (dibelanjakan pada jalan Allah) dan orang-orang musafir (yang terputus bekalan) dalam perjalanan". Sejak akhir-akhir ini, terdapat pertambahan bilangan individu yang memeluk dan menerima Islam. Contohnya seramai 876 orang pada tahun 2013, 656 orang pada 2014 dan 657 orang pada 2015 (Jabatan Agama Islam Wilayah Persekutuan). Laporan statistik *muallaf* negeri Selangor tahun 2008-2012 pula melaporkan seramai 1558 orang Cina telah memeluk Islam (Syarul Azman Shaharuddin, 2014).

Saudara baharu atau *muallaf* ini perlu sentiasa dibimbing dan dipantau pemahaman, penghayatan dan amalan mereka agar tidak bercanggah dengan hukum Islam seterusnya amalan mereka diterima Allah SWT. Begitu juga menurut Siti Fathimatul Zahrah & A'thiroh Masyaa'il Tan (2015), golongan *muallaf* memerlukan bimbingan yang efektif bagi membantu mereka membina persepsi diri yang baru selepas menjalani proses konversi dan peralihan. Oleh kerana mereka terdiri daripada pelbagai kaum, suku dan bangsa sudah tentu banyak amalan budaya dan tradisi yang mereka amalkan sebelum memeluk Islam. Kemungkinan juga berlaku situasi kurang faham atau keliru samada mereka masih boleh teruskan amalan tersebut setelah memeluk Islam. Sebagaimana menurut Ann Wan Seng (2009), kebanyakan *muallaf* menghadapi masalah menyesuaikan diri selepas menjadi sebahagian daripada umat Islam. Ini kerana, ada yang menghadapi cabaran kejutan budaya dan berdepan dengan kecelaruan identiti diri. Tidak kurang juga dengan merasakan kepayahan beramal dengan Islam kerana latihan sistem pengajaran dan pembelajaran yang tidak mengambil kira tahap dan keperluan golongan *muallaf*. Oleh itu, amatlah penting golongan ini dibantu dan diberikan sokongan moral bagi membolehkan mereka melakukan adaptasi terhadap persekitaran dan lingkungan hidup yang baharu bersama masyarakat. Umat Islam tidak seharusnya membiarkan perbezaan bangsa, budaya dan ras menguasai pemikiran mereka sehingga mengesampingkan kehadiran *muallaf* di tengah-tengah masyarakat Islam. Umat Islam harus menghapuskan segala perbezaan itu dan berusaha menjadikan golongan ini sebagai sebahagian daripada masyarakat Islam tanpa sebarang syarat. Justeru di dalam kertas kerja ini penulis akan membincangkan status golongan *muallaf* dan fenomena amalan adat dan budaya dalam kalangan saudara baharu seterusnya menganalisis sejauhmana amalan tersebut bertepatan dengan prinsip Islam khususnya aplikasi 'Urf dalam amalan tersebut. Ini penting bagi memastikan kefahaman dan penghayatan mereka sentiasa berdasarkan syariat Islam.

Latar Belakang dan Sejarah *Muallaf* di Malaysia

Malaysia merupakan sebuah negara yang unik yang terdiri daripada pelbagai kaum dan agama. Walaupun terdiri dari pelbagai bangsa dan agama negara Malaysia masih lagi kekal aman dengan mengamalkan ajaran dan anutan masing-masing. Sebagaimana diperuntukkan dalam Perlembagaan Malaysia Perkara 3 (1) bahawa Islam adalah Agama Persekutuan tetapi agama lain boleh diamalkan dengan aman. Hal ini dikekalkan secara terus menerus dengan pengekalan kedudukan sultan sebagai ketua agama Islam di negeri masing-masing (Fuziah Shaffie & Ruslan Zainuddin, 2000). Ini memberi peluang kepada pendakwah untuk menyebarkan Islam sebagaimana yang disarankan oleh Rasulullah SAW dalam penyebaran agama Islam kesemua pelusuk dunia. Sememangnya penyebaran Islam telah bermula sejak dahulu lagi dengan penyebaran agama Islam di Tanah Melayu oleh pedagang-pedagang luar.

Secara lintasan sejarah, agama Islam mula disebarkan di Tanah Melayu seawal abad ke 7. Hal ini dibuktikan dengan penemuan beberapa batu nisan antaranya ialah batu nisan Syeikh Abdul Kadir Ibn Husayan Shah Alirah yang bertarikh 290H/902M di Alor Star Kedah. Penemuan ini diperkukuhkan lagi dengan penemuan batu nisan di Teluk Cik Munah Pekan Pahang bertarikh 419H/1028M (Arba'iyah Mohd Noor, 2011). Di Tanah Melayu Islam mula disebarkan oleh pedagang dari Tanah Arab, China dan India. Akibat daripada penyebaran Islam ini agama Islam semakin berkembang pesat berikutan dengan kemunculan beberapa buah kerajaan Islam di Pasai dan Perlak di persekitaran selat Melaka pada abad ke-13 masihi. Dengan penyebaran Islam ini telah mengurangkan pengaruh agama Hindu-Buddha yang telah bertapak berabad-abad di Tanah Melayu.

Sebelum kedatangan Islam di Tanah Melayu, masyarakat Melayu menganut fahaman animisme. Menurut Norizan Yusoff (2011: 18), mereka mempercayai terhadap unsur-unsur alam semulajadi iaitu percaya bahawa setiap benda sekeliling manusia mempunyai semangat atau roh yang boleh mempengaruhi kehidupan manusia. Keadaan ini berubah selepas kedatangan Islam yang membawa konsep tauhid dengan menafikan kewujudan banyak tuhan. Dengan pegangan konsep keesaan tuhan yang satu ini telah berjaya menarik minat masyarakat tempatan dengan berlakunya perubahan kehidupan harian dan adat yang bertentangan dengan agama Islam ditinggalkan secara beransur-ansur. Kemasukan agama Islam ini telah memainkan peranan agak penting dari segi mengIslamisasikan masyarakat tempatan sehingga membawa perubahan besar kepada kehidupan masyarakat di Tanah Melayu. Namun berlaku persaingan agama dengan kedatangan penjajah barat pada abad ke-19. Kedatangan mereka bukan sahaja ingin menguasai ekonomi malah turut memperkenalkan nilai-nilai barat dan menyebarkan agama Kristian (Suraya Sintang, 2005). Namun, penyebaran agama Kristian ini tidak menjejaskan perkembangan Islam khususnya dalam kegiatan menyebarkan agama Islam di kalangan orang bukan Islam. Malah penyebaran Islam tidak terputus begitu sahaja tetapi terus disebarkan dan diamalkan sehingga kini dengan pelbagai jenis kaedah penyebaran dakwah sama ada melalui media massa dan media elektronik

Sememangnya kegiatan penyebaran dakwah yang digunakan oleh pendakwah dahulu berbeza dengan pendakwah masa kini. Namun matlamat adalah sama iaitu untuk mengajak manusia mentauhidkan Allah SWT. Melalui penyebaran dakwah Islam inilah menyebabkan masyarakat Melayu yang dahulunya menganut fahaman animisme telah menganut agama Islam sebagai cara hidup. Sehingga kini bangsa Melayu dengan Islam tidak boleh dipisahkan sehingga ada yang menggelarkan Melayu itu Islam dan Islam itu adalah Melayu (Suraya Sintang, 2005). Realitinya, agama Islam tidak ditentukan oleh bangsa, kaum dan warna kulit tetapi ditentukan oleh pegangannya yang yakin dan percaya kepada keesaan Allah SWT. Dengan kata lain, Islam adalah untuk semua manusia tanpa melihat bangsa, negara atau pun warna kulit. Umumnya, di Malaysia mereka yang baharu memeluk Islam digelar sebagai *muallaf*. Terdapat juga yang menggelarkan orang yang baru memeluk Islam sebagai saudara baharu atau saudara kita. Menurut Suraya Sintang (2005), penggunaan perkataan saudara kita dan saudara baharu dapat mengalakkan saudara Islam lain meningkatkan lagi tali siratulrahim dan kasih sayang antara mereka. Sememangnya, tali siratulrahim sesama Islam walaupun berbeza bangsa itu

sangat penting terutamanya kepada saudara baharu agar mereka rasa selesa dengan kehidupan yang baru selepas melalui proses konvensi.

Tuntasnya, *muallaf* wujud di Tanah Melayu disebabkan adanya penyebaran Islam oleh pendakwah-pendakwah Islam dari Asia Timur iaitu dari pedagang Arab, China dan India. Usaha penyebaran dakwah Islam bukan sesuatu yang mudah untuk menarik minat bukan Islam untuk menyukai Islam atau menerima Islam sebagai agama baru mereka. Walaupun, penyebaran agama Islam di Tanah Melayu berlaku sejak dahulu lagi, tetapi usaha dalam berdakwah terus menerus dilakukan hingga kini untuk menyebarkan kebenaran Islam kepada orang bukan Islam khususnya di Malaysia. Dalam menyebarkan kebenaran Islam bukan suatu yang mudah dan bukan suatu perkara yang boleh dipandang ringan kerana tanpa dakwah peningkatan *muallaf* tidak akan berlaku.

Peningkatan bilangan saudara baharu atau *muallaf* di Malaysia menyebabkan wujud pertubuhan dakwah termasuklah beberapa institusi kerajaan seperti Pusat Islam dan Jabatan-Jabatan Agama di bawah negeri. Di Samping itu juga terdapat pertubuhan sukarela yang memainkan peranan penting dalam proses memberi bimbingan dan kebajikan kepada golongan *muallaf* antaranya adalah Angkatan Belia Islam Malaysia (ABIM) dan Pertubuhan Kebajikan Islam Malaysia (PERKIM). PERKIM merupakan pertubuhan yang diasaskan oleh YTM Tunku Abdul Rahman Putra Al-Haj iaitu Perdana Menteri Malaysia yang pertama. PERKIM ditubuhkan pada 19 ogos 1960. Dalam pertubuhan PERKIM, Tunku Abdul Rahman telah mengadakan perjanjian persefahaman (MOU) dengan kerajaan Libya dan telah bersetuju memberi pinjaman pada awal pertubuhan PERKIM di Kuala Lumpur (Nur A'thiroh Masyaa'il, Fakhru Adabi Abdul Kadir, Siti Rugayah Tibek & Amran Abdullah, 2014). Terdapat juga banyak pertubuhan atau organisasi dakwah ditubuhkan seperti Angkatan Nahdatul Islam Bersatu (BINA) dan United Sabah Islamic Association (USIA) yang merupakan organisasi yang hanya bertujuan berdakwah kepada orang melayu yang sudah beragama Islam (Che Latifah, 1996).

Peranan yang dimainkan oleh pertubuhan dakwah ini menjadikan Islam itu mudah disebarkan kepada orang bukan Islam dan memudahkan proses mereka dalam mendalami Islam dengan lebih mendalam. Hal ini ditambah pula ajaran Islam yang bersifat universal dan melihat cara hidup orang Islam juga menjadi penyebab kepada *muallaf* untuk memeluk Islam. Menurut Azaruddin Awang & Khadijah Mohd Khambali (2015), faktor pengaulan dengan rakan muslim menjadi penyebab mereka memeluk Islam disamping faktor perkahwinan, persekitaran, kajian tentang Islam dan mendapat hidayah dari Illahi.

Kepelbagaian Amalan Budaya dalam Kalangan Saudara Baharu

Muallaf atau saudara baharu dalam konteks masyarakat majmuk di Malaysia meliputi mereka yang berasal daripada kaum Cina, India, masyarakat Asli atau suku kaum Sabah dan Sarawak (Nur A'thiroh & Fariza, 2009). Setiap suku kaum tersebut mempunyai budaya tersendiri sama ada berasaskan kepada agama yang dianuti sebelum ini atau berasaskan kepada amalan suku kaum tersebut yang diwarisi turun temurun. Budaya secara umumnya merujuk kepada budi pekerti. Budaya juga boleh ditakrifkan sebagai satu sistem yang kompleks kerana ia merangkumi proses pertukaran daripada satu bentuk kepada bentuk yang lain dalam sesebuah masyarakat. Manakala budaya daripada perspektif sarjana Muslim merujuk kepada idea, pemikiran, tingkahlaku dan adab (Azarudin, Azman & Wahairi, 2018). Azarudin et.al (2018) selanjutnya menghuraikan budaya sebagai aspek yang merangkumi tiga bahagian iaitu budaya yang bersifat kognitif seperti aspek bahasa. Bahagian kedua ialah budaya normatif yang merujuk kepada peraturan yang mengawal tingkah laku serta seterusnya bahagian ketiga budaya benda seperti rumah, pakaian dan makanan. Sebagai contoh, masyarakat Cina dikenali sebagai kelompok yang sangat berpegang kepada nilai kecinaan yang tegar serta semangat kepuakan yang kental (Azarudin & Khadijah, 2014). Namun dalam konteks masyarakat Cina yang berada di Terengganu, mereka dilihat lebih fleksibel dan terbuka dalam menerima budaya Melayu khususnya aspek bahasa, pemakanan, seni bina rumah dan pakaian (Azarudin, et al. 2018). Ini bermakna masyarakat Cina sedikit berbeza dengan

masyarakat Cina di negeri lain di Malaysia kerana mereka boleh berbahasa Melayu dialek Terengganu, menikmati makanan tradisi Melayu Terengganu serta selesa berpakaian tradisi orang Melayu.

Dalam membincangkan tentang kepelbagaian amalan budaya dalam kalangan *muallaf*, sesuatu yang tidak boleh dipertikaikan bahawa budaya adalah salah satu cabaran yang dihadapi oleh mereka apabila telah menerima Islam selain daripada cabaran kewangan dan penyesuaian kepada agama Islam itu sendiri. Cabaran ini mampu merebak dan boleh menyebabkan segelintir *muallaf* kembali kepada agama asal jika cabaran tersebut tidak ditangani dengan segera (Syarul Azman, Hanis Najwa, Muhammad Yusuf Marlon, Mustafa Kamal & Akmal Syazana, 2017).

Dalam satu kajian yang dijalankan oleh Razaleigh (2016) tentang cabaran integrasi budaya dalam kalangan 100 orang responden di Pertubuhan Kebajikan Islam Malaysia (PERKIM) Kuala Lumpur mendapati antara item cabaran integrasi budaya yang mencatat min yang tinggi ialah 'kesukaran *muallaf* untuk membezakan amalan masyarakat Melayu dengan ajaran Islam'; 'kesukaran *muallaf* meninggalkan amalan lama sebelum Islam'; '*muallaf* masih berpegang dengan pantang larang masyarakat lama' serta '*muallaf* masih mengamalkan adat lama yang bercanggah dengan Islam'. Dapatan tersebut adalah bertepatan dengan realiti bahawa adat dan budaya lama tersebut telah sebatih dalam diri mereka dan tentu mereka sukar untuk meninggalkannya (Siti Aishah, 2016). Di samping cabaran daripada dalam diri *muallaf*, integrasi budaya turut melibatkan cabaran luar iaitu daripada masyarakat Melayu Islam itu sendiri. Masyarakat Melayu Islam mengharapkan *muallaf* menjalani kehidupan dengan mengamalkan secara total budaya hidup Melayu dan sekiranya mereka tidak dapat mengikuti budaya hidup Melayu, besar kemungkinan *muallaf* berkenaan sukar diterima dalam masyarakat Melayu (Syarul Azman et al., 2017).

Cabaran kepelbagaian budaya dalam kalangan saudara baru atau *muallaf* boleh ditangani sekiranya wujud unsur perkongsian antara budaya iaitu sedia berkompromi dengan budaya dan cara hidup lama yang masih boleh diteruskan walaupun telah menukar agama (Azarudin & Khadijah, 2014). Sebagai contoh, keluarga yang mengambil anak angkat berstatus *muallaf* perlu memahami bahawa terdapat adat dan budaya lama mereka yang tidak bertentangan dengan Islam boleh terus diamalkan. Dengan lain perkataan, cabaran budaya yang pelbagai ini boleh ditangani dengan adanya 'dialog kehidupan' iaitu sikap memahami dan menghargai perbezaan serta sekaligus mengikis sikap prejudis terhadap adat dan budaya kaum lain (Azarudin & Khadijah, 2014). Nur Ain Sumaiyah, Sumitra & Noor Aishah (2018) telah menjalankan kajian tentang tahap kemurungan yang dialami oleh responden *muallaf* seramai 50 orang mendapati majoriti responden iaitu seramai 19 orang (38%) mengalami kemurungan tahap sederhana. Manakala terdapat juga responden yang mengalami kemurungan tahap tinggi iaitu seramai 10 orang (20%). Dapatan tersebut jelas menunjukkan bahawa cabaran dan masalah yang dihadapi oleh *muallaf* tidak mustahil boleh membawa kepada masalah psikologi kepada mereka iaitu kemurungan. Antara simptom kemurungan yang ditunjukkan berdasarkan dapatan ialah perasaan kegagalan pada masa lalu, menangis, keletihan serta cepat marah (Nur Ain Sumaiyah et al., 2018).

Kemasukan *muallaf* ke dalam agama Islam adalah dengan harapan untuk mendapatkan kesejahteraan hidup namun sebaliknya mereka perlu berhadapan dengan pelbagai cabaran setelah memeluk Islam. Hakikatnya, pertukaran agama menuntut *muallaf* membuat perubahan daripada banyak segi seperti aspek matlamat hidup, tingkah laku, amalan dan personaliti (Azammuddin, Salleh & Noriah, 2017). Namun apabila *muallaf* gagal menangani cabaran dalam kehidupannya menyebabkan timbulnya beberapa masalah lain. Antaranya ada kalangan *muallaf* yang mengambil tindakan untuk kembali ke agama asal khasnya apabila sebab kemasukan ke dalam Islam disebabkan faktor ingin berkahwin (Siti Fatimah, Nadhirah, Siti Khatijah & Siti Hajar, 2018). Begitu juga masalah kemurungan yang mungkin dihadapi oleh *muallaf* sebagaimana yang direkodkan dalam kajian di atas.

Sejarah dakwah Rasulullah menunjukkan bahawa *muallaf* pada zaman baginda telah mendapat sokongan dan bimbingan yang berbentuk spiritual, fizikal dan sokongan moral (Nabilah Huda & Zuliza, 2014). Sokongan spiritual merujuk kepada aspek pendidikan atau bimbingan yang perlu diberikan kepada *muallaf*. Pendidikan tersebut meliputi aspek pengukuhan akidah, ibadah, pembelajaran al-Quran

dan al-Sunnah serta bimbingan akhlak. Manakala sokongan fizikal merujuk kepada bantuan zakat dan sedekah, hak untuk mendapat ganjaran serta perlindungan atau keselamatan. Selanjutnya sokongan moral pula ialah pengiktirafan bakat *muallaf* seperti Rasulullah melantik Khalid al-Walid yang baru memeluk Islam sebagai pemimpin ketenteraan. Sokongan moral turut diberikan oleh Rasulullah dalam bentuk penghargaan iaitu rumah Abu Sufyan bin Harb yang baru memeluk Islam diberi penghargaan iaitu orang Mekah akan selamat ketika peristiwa pembukaan kota Mekah jika berada dalam rumah Abu Sufyan (Nabilah Huda & Zuliza, 2014).

Berdasarkan huraian di atas, jelas bahawa kepelbagaian budaya dalam kalangan *muallaf* adalah realiti yang tidak boleh dipandang ringan kerana ia menjadi salah satu cabaran pula kepada mereka. *Muallaf* sendiri perlu jelas bahawa terdapat sesetengah amalan budaya yang masih boleh diteruskan dengan syarat ianya tidak bercanggah dengan syariat dan hukum Islam. Masyarakat Malaysia khususnya Melayu Islam lebih-lebih lagi perlu memberi sokongan fizikal, spiritual dan terutamanya moral serta fahaman bahawa terdapat amalan budaya yang masih boleh diamalkan oleh *muallaf* walaupun mereka telah memeluk Islam.

‘Urf Dan Aplikasinya dalam Kehidupan Umat Islam

Berbagai adat dan budaya diamalkan oleh setiap kaum dan bangsa di Malaysia. Apabila seseorang memeluk Islam, beliau turut membawa bersama adat dan budaya yang diamalkan sebelum ini. Bagi menentukan status samada dibenarkan atau tidak, Islam telah menggariskan prinsip umum yang jelas berkaitan amalan-amalan tersebut. Ulama awal Islam telah menyusun satu disiplin ilmu yang dikenali sebagai ‘Kaedah Fiqh’. Melalui Kaedah Fiqh ini prinsip hukum Islam telah disusun dalam bentuk kaedah ringkas yang mudah di fahami. Kaedah Fiqh ditakrif sebagai;

1. Prinsip-prinsip fiqh yang bersifat umum dalam bentuk nas pendek yang mengandungi hukum umum yang sesuai dengan bahagian-bahagiannya.
2. Asas-asas atau prinsip-prinsip fiqh yang bersifat kulli dalam bentuk nas-nas atau otoriti-otoriti perundangan yang ringkas yang merangkumi hukum-hukum yang disyariatkan secara umum mengenai atau tentang perkara-perkara yang dirangkuminya.
3. Prinsip-prinsip hukum yang bersifat kulliyah yang dipetik dari dalil-dalil kulli dari al-Quran dan al-Sunnah. Di mana ia menjadi asas kepada kaedah-kaedah yang dapat disesuaikan dengan perkara-perkara juziyyah dan daripada maksud-maksud syara’. Ini dapat membantu orang awam memahami rahsia-rahsia serta hikmah-hikmah tasyri’.

Sebagai rumusannya, Kaedah Fiqh merupakan prinsip-prinsip hukum Islam yang dipetik dari nas-nas al-Quran dan al-Sunnah. Kemudiannya prinsip-prinsip tersebut disusun dalam bentuk kaedah-kaedah ringkas yang mudah difahami oleh orang awam (Ali Ahmad An Nadwi, 1998, 39-41, Al-Syeikh Ahmad bin al-Syeikh Muhammad al-Zarqa’, 1998, 34).

Kitab-kitab utama yang membincangkan tentang Kaedah Fiqh adalah; Ta’sis al-Nazar tulisan al-Dabusi (430 H), al-Asybah wa al-Nazair tulisan Ibn al-Wakil al-Syafie (716 H), al-Asybah wa al-Nazair tulisan al-Subki al-Syafie (771 H), al-Asybah wa al-Nazair tulisan Ibn al-Mulqin al-Syafie (804 H), al-Asybah wa al-Nazair tulisan al-Suyuti al-Syafie (911 H), dan al-Asybah wa al-Nazair tulisan Ibn Nujaym al-Hanasi (970 H). Penulisan Kaedah Fiqh terus berkembang hingga terhasilnya *Majallat al-Ahkam al-‘Adliyyah* yang diusahakan oleh Lembaga *Majallat* yang ditubuhkan oleh kerajaan Othmaniyyah Turkey. *Majallat* disusun dalam bentuk kod undang-undang moden. Ia mengandungi 1851 artikel atau seksyen. Hari ini, *Majallat al-Ahkam al-‘Adliyyah* yang disusun pada tahun 1885 tersebut telah diterjemahkan dalam berbagai bahasa di dunia termasuklah Bahasa Melayu. Ia pernah dilaksanakan di Johor pada tahun 1914. Ia merupakan satu hasil kerja yang terulung dan tinggi nilainya dalam bidang perundangan Islam. Adapun Kaedah Fiqh yang asas ialah lima kaedah berikut;

- 1) al-Umur bi-Maqasidiha (Setiap Perkara Berdasarkan Niat)
- 2) al-Yaqin la Yuzal bi al-Syakk (Keyakinan Tidak Dihilangkan Oleh Keraguan)
- 3) al-Masyaqqah Tujlibu al-Taisir (Kesukaran Mendatangkan Keringanan)
- 4) al-Dharar Yuzal (Dharurat Dihapuskan)
- 5) al-'Adah Muhkamah ('Adat Diakui)

Fokus perbincangan di sini ialah kaedah 'Adat Diakui'. Kaedah ini bermaksud adat kebiasaan dan budaya yang diamalkan dan diterima sebagai hukum dan peraturan. Untuk itu ulama' menentukan bahawa 'uruf atau adat itu merupakan salah satu daripada sumber hukum jika tiada nas syara'. Walau pun Islam menerima 'uruf atau adat dan budaya sebagai sumber hukum, ia tertakluk kepada perkara tersebut tidak bertentangan dengan nas syara' atau prinsip hukum Islam yang lain. Jika ia bertentangan, 'uruf atau adat budaya tersebut di tolak. Contohnya di peringkat awal Islam, adat *Jahiliyyah* yang membenarkan anak lelaki mewarisi isteri-isteri bapanya dan mengahwini mereka tidak diterima oleh Islam.

Kaedah 'Adat Diakui adalah bersumberkan nas-nas berikut, antaranya:

Hadis yang diriwayatkan oleh Abdullah bin Mas'ud; "Apa yang dilihat oleh orang Islam baik maka ia baik disisi Allah dan apa yang dilihat oleh orang Islam buruk maka buruk juga disisi Allah." (Riwayat Imam Ahmad). Begitu juga dalam firman Allah SWT dalam surah al A'raf, ayat 199 yang bermaksud; "Terimalah apa yang mudah engkau lakukan, dan suruhlah dengan perkara yang baik, serta berpalinglah (jangan dihiraukan) orang-orang yang jahil (yang degil dengan kejahilannya). Kaedah ini juga dibina atas dasar menolak kesukaran dari manusia seperti firman Allah SWT dalam surah al-Hajj, ayat 78 yang bermaksud; "...dan Ia tidak menjadikan kamu menanggung sesuatu keberatan dan susah payah dalam perkara ugama..."

Dalam konteks Malaysia, berbagai amalan adat dan budaya orang-orang Islam dari berbagai bangsa yang tidak bertentangan dengan prinsip-prinsip Islam diamalkan. Dalam aspek undang-undang Islam yang dilaksanakan, terdapat amalan adat yang dimasukkan dalam peruntukkan undang-undang. Sebagai contoh, peruntukkan mengenai harta sepencarian suami isteri. Menurut seksyen 2 Enakmen Undang-Undang Keluarga Islam Selangor, 1984, definisi harta sepencarian ialah harta yang diperolehi bersama oleh suami isteri semasa perkahwinan, berkuat kuasa mengikut syarat-syarat yang ditentukan oleh Hukum Syarak. Harta sepencarian tersebut termasuklah harta alih atau tidak alih yang diperolehi suami dan isteri. Di bawah Seksyen 122, Akta Undang-Undang Keluarga Islam (Wilayah-wilayah Persekutuan) 1984 memberi kuasa kepada mahkamah untuk memerintahkan pembahagian harta sepencarian kepada pasangan samada $\frac{1}{2}$ atau $\frac{1}{3}$ tertakluk kepada kadar sumbangan pasangan tersebut. Contohnya dalam kes *Ramah lwn. Laton* [1927] 6 FMSLR 128, kes berkenaan harta sepencarian yang terawal dibicarakan di mahkamah, dan dibicarakan dihadapan hakim Inggeris, pengiktirafan telah diberi kepada hukum adat dan hukum Islam. Terkini, satu kes tuntutan harta sepencarian terbesar dalam sejarah sedang dalam proses permohonan di Mahkamah Syariah Kuala Lumpur. Tuntutan harta sepencarian bernilai RM500 juta yang dikemukakan oleh Shahnaz Abdul Majid terhadap bekas suaminya, Datuk Seri Mahmud Abu Bekir Abdul Taib, ditolak oleh Mahkamah Tinggi Syariah kerana beberapa butiran tidak lengkap dan diminta untuk membuat permohonan semula dengan butiran yang lengkap (Utusan Malaysia, 29 Oktober 2018).

Amalan 'adat dan budaya juga diiktiraf dalam penentuan kadar mas kahwin. Bagi negeri-negeri Pantai Barat Semenanjung, kadarnya adalah berbeza dari negeri-negeri Pantai Timur. Dalam dua kes yang diputuskan di Mahkamah Syariah berikut menunjukkan perbezaan kadar maskahwin antara dua negeri yang berbeza kerana perbezaan adat dan budaya di negeri-negeri berkenaan. Dalam kes *Aishah bt Mahmud lwn Jamaluddin b. Sulaiman* (1983) 3 JH 104, antara tuntutan dalam kes ini ialah mas kahwin sebanyak RM24.00 merupakan kadar yang menjadi kebiasaan dan budaya di negeri Kedah. Manakala dalam kes *Husin lwn Moh* (1980) 1 JH 44, isu yang menjadi pertikaian ialah mas kahwin dan

jumlahnya ialah sebanyak RM500. Jelas tidak menjadi masalah kepada mahkamah untuk memutuskan kes-kes tersebut berdasarkan adat dan budaya sesuatu tempat. Bagi golongan *muallaf* atau saudara baharu, mahkamah akan mengiktiraf amalan budaya mereka sekiranya berlaku kes seumpama ini.

Adat kebiasaan dikalangan saudara baharu adalah dibenarkan selagi ianya tidak bertentangan prinsip-prinsip yang digariskan dalam nas al-Quran dan al-Sunnah. Contohnya apabila seseorang dari kaum Cina memeluk Islam, ia boleh meneruskan cara hidup asalnya, cara makan dan jenis makanan, cara berpakaian dan berbagai amalan adat dan budaya selagi tidak melibatkan perkara yang dilarang. Mereka boleh terus merayakan perayaan Tahun Baru Cina, penggunaan ciptik ketika makan, rekabentuk pembinaan masjid dan lain-lain. Namun, perkara yang melibatkan 'aqidah seperti pemujaan roh nenek moyang tidak boleh diamalkan kerana ia bertentangan dengan hukum Islam. Begitu juga bagi masyarakat India, mereka boleh terus memakai sari yang diubah suai agar menutup aurat. Makanan seperti kari, roti canai, roti nan, tosai, tandoori, maruku, putu mayam, vadai dan lain-lain boleh terus dimakan dengan syarat tidak bercampur dengan perkara dan bahan yang diharamkan oleh Islam. Begitu juga, misalnya adat dalam perkahwinan seperti merisik dan bertunang juga boleh terus diamalkan.

Kesimpulan

Berdasarkan perbincangan di atas jelas menunjukkan bahawa peraturan dan sistem yang disediakan oleh Islam sangat relevan dan sentiasa memenuhi fitrah serta keperluan manusia. Justeru, tidak sekali-kali membebankan umat Islam khususnya *muallaf* atau saudara baharu yang mula berjinak-jinak mematuhi hukum Islam. Aplikasi '*Urf*' ini perlu difahami dengan jelas agar saudara baharu dan umat Islam umumnya mengamalkan budaya dan adat yang tidak bercanggah dengan hukum Islam. Seterusnya memberi keringanan kepada mereka yang baru mula untuk mengadaptasi hukum Islam dalam kehidupan harian. Usaha dakwah perlu diteruskan secara hikmah dan jelas supaya lebih ramai lagi manusia yang rela dan suci hati menerima Islam. Sokongan tersebut penting bagi mengelakkan berlakunya kes tekanan perasaan atau kemurungan dalam kalangan *muallaf* yang baharu sahaja memasuki dunia baru yang kerap kali mereka keseorangan setelah dipinggirkan keluarga, sanak saudara dan rakan. Begitu juga, sokongan institusi agama, pertubuhan bukan kerajaan serta anggota masyarakat sangat penting agar *muallaf* tidak kembali kepada agama asal mereka.

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UJIAN KECERGASAN FIZIKAL KANAK-KANAK BERASASKAN KESIHATAN

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Abstrak: Kecergasan fizikal merupakan keupayaan seseorang individu dalam melaksanakan tugas harian dengan cekap dan cergas tanpa rasa letih serta berkeupayaan melaksanakan aktiviti semasa kecemasan. Individu yang mempunyai kecergasan fizikal yang baik adalah individu yang mempunyai kecergasan fizikal berasaskan kesihatan dan kecergasan fizikal berasaskan kemahiran. Kecergasan fizikal berasaskan kesihatan terbahagi kepada lima komponen iaitu kecergasan kardiovaskular, kekuatan, daya tahan otot, kelembutan dan komposisi badan. Terdapat lebih daripada 15 ujian bateri kecergasan fizikal yang digunakan di seluruh dunia untuk mengukur tahap kecergasan fizikal kanak-kanak dan orang dewasa. Tujuan kajian ini dijalankan adalah untuk menganalisis hubungan antara penggunaan ujian bateri kecergasan fizikal dengan tahap kecergasan fizikal kanak-kanak berasaskan kesihatan. Sehubungan itu, analisis literatur menunjukkan bahawa ujian bateri yang sering digunakan bagi mengukur tahap kecergasan kanak-kanak adalah ujian bateri FITNESSGRAM yang digunakan di Amerika Syarikat dan ujian bateri EUROFIT yang digunakan di negara Eropah. Manakala Malaysia menggunakan Ujian SEGAK yang hanya diukur terhadap kanak-kanak berumur 10 tahun hingga 17 tahun sahaja. Komponen dan kaedah pelaksanaan ujian bateri kecergasan fizikal berasaskan kesihatan akan diterangkan secara terperinci. Kesimpulannya, pengukuran tahap kecergasan fizikal kanak-kanak berasaskan kesihatan memberikan maklumat yang penting kepada murid, guru dan ibu bapa tentang tahap kecergasan fizikal kanak-kanak. Sehubungan itu, ujian kecergasan fizikal berasaskan kesihatan perlu dilaksanakan bersesuaian dengan usia kanak-kanak dan secara tidak langsung kesihatan kanak-kanak dapat digambarkan melalui ujian kecergasan fizikal berasaskan kesihatan.

Kata Kunci: Kecergasan Fizikal, Ujian Bateri, FITNESSGRAM, EUROFIT, SEGAK.

Pengenalan

Kecergasan fizikal merupakan penentu kesihatan kanak-kanak dan orang dewasa (Kolimechkov, 2017; Ortega, et al., 2014) serta dapat menjangkakan tahap kesihatan individu pada masa akan datang (Kolimechkov, 2017). Selain itu, kecergasan fizikal dapat disimpulkan sebagai kebolehan seseorang dalam melakukan tugas harian dengan cekap dan cergas tanpa rasa letih serta berkeupayaan melaksanakan aktiviti semasa kecemasan (*Council of Europe*, 1985). Sehubungan itu, kecergasan fizikal dan aktiviti fizikal berperanan penting dalam kesejahteraan hidup murid (Erwan dan Mohd Radzani, 2017) terutamanya kanak-kanak (Ortega et al. 2014). Kecergasan fizikal juga dapat menentukan kebolehan individu dalam melakukan aktiviti fizikal (Ortega F. et al., 2008). Berdasarkan definisi yang diperoleh, dapatlah dirumuskan bahawa kecergasan fizikal individu mempunyai kaitan yang rapat dengan keupayaan individu semasa melaksanakan aktiviti fizikal tanpa rasa letih serta dapat memberikan gambaran tentang kesihatan individu pada masa akan datang.

Ujian Kecergasan Fizikal

Seseorang individu dikatakan mempunyai kecergasan fizikal yang baik sekiranya individu tersebut mampu menguasai dua aspek kecergasan fizikal iaitu kecergasan fizikal berasaskan kesihatan dan kecergasan fizikal berasaskan kemahiran (Erwan dan Mohd Radzani, 2017; Cvejic, Tamara & Sergej, Tamara & Sergej, 2013; Anizu, 2011, Caspersen, Kenneth & Gregory, 1985). Kecergasan fizikal berasaskan kesihatan terbahagi kepada lima (5) komponen iaitu kecergasan kardiovaskular, kekuatan, daya tahan otot, kelembutan dan komposisi badan (Kolimechkov, 2017; Erwan dan Mohd Radzani, 2017; Anizu, 2011). Manakala kecergasan fizikal berasaskan kemahiran terbahagi kepada enam (6) komponen iaitu ketangkasan, keseimbangan, koordinasi, kuasa, masa tindak balas dan kelajuan (Erwan dan Mohd Radzani, 2017; Anizu, 2011). Oleh hal yang demikian, bagi mengetahui tahap kecergasan fizikal, ujian kecergasan fizikal perlu dilakukan. Ujian kecergasan fizikal boleh diukur dengan tepat menggunakan pelbagai kaedah makmal. Walau bagaimanapun, penggunaan modal yang tinggi disebabkan oleh alatan yang canggih membuatkan kaedah ini tidak bersesuaian untuk mengukur tahap kecergasan fizikal individu bagi keseluruhan populasi di sesuatu tempat (Kolimechkov, 2017). Justeru, terdapat lebih daripada 15 ujian bateri kecergasan fizikal yang digunakan di seluruh dunia untuk mengukur tahap kecergasan fizikal kanak-kanak dan orang dewasa (Stefen, 2017; Cvejic, Tamara & Sergej, 2013; Ruiz et. al., 2010). Jadual 1 menunjukkan ujian bateri kecergasan fizikal yang digunakan untuk kanak-kanak dan orang dewasa.

**Jadual 1: Ujian Bateri Kecergasan Fizikal untuk Kanak-Kanak dan Orang Dewasa
 (Castro-Pinero. J. et. al., 2009)**

Umur Tahun	Akronim	Organisasi atau Ujian Bateri	Negara atau Tahun
3 - 5	PREFIT	Ujian bateri PREFIT: Menilai kecergasan fizikal kanak-kanak prasekolah	Eropah 2015
5 – 17	FITNESSGRAM	The copper Institute	USA 1982
5 -17	NYPFP	National Youth Physical Program. The United States Marines Youth Foundation	USA 1967
5 – 18	HRFT	Health-Related Fitness Test, American Association for Health, Physical Education, and Recreation (AAHPER)	USA 1980
5 – 18	Physical Best	American Association for Health. Physical Education and Recreation (AAHPER)	USA 1988

6 – 12	NZFT	New Zealand Fitness Test. Rusell/ Department of Education	New Zealand
6 -17	AAUTB	Amateur Athlete Union Test Battery. Chrysler Foundation/ Amateur Athletic Union	USA 1988
6 – 17	PCPF	President's Challenge: Physical Fitness. The President's Council on Physical Fitness and Sports/ American Association of Health, Physical Education and Recreation (AAHPER)	USA 1986
6 – 17	PFAAT*	Physical Fitness and Athletic Ability Test (Japan) (Shingo and Takeo, 2002)	Japan 1964
6 - 17	YMCA YFT	YMCA Youth Fitness Test	USA 1989
6 – 18	ALPHA-FIT*	The ALPHA (Assessing Level of Physical Activity and Fitness) Project (ALPHA, 2009)	EUROPE 2009
6 – 18	EUROFIT	Council of Europe Committee for the Development of Sport	Europe 1983
7 – 69	CAHPER-FPT II	Fitness Performance Test II. Canadian Association for Health, Physical Education and Recreation (CAHPER).	Canada 1980
9 – 18	AFEA	Australian Fitness Education Award. The Australian Council for Health, Education and Recreation, ACHER	Australia
9 -19	IPFT	International Physical Fitness Test (United States Sports Academic/ General Organization of Youth and Sport of Bahrain)	Middle East 1977 r.
9 – 19+	NFTP – PRC	National Fitness Test Program in the Popular Republic China (China's National Sport and Physical Education Committee)	China
12 -24	NAPFA*	Singapore National Physical Fitness Awards/ Assessment (Schmidt, 1995)	Singapore 1982
13 -17	ASSO-FTB*	Adolescent and Surveillance System for the Obesity prevention – Fitness Test Battery (Bianco et al., 2015)	Europe 2015
15 – 69	CPAFLA	The Canadian Physical Activity, Fitness & Lifestyle Approach (Canadian Society for Exercise Physiology)	Canda

Berdasarkan Jadual 1, banyak negara yang telah menyediakan ujian bateri untuk mengukur tahap kecergasan fizikal kanak-kanak mahu pun orang dewasa. Di Malaysia, Kementerian Pendidikan Malaysia telah menerbitkan panduan Standard Kecergasan Fizikal Kebangsaan (SEGAK) untuk murid sekolah Malaysia. SEGAK merupakan satu ujian kecergasan fizikal bagi mengukur tahap kecergasan murid berdasarkan kesihatan.

Ujian Bateri *FITNESSGRAM*

FITNESSGRAM dibangunkan pada tahun 1977 oleh Dr Charles Sterling apabila beliau menyedari ibu bapa dan pihak sekolah berminat untuk mengetahui perkembangan fizikal murid sama seperti perkembangan akademik (Kolimechkov, 2017; Cvejic, Tamara & Sergej et al., 2013). Ujian ini dibangunkan khas untuk kegunaan negara Amerika Syarikat namun ujian ini banyak juga digunakan di

negara-negara lain (Kolimechkov, 2017). Keputusan yang diperoleh dari ujian ini merupakan titik permulaan bagi 1) kanak-kanak memperoleh pengetahuan berkenaan kesihatan, kaedah dan cara untuk meningkatkan tahap kesihatan, 2) ibu bapa dapat mengetahui tahap kecergasan kanak-kanak dan merancang aktiviti bersama anak mereka, 3) guru dan pihak berkenaan dapat membiasakan diri dengan kecergasan murid dan mereka bentuk kurikulum pendidikan fizikal (Cvejic, Tamara & Sergej et al., 2013; Pangrazi & Corbin, 2008). Misi pembangunan program *FITNESSGRAM* adalah untuk mempromosikan aktiviti fizikal sepanjang hayat terhadap golongan muda (Merlu & Gregory, 2010). Ujian ini merangkumi lima komponen ujian kecergasan fizikal berasaskan kesihatan iaitu ujian kecergasan kardiovaskular, kekuatan otot, ketahanan otot, fleksibiliti dan komposisi badan – rujuk Jadual 2 (Cvejic, Tamara & Sergej et al., 2013; Merlu & Gregory, 2010). *FITNESSGRAM* juga adalah laporan kemajuan berkenaan pencapaian kecergasan fizikal berdasarkan pencapaian komponen seperti di atas. Ujian ini boleh digunakan oleh murid, guru dan juga ibu bapa. Murid boleh menggunakan ujian ini bagi merancang program kecergasan peribadi, guru pula boleh menggunakan ujian ini bagi mengenal pasti keperluan murid dan membantu murid dalam merancang program manakala ibu bapa dapat menggunakan *FITNESSGRAM* bagi membantu mereka memahami keperluan anak-anak serta membantu merancang program untuk aktiviti fizikal anak mereka (Merlu & Gregory, 2010).

Jadual 2: Penambahan dan Pemansuhan Item Ujian Kecergasan Fizikal Berasaskan Kecergasan Fizikal FITNESSGRAM 1987 - 2005 (Plowman et al., 2006)

Komponen Kecergasan	Item Ujian	Tahun Penambahan	Tahun Pemansuhan
Kapasiti aerobik	Lari atau Jalan (1 Batu)	1987	
	PACER	1922	
	Ujian Berjalan 1 Batu	1999	
Komposisi Badan	Ujian Peratusan Nilai Lemak	1987	
	Indeks Jisim Badan (tinggi dan berat)	1987	
Kekuatan dan Ketahanan Otot	Ujian Bangkit Tubi	1987	1992
	<i>Curl Up Test</i>	1992	
	<i>Flexed Arm Hang</i>	1987	
	<i>Tekan Tubi 90⁰</i>	1992	
	<i>Modified Pull Up</i>	1992	
	<i>Trunk Lift</i>	1992	
	<i>Sit and Reach Test</i>	1987	1992
	<i>Back Saver Sit and Reach Test</i>	1992	
Lain-lain	Regangan Bahu		
	<i>Shuttle Run</i>	1987	1992

Ujian Bateri EUROFIT

The Committee of Experts on Sports Research telah mewujudkan ujian kecergasan fizikal pada tahun 1977 dan data normatif berkenaan tahap kecergasan fizikal kanak-kanak telah dikeluarkan untuk kali pertama. Manakala ujian bateri EUROFIT telah dibangunkan pada tahun 1983 dan ujian ini telah diterima pakai oleh majoriti negara Eropah serta telah digunakan oleh beberapa negara luar Eropah (Cvejic, Tamara & Sergej et al., 2013). Oleh hal yang demikian, kebanyakan sekolah di Eropah telah

menggunakan ujian bateri EUROFIT sejak tahun 1988. Objektif utama pembangunan EUROFIT adalah untuk memotivasikan kanak-kanak dan orang dewasa untuk melakukan senaman secara berkala serta bukan hanya melakukan aktiviti tersebut hanya di sekolah malahan sehingga mereka dewasa (Council of Europe, 1983). Ujian EUROFIT yang dibangunkan adalah sangat mudah kerana dibangunkan untuk kegunaan di padang dan dalam kelas bagi mata pelajaran pendidikan jasmani (Cvejic, Tamara & Sergej et al., 2013). Jadual 3 menunjukkan ujian kecergasan yang diuji dalam ujian bateri EUROFIT. Ujian ini mengambil masa lebih kurang 30 minit hingga 40 minit serta menggunakan peralatan yang mudah. Pada tahun 1995, ujian EUROFIT juga dibangunkan untuk orang dewasa (Council of Europe, 1983).

Jadual 3: Ujian Kecergasan Fizikal EUROFIT (Council of Europe, 1987)

Dimensi	Faktor	Penerangan
Cardio – Respiratory Endurance	<i>Cardio – Respiratory Endurance</i>	<i>Endurance shuttle run, bicycle ergometer test</i>
Kekuatan	<i>Static strength</i> <i>Explosive strength</i>	<i>Arm pull</i>
Ketahanan Otot	<i>Fungsional Strength</i> <i>Abdominal Strength</i>	<i>Bent arm hand</i> <i>Sit ups</i>
Fleksibiliti	Tahap fleksibiliti	<i>Sit and reach</i>
Kelajuan	Kelajuan pergerakan anggota badan Kelajuan berlari	<i>Shuttle run: 10 x 5 meter</i> <i>Plate tapping</i>
Imbangan	Jumlah imbalan badan	Imbangan flamingo (berdiri menggunakan sebelah kaki)

Ujian Bateri SEGAK

Standard Kecergasan Fizikal Kecergasan (SEGAK) merupakan satu ujian bateri standard kecergasan fizikal yang dibina untuk mengukur tahap kecergasan fizikal murid berdasarkan kesihatan di Malaysia. Setiap komponen yang dimasukkan dalam SEGAK terkandung dalam kurikulum Pendidikan Jasmani sekolah rendah dan juga sekolah menengah. Pada tahun 2008, SEGAK mula dilaksanakan terhadap murid-murid Tahun 4 sehingga Tingkatan 5 yang berumur antara 10 tahun hingga 17 tahun. SEGAK dilaksanakan secara pentaksiran sekolah dan skor murid direkodkan. Ujian ini dijalankan secara sistematik dan wajib dijalankan dua kali setahun iaitu pada bulan Mac dan Ogos. Pelaporan SEGAK dapat memberi maklum balas kepada murid, guru, pentadbir sekolah, ibu bapa dan pihak berkepentingan tentang tahap kecergasan fizikal murid. Melalui maklum balas tersebut, tindakan susulan dapat dirancang dan dilaksanakan bagi meningkatkan tahap kecergasan fizikal seseorang murid. Matlamat utama ujian SEGAK adalah untuk meningkatkan dan mengekalkan tahap kecergasan fizikal berdasarkan kesihatan yang optimum. SEGAK mempunyai lima objektif iaitu 1) mengukur dan mentafsir tahap kecergasan fizikal sendiri; 2) menganalisis dan mentafsir kecergasan fizikal sendiri; 3) mengetahui tahap kecergasan fizikal sendiri; 4) merancang dan melakukan tindakan susulan bagi meningkatkan tahap kecergasan fizikal; dan 5) mengamalkan gaya hidup aktif dan sihat untuk mencapai tahap kecergasan fizikal berdasarkan kesihatan yang optimum (BPK, 2016).

Ujian bateri kecergasan fizikal berasaskan kesihatan yang terdapat dalam SEGAK mempunyai lima komponen. Komponen tersebut adalah indeks jisim badan (*Body Mass Index – BMI*), naik turun bangku selama 3 minit, tekan tubi untuk murid lelaki dan tekan tubi ubah suai untuk murid perempuan, ringkuk tubi separa dan jangkauan melunjur. Ujian indeks jisim badan perlu dibuat sebelum melakukan ujian-ujian lain dan ujian ini mesti dilaksanakan mengikut turutan secara berterusan oleh murid. Bagi murid yang tidak sihat, ujian SEGAK boleh dijalankan pada hari lain dalam bulan yang sama. Murid-

murid berkeperluan khas tidak perlu menjalani ujian SEGAK kerana ujian ini adalah khusus untuk murid-murid normal (BPK, 2016).

Kesimpulan

Kecergasan fizikal merupakan petunjuk yang signifikan terhadap tahap kesihatan kanak-kanak dan orang dewasa. Sehubungan dengan itu, ujian kecergasan fizikal berasaskan kesihatan dapat memberikan jangkaan awal terhadap kesihatan individu pada masa akan datang. Terdapat lebih daripada 15 ujian bateri kecergasan fizikal yang terdapat di dunia. Walau bagaimanapun, ujian bateri *EUROFIT* dan *FITNESSGRAM* yang paling banyak digunakan di negara Eropah dan juga Amerika Syarikat. Manakala kanak-kanak di Malaysia menggunakan ujian bateri kecergasan fizikal SEGAK bermula usia 10 tahun hingga 17 tahun. . Justeru, adalah perlu bagi kanak-kanak Malaysia yang berusia bawah 10 tahun juga menjalani ujian kecergasan dan secara tidak langsung mereka dapat mengetahui tahap kecergasan fizikal mereka sama seperti kanak-kanak di luar negara. Rentetan itu, satu ujian bateri kecergasan fizikal berasaskan kesihatan perlu dibangunkan bagi mengukur tahap kecergasan fizikal kanak-kanak berasaskan kesihatan Semasa proses pembangunan ujian bateri kecergasan fizikal, terdapat beberapa perkara yang perlu diambil kira seperti lokasi geografi pengguna ujian bateri dan juga alatan yang perlu digunakan untuk menjalankan ujian kecergasan berasaskan kesihatan bagi memudahkan ujian tersebut dilaksanakan. Oleh hal yang demikian, ujian kecergasan yang dibangunkan perlulah memberikan impak yang positif terhadap individu, guru dan juga ibu bapa. Individu yang terlibat dalam ujian ini adalah kanak-kanak atau murid. Kanak-kanak perlu tahu tahap kecergasan mereka dan biasanya guru akan mengajar pelbagai aktiviti fizikal yang secara langsung dapat meningkatkan kecergasan fizikal murid. Ibu bapa juga perlu dimaklumkan tentang tahap kecergasan fizikal kanak-kanak supaya mereka cakna tentang kepentingan melakukan aktiviti fizikal yang semakin kurang dilakukan oleh kanak-kanak pada masa kini kerana sibuk dengan gajet dan secara tidak langsung menyebabkan bilangan kanak-kanak yang mengalami masalah obesiti semakin meningkat.

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PENDIDIKAN ILMU FALAK DALAM MEMPENGARUHI NILAI MURNI PELAJAR

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Abstrak: Secara umum Ilmu Falak, boleh disamakan dengan Astronomi, iaitu ilmu yang mempelajari pergerakan bintang. Ilmu falak juga adalah sebuah ilmu yang mempelajari peredaran badan cakerawala di langit, bumi, bulan dan matahari. Peredaran badan-badan cakerawala di langit tersebut digunakan untuk menentukan waktu sholat, arah kiblat, gerhana bulan dan matahari serta penentuan awal bulan- bulan hijriyah. Melalui Kursus Astronomy Lapangan yang ditawarkan kepada Program Geomatik Politeknik Merlimau khasnya dan Program Geomatik di Politeknik seluruh Malaysia amnya, perlu sentiasa dinilai agar sentiasa mencapai matlamatnya. Fokus utama adalah astronomi falak syari'e pada sebahagian sub topik dalam Kursus Astronomy Lapangan. Tujuan kajian ini adalah untuk mencari pendekatan nilai-nilai murni di kalangan pelajar yang telah mengikuti Kursus Falak Syari'e. Metodologi kajian yang digunakan ialah kajian lapangan yang menggunakan sepenuhnya kaedah pengumpulan data iaitu borang kaji selidik. Data yang diperolehi daripada borang kaji selidik dianalisis menggunakan perisian SPSS dan dapatan kajian dihuraikan dengan menggunakan kaedah statistic deskriptif dan inferensi. Hasil kajian mendapati tahap peningkatan nilai murni dalam kalangan responden dalam aspek yang dikaji berada pada tahap yang tinggi. Kesimpulannya dapatan kajian ini menunjukkan bahawa tahap peningkatan nilai murni para pelajar adalah baik.

Katakunci: Ilmu Falak, nilai murni.

Pengenalan

Apabila meneliti ayat al-Quran pertama yang diturunkan kepada Rasulullah saw bermaksud bacalah menunjukkan bahawa Islam mementingkan kepada pendidikan. Ia tidak dimulai dengan perintah yang berhubung perkara lain seperti ibadat, tetapi dimulakan dengan perintah yang berhubung dengan pendidikan.

Firman Allah S.W.T.

“Bacalah (wahai Muhammad) dengan nama Tuhanmu yang menciptakan (sekalian makhluk), Ia menciptakan manusia dari sebuku darah beku; bacalah, dan Tuhanmu Yang Maha Pemurah, yang mengajar manusia melalui pena dan tulisan. Ia mengajar manusia apa yang tidak diketahuinya”.

(Al-`Alaq: 1-5)

Dalam erti kata lain, pendidikan amat penting dalam kehidupan manusia. Menurut Mohammad Hannan Hassan (2013), seseorang mendapat pendidikan melalui bacaan, menulis, oral dan praktikal. Bukan sahaja ilmu-ilmu di dalam Al-Quran sahaja, malah termasuk dalam ilmu keduniaan. Justeru, daripada ilmu yang diperolehi seseorang manusia perlu mempraktikkan apa yang telah dipelajari supaya ilmu tersebut dapat memberikan kesan dalam kehidupan seseorang.

Latar Belakang Kajian

Mempelajari ilmu falak pada dasarnya mempunyai dua kepentingan yang saling berkaitan. Pertama, untuk penguasaan dan pengembangan ilmu pengetahuan dan teknologi. Untuk keperluan ini muncul para ahli falak (Astronom Muslim) terkenal pada abad-abad kemajuan Islam yang mengembangkan ilmu falak melalui berbagai percubaan dan penelitian secara mendalam. Hasil karya mereka memberikan sumbangan besar bagi pengembangan ilmu pengetahuan moden, baik di timur maupun di Barat. Kedua, mempelajari ilmu falak merupakan satu hal yang penting karena ilmu falak sangat berkaitan dengan empat perkara dari lima rukun Islam, yaitu untuk keperluan yang berkaitan dengan masalah-masalah ibadah, seperti shalat, puasa, dan haji. keperluan ini bersifat pragmatis dan turut menentukan sah atau tidaknya amal ibadah.

Keperluan yang kedua ini meliputi penentuan arah kiblat, penentuan waktu shalat, penentuan awal bulan kamariah untuk puasa, haji, dan hari-hari kebesaran Islam, serta untuk penentuan saat terjadinya gerhana bulan maupun matahari. Dengan demikian, ilmu falak atau ilmu hisab dapat menumbuhkan keyakinan seseorang dalam melakukan ibadah, sehingga ibadahnya lebih khusyuk". Nabi SAW bersabda yang bermaksud;

"Dari Abu Abdillah bin Aufa berkata: telah berkata Rosulullah SAW, Sesungguhnya sebaik-baik hamba Allah adalah mereka yang selalu memperhatikan Matahari dan Bulan dan Bintang-Bintang dan Bayang-Bayang untuk mengingat Allah „Azza Wajalla” (HR. Ath-Thabrani)

Ali Bin Abi Thalib berkata:

"Barangsiapa mempelajari ilmu pengetahuan tentang bintang-bintang (benda-benda langit), sedangkan ia dari orang yang sudah memhami al-Qur"an, niscaya bertambah iman dan keyakinannya"

Selain itu, ilmu falak juga berfaedah untuk sarana tadabbur alam. Sumber Hakiki ilmu pengetahuan adalah al-Qur"an dan Hadist yang dinamakan ulum al-Naqliyah, adapun alam menjadi subjek ilmu yang dinamakan ulum al-Aqliyah. Sains akan digunakan untuk menjelaskan secara rasional dan ilmiah tentang segala sesuatu yang terjadi pada subjek iaitu alam, sedangkan sumber-sumber naqliyah menyediakan pedoman dan kunci-kunci mengenai hal-hal yang berkaitan dengan keperluan manusia hidup di dunia. Dalam hal ini penerapan ilmu falak dapat digambarkan sebagai hubungan antara sumber naqli dengan alam sebagai subjek ilmiah. Dalam merumuskan kedudukan ilmu falak sebagai wasilah ibadah, ilmu falak berperanan sebagai sarana untuk mencapai kesempurnaan ibadah.

Menurut Sidek Baba (2006) ilmu dalam Islam terbentuk dalam acuan yang sepadu. Ilmu-ilmu seperti akidah, akhlak dan ibadah adalah tunjang yang selaras dengan ilmu sains dan teknologi serta ilmu-ilmu yang lain. Ilmu dalam Islam merangkumi keseluruhan dengan meletakkan fakta dan data yang laras dengan teori sains. Kesemuanya bertujuan untuk mengenali dan mengagumi kekuasaan dan kebesaran Allah s.w.t

Melalui penjelasan ini dapatlah difahami bahawa Pendidikan ilmu falak bertujuan mencapai pertumbuhan yang seimbang dalam keseluruhan pembentukan sahsiah manusia melalui latihan jasmani, emosi, rohani dan intelek manusia. Oleh kerana itu pendidikan ilmu falak mampu membentuk pelajar yang soleh dan berakhlak mulia dan melahirkan sifat nilai-nilai murni yang dimaksudkan adalah kompenan bersepadu terpenting yang terkandung dalam Falsafah Pendidikan Negara. Ia perlu disepadukan ke dalam setiap mata pelajaran pendidikan Islam dan moral. Nilai-nilai murni adalah berteraskan nilai-nilai kerohanian iaitu baik hati, berhemah tinggi, hormat menghormati, kasih sayang, adil, kebersihan fizikal dan mental, jujur, rajin, bekerjasama, bersemangat kemasyarakatan, sederhana, bersyukur dan berdikari (Pusat Perkembangan Kurikulum,1992).

Manakala dari aspek sahsiah pula, pelajar-pelajar perlu dibentuk menjadi individu yang serius dalam setiap usaha kreatif, inovatif, produktif dan berdisiplin. Mereka juga merupakan individu yang berkeyakinan diri, berdaya saing dan menghayati idealisme. Ini akan melahirkan pelajar-pelajar yang berjaya, cemerlang dan seterusnya membina manusia yang ‘berbuat sendiri’ ataupun ‘*self actualize person*’. Para pelajar juga perlu mempunyai nilai ketaatan kepada negara yang tinggi di samping memiliki aspek kesihatan mental dan fizikal yang berkualiti (Taaherah *et al*, 1994).

Berdasarkan Teori Perkembangan Moral Kohlberg (1988) yang menyatakan bahawa pengajaran nilai merupakan tanggungjawab bagi membantu murid-murid melalui peringkat perkembangan pemikiran moral. Ini bermakna pengajaran nilai di sekolah bertujuan untuk membimbing pelajar mencapai satu peringkat pemikiran dan kesedaran yang tinggi. Kohlberg juga menekankan pendidikan nilai berkait rapat dengan perkembangan personaliti pelajar. Manakala latihan kemahiran dilakukan secara bersepadu dapat memperkembangkan diri pelajar dalam aspek emosi, rohani dan jasmani bagi melahirkan pelajar beretika dan berfikiran matang. Pada hakikatnya, nilai murni dan kemahiran adalah merupakan satu elemen pengajaran dan pembelajaran yang paling penting serta saling berkaitan untuk membina masa depan pelajar yang lebih baik.

Pernyataan Masalah

Daripada hasil kajian Siti Mariam Samat (2002) ke atas salah sebuah politeknik mendapati bahawa pihak pengurusan politeknik tersebut telah melakukan pengawalan yang tinggi bagi menangani masalah sosial, namun masalah sosial ini tetap berterusan walaupun ia tidak kritikal disebabkan faktor-faktor di luar kawalan pihak pengurusan. Sikap sebahagian pihak pentadbiran institusi-institusi pendidikan dan juga pengajar-pengajar yang hanya mementingkan kepada kecemerlangan akademik semata-mata haruslah diperbetulkan di mana aspek pembangunan insan dan penerapan nilai harus diberikan perhatian yang menyeluruh bagi melahirkan pelajar yang cemerlang dan bersahsiah tinggi. Sehubungan itu Ab. Halim Tamuri (2000) mendapati bahawa masih ramai guru yang tidak dapat menerapkan nilai-nilai murni semasa proses pengajaran dan pembelajaran (P&P) berlangsung.

Mengikut kajian Alias (2010) bertajuk *Penilaian Pelaksanaan Kurikulum Pendidikan Islam Politeknik Kementerian Pengajian Tinggi Malaysia*, mendapati tingkah laku pelajar politeknik dari aspek akhlak berada pada tahap tinggi, manakala tingkah laku ibadah dan akhlak berada pada tahap sederhana. Ini menunjukkan keberkesanan Pendidikan Islam yang dilaksanakan di politeknik masih belum mencapai tahap keberkesanan yang tinggi dalam aspek pengamalan.

Sehubungan itu, timbul persoalan sejauhmanakah pula tahap pengamalan nilai-nilai murni dalam kalangan pelajar di Politeknik Merlimau, Melaka (PMM). Justeru itu, satu kajian perlu dijalankan untuk mengkaji tahap pengamalan ilmu falak telah mempengaruhi nilai murni dalam kalangan pelajar Politeknik Merlimau, Melaka yang telah mengikuti kursus tersebut.

Objektif

Mengenalpasti tahap pengamalan ibadah di kalangan pelajar yang telah menjalani kursus ilmu Falak.

Mengenalpasti tahap penghayatan sains di kalangan pelajar yang telah menjalani kursus ilmu Falak.

Mengenalpasti tahap pengamalan kerohanian di kalangan pelajar yang telah menjalani kursus ilmu Falak.

Metodologi Kajian

Dalam kajian ini, penulis menggunakan dua lapangan penyelidikan iaitu kajian perpustakaan dan kajian lapangan bagi membantu penulis untuk memahami permasalahan yang dikaji dengan lebih mudah. Bagi kajian ini, penulis telah menggunakan dua metode utama iaitu Metode Pengumpulan Data dan Metode Analisis Data. Kaedah ini sesuai digunakan untuk mengkaji populasi yang ramai (Mohd Najib A. Ghafar, 1998). Sebanyak 85 kertas soal selidik diedarkan kepada sampel kajian yang terdiri dari 135 orang populasi. Jumlah sampel adalah bersesuaian dengan Jadual Penentuan Saiz Sampel seperti yang dikemukakan oleh Krejcie dan Morgan (Chua Yan Piew (2006).

Soalan kaji selidik ini dibentuk oleh penyelidik sendiri yang diadaptasi daripada soal selidik yang digunapakai oleh pengkaji terdahulu iaitu Seri Kartini Jurami (2011) bertujuan untuk mengukur tahap pengamalan ilmu falak dalam kalangan pelajar Politeknik Merlimau mempengaruhi nilai-nilai murni. Kajian dijalankan hanya kepada pelajar Program Geomatik yang telah mengikuti Kursus Ilmu Falak. Penilaian kepada responden dilakukan berdasarkan kepada tiga aspek hasil dari pembelajaran ilmu falak iaitu pengamalan ibadah, pengamatan sains dan amalan kerohanian.

Dapatan Kajian

Jadual 1: Tahap nilai-nilai murni dalam kalangan pelajar Politeknik Merlimau Melaka
Bilangan responden = 75 pelajar

Bil.	Nilai-nilai murni	STS	TS	TT	S	SS	MIN	INTERP.
A. PENGAMALAN IBADAH								
1.	Melengkapkan keperluan ibadah	0 (0%)	0 (0%)	1 (1.3 %)	13 (17.3 %)	61 (81.3%)	4.80	Sangat Ting gi
2.	Melaksanakan rukun Islam lebih sempurna	0 (0%)	0 (0%)	2 (2.7 %)	18 (24%)	55 (73.3%)	4.71	Sangat Tinggi
3.	Kerap sujud syukur	1 (1.3%)	0 (0%)	2 (2.7 %)	15 (20.0 %)	57 (76%)	4.69	Sangat Tinggi
4.	Solat 5 waktu sehari	1 (1.3%)	0 (0%)	1 (1.3 %)	15 (20.0 %)	58 (77.3%)	4.72	Sangat Tinggi
5.	Yakin melaksanakan ibadah	0 (0%)	0 (0%)	0 (0%)	12 (16%)	63 (84%)	4.84	Sangat Tinggi
B. PENGAMALAN SAINS								
6.	Meningkatkan kemahiran dalam sains dan matematik	0 (0%)	0 (0%)	3 (4%)	27 (36%)	45 (60%)	4.56	Sangat Tinggi
7.	Meningkatkan kemahiran penggunaan peralatan	0 (0%)	0 (0%)	1 (1.3 %)	26 (34.7 %)	48 (64%)	4.63	Sangat Tinggi
8.	Meningkatkan pengetahuan dalam astronomi	0 (0%)	0 (0%)	2 (2.7%)	11 (14.7 %)	62 (82.7%)	4.8	Sangat Tinggi
9.	Menajamkan daya pemikiran	0 (0%)	0 (0%)	2 (2.7 %)	27 (36%)	46 (61.3%)	4.59	Sangat Tinggi

10. Gerhana bulan dan matahari mendidik keinsafan	0 (0%)	0 (0%)	4 (5.3%)	17 (22.7%)	54 (72%)	4.67	Sangat Tinggi
11. Ketenangan berfikir kesan fenoma alam	0 (0%)	0 (0%)	1 (1.3%)	19 (25.3%)	55 (73.3%)	4.72	Sangat Tinggi
C. KEROHANIAN							
12. Tidak menanggung tugas diamanahkan	0 (0%)	0 (0%)	1 (1.3%)	29 (38.7%)	45 (60%)	4.59	Sangat Tinggi
13. Kerap menghadiri majlis ilmu	0 (0%)	1 (1.3%)	2 (2.7%)	29 (38.7%)	43 (57.3%)	4.52	Sangat Tinggi
14. Membantu masyarakat masalah kiblat	0 (0%)	0 (0%)	3 (4%)	18 (24%)	54 (72%)	4.68	Sangat Tinggi
15. Mendalami ilmu falak	0 (0%)	1 (1.3%)	6 (8%)	24 (32%)	44 (58.7%)	4.48	Sangat Tinggi
16. Tidak cuai tanggungjawab	0 (0%)	0 (0%)	3 (4%)	30 (40%)	42 (56%)	4.52	Sangat Tinggi
17. Berani keluarkan pendapat berdasarkan fakta	1 (1.3%)	0 (0%)	4 (5.3%)	26 (34.7%)	44 (58.7%)	4.49	Sangat Tinggi
18. Kerja lebih teratur	0 (0%)	0 (0%)	1 (1.3%)	31 (41.3%)	43 (57.3%)	4.56	Sangat Tinggi
19. Tidak bertindak agresif	0 (0%)	0 (0%)	1 (1.3%)	28 (37.3%)	46 (61.3%)	4.66	Sangat Tinggi
20. Bertambah keimanan	0 (0%)	0 (0%)	2 (2.7%)	19 (25.3%)	54 (72%)	4.69	Sangat Tinggi
Jumlah keseluruhan						4.69	Sangat Tinggi

Jadual 1 menunjukkan bahawa setiap elimen iaitu ibadah, sains dan kerohanian dalam kalangan pelajar Politeknik Merlimau Melaka yang telah mengikuti kursus ilmu falak berada pada tahap sangat tinggi. Semua elimen tersebut telah membentuk nilai-nilai murni dengan bukti pencapaian nilai min adalah sangat tinggi. Dari segi kekerapan dan peratusan menunjukkan bahawa pada penilaian elimen pengamalan ibadah seramai 59 orang (78.38%) pelajar menyatakan sangat setuju dan seramai 15 orang (19.46%) pelajar menyatakan setuju. Pada penilaian pengamalan sains seramai 52 orang (68.9%) pelajar menyatakan sangat setuju, seramai 21 orang (28.2%) menyatakan setuju dan seramai 2 orang (2.9%) menyatakan tidak tahu. Manakala elimen pengamalan kerohanian seramai 46 orang (61.5%) pelajar menyatakan sangat setuju, seramai 26 orang (34.7%) menyatakan setuju dan seramai 3 orang (3.4%) menyatakan tidak tahu. Secara keseluruhannya menunjukkan bahawa nilai-nilai murni dalam kalangan pelajar Politeknik Merlimau Melaka yang telah mengikuti kursus ilmu falak berada pada tahap sangat tinggi (min = 4.69).

Perbincangan

Pengajaran dan Pembelajaran Pengajaran dan pembelajaran biasanya proses yang dilakukan secara formal dan di dalam bilik darjah. Namun di era globalisasi ini pengajaran dan pembelajaran telah merentasi masa iaitu dengan pembelajaran secara online dan sebagainya. Sebagaimana yang dinyatakan oleh Hashim (2003), pengajaran dan pembelajaran ialah sesuatu tugas dan aktiviti yang diusahakan bersama oleh pengajar dan pelajarnya. Tanpa salah satu daripadanya pengajaran tidak akan berlaku. Oleh yang demikian, pengajaran perlu dirancang oleh pengajar secara sistematik dengan menggunakan kaedah dan teknik yang sesuai bagi mencipta lingkungan yang memungkinkan terjadinya proses belajar. Dalam kajian ini, proses pengajaran dan pembelajaran adalah fokus kepada penerapan nilai-nilai murni dan secara khususnya bertujuan untuk membentuk sahsiah dikalangan pelajar.

Teori Pembelajaran yang diperkenalkan oleh Bandura (1973), menyatakan bahawa tingkah laku seseorang bukan sahaja ditentukan oleh faktor dalaman sahaja malahan faktor luaran seperti idola juga mempengaruhi tingkah laku. Ini secara jelas menyatakan bahawa pengalaman dan pemerhatian akan mempengaruhi tingkah laku seseorang. Selain itu juga, perkaitan antara teori tersebut dengan tingkah laku nilai-nilai murni mempunyai hubungkait yang ketara. Sebagai contoh, suasana persekitaran yang baik akan melahirkan seorang pelajar yang berakhlak mulia seperti bertanggungjawab, bekerjasama, hormat menghormati dan sebagainya. Sebagaimana yang dinyatakan oleh Yahaya *et al* (2011), teori Albert Bandura menerangkan tentang pengukuhan tingkah laku. Malahan, permasalahan yang paling dominan seperti masalah disiplin di kalangan pelajar adalah antara permasalahan yang memerlukan pengukuhan tingkah laku. Oleh yang demikian, memupuk nilai-nilai murni kepada pelajar perlu bermula dari semua pihak. Justeru itu, pengajar juga bertanggungjawab untuk menyampaikan nilai-nilai ini kepada pelajar terutamanya sewaktu proses pembelajaran dan pengajaran berlaku.

Perbezaan pengamalan nilai-nilai murni dalam kalangan pelajar Politeknik Merlimau, Melaka berdasarkan tiga aspek hasil daripada mempelajari ilmu falak.

Hasil kajian perbandingan pengamalan nilai-nilai murni dalam kalangan pelajar PMM menunjukkan, tidak terdapat perbezaan yang signifikan berdasarkan aspek pengamalan ibadah, penghayatan sains dan amalan kerohanian. Ini bermakna pengamalan nilai-nilai murni dalam kalangan pelajar PMM adalah sama dan selari dengan dapatan kajian Mohd Khairi (2016). Faktor rakan sebaya dikenali pasti mempunyai pengaruh kuat terhadap proses pembentukan nilai murni di kalangan pelajar (Che Noraini, 2005). Rakan sebaya adalah pengaruh luar yang berkomunikasi atau seseorang membuat hubungan dengannya. Rakan sebaya ini juga mempunyai budaya mereka tersendiri. Justeru, pengaruh rakan sebaya juga mempengaruhi pembentukan nilai murni di kalangan pelajar kerana sekiranya pelajar bergaul dengan rakan-rakan yang baik maka eloklah nilai murninya dan sebaliknya. Menurut Azhar (2006), rakan sebaya sememangnya merupakan golongan yang paling hampir dalam kehidupan remaja. Justeru, bimbingan dengan menjayakan program-program berkualiti perlu dilaksanakan agar pembinaan sikap positif di kalangan pelajar terjana dengan cemerlang.

Cadangan

Cadangan Terhadap Bahagian Pembangunan dan Penilaian Kurikulum Politeknik

Cadangan utama agar sukatan Kursus Ilmu Falak diberi tempoh masa pengajaran dan pembelajaran lebih lama agar penyampaian ilmu tersebut lebih luas dan menyeluruh. Tempoh waktu pengajaran sekarang adalah 32 jam selama satu semester. Pengukuhan nilai-nilai murni akan lebih padu jika pertemuan di dalam bilik kuliah lebih lama bagi kursus tersebut. Pentaksiran berbentuk amali seperti cerapan hilal, gerhana bulan dan matahari amat sesuai bagi merealisasikan kefahaman dan seterusnya pengamalan nilai-nilai murni. Penilaian bukanlah sekadar mengukur pengetahuan sahaja malah ia lebih kepada pengukuhan dan peneguhan kepada pelajar untuk memahami serta mengamalkan nilai murni daripada pengaruh ilmu falak yang telah dipelajari. Kursus ilmu falak ini juga boleh diaplikasikan kepada pelajar yang mempunyai asas kerja ukur seperti Kejuruteraan Awam, Senibina dan Perancangan Bandar agar mereka juga memperolehi impak hasil pembelajaran tersebut.

Cadangan Terhadap Pihak Pengurusan PMM

Pihak pengurusan PMM hendaklah senantiasa memberi sokongan padu kepada mana - mana pensyarah, unit Geomatik, Jabatan Kejuruteraan Awam, PMM bagi program yang melibatkan usaha sama dengan Jabatan Mufti Negeri Melaka seperti menjalankan kerja semakan arah kiblat kubur dan masjid, hospital dan pusat tumpuan orang ramai. Usaha ini bagi melahirkan pelajar yang berkomitmen tinggi dalam melakukan ibadah ke arah melahirkan pelajar yang berakhlak mulia, bersahsiah dan berwibawa sehingga mereka dapat menjadi kebanggaan PMM. Mengadakan kursus dan latihan untuk pelajar sama ada di peringkat jabatan pengajian atau peringkat PMM bagi menjamin terus memberi komitmen terhadap program-program yang memberi manfaat kepada diri pelajar.

Cadangan Terhadap Pensyarah Geomatik

Para pensyarah disarankan untuk menekankan pelaksanaan amalan ibadah, penghayatan sains dan amalan kerohanian di sesi pengajaran dan pembelajaran. Penekanan tentang akhlak dalam kehidupan harian juga perlu di ingatkan selalu. Disamping itu juga, kaedah dakwah dan kaunseling yang bersesuaian perlulah digunakan bagi menarik minat dan membimbing pelajar agar mengamalkan nilai-nilai murni dalam kehidupan harian.

Cadangan Terhadap Pelajar

Semua pelajar perlulah senantiasa belajar untuk memahami nilai-nilai murni berteraskan nilai-nilai kerohanian iaitu baik hati, berhemah tinggi, hormat menghormati, kasih sayang, adil, kebersihan fizikal dan mental, jujur, rajin, bekerjasama, bersemangat kemasyarakatan, sederhana, bersyukur dan berdikari. Selain daripada itu nilai akidah, ibadah dan akhlak dan mempraktikan amalan ajaran Islam khususnya amalan yang wajib serta amalan sunat bagi membina kekuatan diri agar tidak terpengaruh unsur-unsur negatif yang semakin berleluasa sekarang.

Kesimpulan

Secara keseluruhannya tahap penghayatan nilai-nilai murni dalam diri pelajar adalah berada pada tahap tinggi. Apabila diberi masalah untuk diselesaikan, mereka dapat berfikir untuk menyelesaikan dengan cara yang terbaik. Sebagai contoh apabila seseorang memahami kandungan Al-Quran ia akan memberi kesan kepada pembentukan pemikiran, pembinaan perasaan dan pembawaan hidup seseorang (Abdul Halim, 1991). Begitu juga apabila memahami nilai-nilai murni sebagai nilai yang dapat membentuk peribadi yang terpuji, akan memberi kesan terhadap pemikiran pelajar. Untuk itu apabila pelajar diminta reaksi daripada situasi yang diberikan, pelajar

dapat memberi pilihan yang terbaik kerana tahap penghayatan nilai-nilai murni dalam diri pelajar adalah tinggi. Tahap penghayatan nilai-nilai murni dalam diri pelajar berada pada tahap tinggi tetapi dari segi amalan penghayatan pelajar terhadap penerapan nilai-nilai murni dalam kehidupan seharian pelajar adalah berada pada tahap baik. Penghayatan nilai-nilai murni sebenarnya adalah pelajar bukan sahaja mengetahui dan memahami nilai-nilai murni tetapi mengamalkan nilai-nilai murni dalam kehidupan seharian.

Proses penghayatan nilai murni dapat dilakukan seperti mana konsep umat Islam menghayati al-Quran. Menurut Abdul Halim (1991), apabila seseorang itu menghayati al-Quran bukan sahaja adalah dalam bentuk pembacaan dan pelaksanaan idea dalam semua aspek, termasuk penghayatan dalam mengamalkan nilai-nilai dan hukum hakam dalam segala bentuknya. Sehubungan itu dalam pengajaran ilmu falak penekanan dalil al Quran berhubung sesuatu kejadian fenomena alam seperti gerhana bulan dan matahari telah memenuhi ruang rohani mereka. Untuk itu penghayatan nilai-nilai murni dalam erti kata sebenar amat penting yang mana dapat membantu membentuk disiplin dalam diri. Dapatan kajian untuk mengenal pasti tahap penghayatan nilai-nilai murni dalam diri pelajar adalah berada pada tahap tinggi. Tahap penghayatan nilai-nilai murni berada pada tahap tinggi ini apabila pelajar mengetahui dan memahami sepenuhnya tindakan yang perlu diambil dengan menilai setiap pilihan yang ada berdasarkan penghayatan nilai-nilai murni dalam diri mereka.

Nilai-nilai hidup yang baik perlu ditanam, dipupuk dan dibentuk dalam diri seorang pelajar kerana mereka adalah merupakan pelapis generasi yang akan datang. Sekiranya nilai-nilai ini tidak diterapkan dari sekarang sistem nilai dalam masyarakat negara kita pasti akan berubah ke arah yang lebih buruk (Toffler, 1969). Jangan biarkan angin perubahan yang melanda negara kita ini menghakis nilai-nilai murni yang perlu dipertahankan.

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MODEL PEMBINAAN MODUL SIDEK DI DALAM MODUL INTERVENSI PENGURUSAN STRES PELAJAR

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Abstract: *This study builds a psychology-based training module and an Islamic psychological perspective known as the Psychospiritual Therapy Intervention Module (IPTR) for the students. This module is based on Sidek Module construction model which uses two theoretical studies, the basic theory of General Adaptation Syndrome (GAS) stress and Islamic Psychology Perspective. These two theoretical studies are adapted in the structure of the activity building in the module. This module is still considered as a draft and the next step of this module will be evaluated and tested to obtain validity and reliability values before being implemented on the actual setting.*

Keyword: *Module, Stress, Spiritual, Stress Module, Students.*

Pengenalan

Semenjak awal abad- 20 an, kajian awal terhadap remaja telah menjadi fokus kajian di bidang psikologi dan kaunseling. Fokus kajian utama dalam tempoh perkembangan ini ialah permasalahan psikologikal remaja. Fenomena “*storm and stress*” sebagaimana pandangan Hall (1904) menerusi kajian-kajian saintifik yang telah dijalankan sehingga kini masih relevan dan diakui oleh para psikologi yang lain (Arnett, 2006). Remaja terdedah dengan pelbagai risiko dan keperluan serta kehendak yang perlu dipenuhi. Kemuncak cabaran remaja adalah tertumpu kepada populasi pelajar di pusat-pusat pengajian atau di kolej (Lynch et al. 2011). Pelajar-pelajar kini dikenali sebagai pelajar *millennial* yang ditafsirkan sebagai generasi Y yang amat berbeza dengan generasi sebelumnya (Kumaraswamy, 2013.) Menurut Bland et al. (2012), generasi Y menghadapi cabaran *stress overload* stres yang berlebihan di dalam mengharungi dan menamatkan pengajian mereka. Kolej dan universiti bukan lagi tempat yang menyeronokkan sebaliknya pelajar berdepan dengan pelbagai isu yang perlu ditangani (Eisenberg et al. 2012). Antara isu kritikal yang sering dihadapi di kampus ialah tekanan akademik seperti kesuntukan masa menghadapi peperiksaan kerana silabus yang padat, risau tentang peperiksaan dan kerjaya yang bakal dimiliki (El Ansari & Stock 2010; El Ansari et al. 2014), sosial dan tuntutan keperluan diri (Bland et al. 2012). Revolusi budaya pula, kian pantas mempengaruhi kehidupan semasa dengan perubahan yang signifikan seperti industri muzik (*i-tunes*), industri berita dan komunikasi, peluang pekerjaan, pengangkutan, media sosial dan pelbagai isu kesihatan yang komplek(Seaward, 2018). Dalam kontek tempatan, KPM berhasrat untuk memantapkan sistem pendidikan bertaraf dunia, selari dengan matlamat menjadikan sebuah negara maju. Keadaan ini pastinya menyumbangkan kesan positif dan kesan negatif kepada pelajar. Satu perkara yang pasti membimbangkan ialah risiko stres dalam kalangan pelajar di Malaysia. Justeru, di dalam mengharungi kehidupan sebagai seorang pelajar, simptom dan risiko stres tidak dapat dielakkan. Simptom stres yang dibiarkan tanpa rawatan akan memberikan impak terhadap tingkah laku dan peningkatan kecelaruan mental seperti kerisauan (Mohd Razali, 2010) dan kemurungan (Tahir et al. 2010). Keadaan ini mencetuskan

perasaan negatif stres dan kemurungan kepada tahap yang lebih serius iaitu bertindak membunuh diri (Mohammad, 2016).

Berdasarkan kepentingan inilah, maka sebuah modul yang komprehensif perlu dibangunkan bagi membantu pelajar untuk memberikan kemahiran mengawal dan menangani stres. Kajian-kajian awal menyatakan, masih kurang modul pengurusan stres pelajar yang dinilai secara ilmiah. Ini berdasarkan dapatan kajian Samsudin et al. (2013), pelajar –pelajar di kampus perlu dibantu untuk memiliki satu mekanisme menangani tahap stres. Kegagalan membantu pelajar sasaran akan memberikan impak terhadap pembangunan modal insan ke arah melahirkan guna tenaga yang terlatih dan berdaya saing, dengan keperluan negara pada 2020 (Bahagian Perancangan dan Penyelidikan Dasar Pendidikan, KPM 2006).

Teoritikal kajian modul pengurusan stres pelajar

Rangka modul pembinaan Modul Intervensi Psikospiritual Terapi Relaksasi (IPTR) adalah dibangunkan berdasarkan model Sidek. Manakala, pembinaan penyelesaian IPTR pula, adalah diadaptasikan menerusi Teori GAS dan diintegrasikan mengikut perspektif Islam. Menurut Nurrussakinah (2014), menerusi bukunya Pengantar psikologi dan pandangan al-Quran tentang psikologi, menyatakan jika ingin membangunkan psikologi Islam, maka seharusnya memanfaatkan hasil-hasil pemikiran Ilmuwan psikologi barat. Justeru, modul ini mengadatkan penemuan saintifik yang telah diterangkan secara terperinci tentang perubahan fisiologi badan terhadap stres. Teori ini dibina oleh Selye (1974), yang membincangkan fasa-fasa stres mengikut tahap iaitu tahap pertama dikenali sebagai *alarm stage*, *resistance stage* dan *collapse stage*.

Teori ini dipilih bagi membantu populasi pelajar yang dikenalpasti sebagai populasi yang paling berisiko menghadapi stres (Yazdani et al. 2010; Hunt & Eisenberg, 2010; Baghurst & Kelly, 2014). Justeru, menurut Yazdani et al. (2010) dan Mahmoud Jihan (2011), kefahaman terhadap punca-punca stres dan mekanisme daya tindak yang positif perlu diajarkan kepada pelajar kerana stres merupakan fenomena multidimensional yang berfokuskan hubungan dinamik di antara individu dan persekitaran. Pencegahan yang proaktif menerusi kemahiran daya tindak dapat mencegah pelajar berada pada tahap ketiga iaitu *collapse stage* seperti yang diterangkan menerusi Teori GAS yang memberikan implikasi negatif terhadap diri dan masyarakat (Deasy et al. 2015; Jennings et al. 2018).

Pemilihan perspektif psikologi Islam pula adalah berasaskan pandangan (Aisha Utz 2011; Mohd Shahril, 2013; Khairunnas 2013; Fariza, 2016; Skinner, 2018) elemen spiritual, entiti roh dan merujuk kepada al-quraan adalah antara keperluan yang perlu dipraktikkan di dalam membantu permasalahan individu. Menurut Nurrussakinah (2014) pula, peranan psikologi Islam adalah berbeza dengan psikologi barat. Psikologi barat hanya menerangkan, mengawal dan membuat ramalan terhadap tingkah laku manusia, sebaliknya psikologi Islam menerangkan, mengawal, membuat ramalan terhadap tingkah laku dan mengarahkan manusia untuk mendapat redha Allah. Jadi misi utama psikologi Islam adalah menyelamatkan manusia dan mengantar manusia untuk memenuhi kecenderungan alaminya dan fitrahnya untuk kembali kepada Allah.

Di samping itu, pengiktirafan terhadap keperluan agama dalam proses membantu juga semakin mendapat perhatian di barat (Corey, 2010; Skinner, 2018). Keperluan elemen agama sebagai intervensi telah diperakui oleh badan professional seperti *America Psychological Association* (APA) dan *America Counseling Association* yang mengiktiraf dan mengakui bahawa agama adalah satu elemen yang memberikan sumbangan kepada perkembangan dan kefungsi manusia (Md Noor et al. 2016). APA telah meletakkan religiositi pada division ke 36 sebagai salah satu bahagian daripada beberapa bahagian psikologi yang diiktiraf (APA, 2011). Berdasarkan sokongan tersebut, elemen agama ini juga turut menjadi keperluan untuk dipraktikkan di dalam kehidupan generasi muda di Malaysia.

Oleh itu, kesinambungan terhadap pendekatan kombinasi psikologi dan Perspektif Islam secara empirikal telah pun terbukti keberkesanan di dalam merawat permasalahan psikologikal individu. Antara kajian empirikal yang menggunakan kombinasi tersebut ialah Ziasma et al. (2013), pendekatan intervensi merawat permasalahan psikologikal pelajar di Pakistan, Basim Aldahadha (2013), pengurusan stres ke atas pelajar di Universiti Nizwa, dan Mohd Shahril, (2013), modul pengurusan stres guru di Malaysia. Maka pembinaan modul IPTR adalah sebahagian alternatif yang turut menggunakan kombinasi pendekatan psikologi dan mengikut perspektif psikologi Islam di dalam merawat stres pelajar muslim di Malaysia.

Pembinaan Modul Pengurusan Stres Pelajar

Modul IPTR dibina berdasarkan model Pembinaan Modul Sidek (Sidek & Jamaludin 2005). Menurut pembinaan modul ini, terdapat dua peringkat penghasilan modul iaitu, peringkat pertama adalah proses-proses menghasilkan draf modul dan peringkat kedua pula adalah proses-proses melaksanakan penilaian terhadap modul tersebut. Langkah-langkah tersebut ialah;

1. Pembinaan matlamat
 2. Mengenalpasti teori, rasional, falsafah, konsep, sasaran dan tempoh masa
 3. Kajian keperluan
 4. Menetapkan objektif
 5. Pemilihan isi kandungan
 6. Pemilihan strategi
 7. Pemilihan logistik
 8. Pemilihan media
 9. Menyatukan draf
- Peringkat kedua: mencuba dan menilai modul
10. Kajian rintis
 11. Menguji kesahan, kebolehppercayaan dan norma
 12. Penilaian keberkesanan
 13. Modul lengkap

Isi kandungan IPTR boleh dibahagikan kepada empat tahap iaitu Tahap pertama orientasi, Tahap kedua penerokaan, Tahap ketiga pengintegrasian Tindakan dan Tahap keempat Penamat. Berikut adalah fokus utama dan objektif modul IPTR;

Pengenalan: (1 jam 30 minit)

1. Mengumpulkan semua peserta dan menerangkan penglibatan peserta. Peserta juga dimaklumkan etika kerahsiaan, persetujuan bertulis untuk mengikuti modul IPTR, dan perbincangan jadual pertemuan sepanjang intervensi IPTR.

Tahap 1: Orientasi: (1 jam 30 minit)

1. Membina hubungan yang terapeutik dalam kalangan peserta.
2. Melibatkan diri dalam setiap sesi untuk perubahan diri.
3. Berkenalan sesama peserta.
4. Mampu berinteraksi antara satu sama lain dengan mesra dan membina.
5. Memahami kepentingan mengikis perasaan malu untuk beinteraksi

Tahap 2: Penerokaan: (1 jam 30 minit)

1. Peserta dapat menyatakan definisi stres.
2. Peserta dapat menyenaraikan punca stres pelajar.
3. Peserta dapat menyenaraikan implikasi stres.

Tahap 3: Pengintegrasian Tindakan: Psikologi: (1 jam 30 minit)

1. Peserta dapat menyatakan

Tahap 3: Pengintegrasian Tindakan: Spiritual: (1 jam 30 minit)

1. Peserta dapat pilihan berdaya tindak mengikut pendekatan spiritual di dalam mencegah dan menangani tahap stres.
2. Peserta dapat menganalisis kepentingan dan pengukuhan dengan cerita-cerita amalan daripada hadis dan salafus soleh.

Tahap 4: Penamat: (1 jam 30 minit)

1. Peserta dapat menganalisis tindakan perubahan diri.
2. Melengkapkan borang penyelidikan.

Penutup

Kajian tentang permasalahan stres pelajar adalah amat penting dijalankan kerana permasalahan tersebut mengganggu kesejahteraan pelajar (Bland et al. 2012). Menurut Khaidzir & Khairil (2011) pula, pelajar adalah aset negara dan penyumbang ke arah pembangunan negara pada masa hadapan. Justeru, kajian terhadap rawatan atau pembinaan intervensi pelajar perlu diberikan keutamaan kerana menurut Seaward (2018) ketahanan diri dan desakan persekitaran adalah sebahagian punca stres. Fenomena tersebut tidak dapat dielakkan dalam kehidupan seharian pelajar. Oleh itu, pelajar perlu diberikan kemahiran berdaya tindak untuk menyesuaikan diri dengan persekitaran tersebut. Menurut WHO (2011), satu badan kesihatan dunia menyarankan mekanisme pengurusan yang terbaik adalah secara holistik. Maka, pembinaan modul IPTR dijangkakan dapat membantu pelajar mengawal dan menangani tahap stres menerusi kombinasi pendekatan psikologi dan perspektif psikologi Islam.

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PENGUASAAN PELAJAR BAGI KURSUS DFC2073 – PROGRAMMING FUNDAMENTALS

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Abstrak : Kursus DFC2073 – Programming Fundamentals merupakan kursus teras dan wajib diambil oleh pelajar semester satu (1), Program Diploma Teknologi Maklumat (Digital Teknologi) (DDT), Politeknik Sultan Abdul Halim Mu'adzam Shah (POLIMAS). Kajian ini bertujuan untuk mengenalpasti pencapaian pelajar bagi kursus DFC2073 – Programming Fundamentals. Aspek-aspek yang dikaji ialah pencapaian pelajar dalam Peperiksaan Akhir, penguasaan dan kelemahan pelajar ke atas topik-topik dalam kursus ini. Untuk melayakkan pelajar mengambil kursus ini, mereka perlu lulus kursus DFC1042-Problem Solving And Program Design pada tujuh (7) minggu pertama iaitu pada sukuan pertama semester. Kursus DFC1042 ini mendedahkan pelajar kepada konsep awal pengaturcaraan. Seterusnya pelajar akan mengambil kursus DFC2073 ini selama tujuh (7) minggu pada sukuan kedua semester dan akan menduduki Peperiksaan Akhir pada minggu peperiksaan politeknik. Rekabentuk kajian menggunakan data sekunder iaitu skrip jawapan Peperiksaan Akhir ke atas 89 pelajar pada sesi Semester Jun 2018. Dapatan menunjukkan pencapaian pelajar kepada kursus ini adalah memuaskan di mana 47.2 peratus mendapat gred A dalam Peperiksaan Akhir. Dapatan juga menunjukkan penguasaan pelajar ke atas semua topik amat memberangsangkan dimana semua topik dapat dikuasai oleh pelajar dengan baik iaitu melebihi 83 peratus. Dapatan ini menunjukkan bahawa walaupun kursus ini mengambil masa selama tujuh (7) minggu pelajar masih dapat menguasai setiap topik dengan baik.

Kata Kunci: PENGUASAAN, PENCAPAIAN, KEPUTUSAN PEPERIKSAAN AKHIR

Pengenalan

Program Diploma Teknologi Maklumat (Teknologi Digital) (DDT) merupakan program yang menyediakan pendidikan dan latihan di dalam bidang pengkomputeran dengan penekanan khusus pada bidang Teknologi Maklumat. Program ini menawarkan kursus-kursus didalam bentuk kelompok yang dikenali sebagai *Track Software And Application Development*, *Track Networking Systems*, *Track Information Security*, *Track Game Technology* (Portal Pengambilan Pelajar Politeknik, 2018). Sementara itu Politeknik Sultan Abdul Halim Mu'adzam Shah telah memilih *Track Software And Application Development* kerana pensyarah-pensyarah bagi DDT memiliki kelulusan yang setara dengan keperluan bagi trak ini. Semua trak pada awalnya menawarkan kursus teras yang sama. Salah satu kursus teras adalah DFC2073-*Programming Fundamentals*. Kursus ini menekankan kepada prinsip pengaturcaraan dan ditawarkan pada pelajar semester satu (1). Untuk lulus dalam kursus ini, pelajar wajib lulus Pentaksiran Kerja Kursus dan lulus Peperiksaan Akhir.

Terlebih dahulu, pada sukuan pertama iaitu dalam tempoh tujuh (7) minggu pertama, pelajar semester satu (1) akan mengambil kursus DFC1042-*Problem Solving and Program Design*. Hanya pelajar yang lulus dengan markah 40 dan ke atas dalam kursus DFC1042-*Problem Solving and Program Design* layak dan akan meneruskan ke Kursus DFC2073-

Programming Fundamentals pada sukauan kedua iaitu tujuh (7) minggu berikutnya. Pada amnya kursus ini menekankan prinsip-prinsip dalam pengaturcaraan dengan mengguna Bahasa Pengaturcaraan C++. Hasil pembelajaran yang diharap dari kursus ini ialah memahami asas pembinaan aturcara, langkah-langkah mengawasilap aturcara dan menyelesaikan masalah dengan mentafsir masalah berkenaan dalam bentuk algoritma penyelesaian masalah dan seterusnya, mentafsirkannya pula kebentuk aturcara dengan menggunakan Bahasa Pengaturcaraan C++. Bahasa pengatucaraan C++ adalah bahasa yang teramat sesuai dipelajari diperingkat awal pengajian kerana ia merupakan bahasa terkini yang digunakan dipasaran. Ini disokong oleh Hao Chen, (2010), menyatakan di antara Bahasa pengatucaraan yang perlu mereka kuasai dengan baik adalah Bahasa Pengaturcaraan Java, C++, Visual Basic .NET, JavaScript dan Personal Home Page-Hypertext Preprocessor (PHP).

Topik-topik yang dipelajari dalam kursus DFC2073 ialah *Introduction To Fundamentals Of Programming, Basic Program Elements, Program Control Structures, Array, Structures, Pointer dan Functions*. Pentaksiran dalam kursus ini terdiri daripada Penilaian Kerja Kursus sebanyak 50 peratus dan Peperiksaan Akhir juga 50 peratus.

Pernyataan Masalah

Kursus DFC2073- *Programming Fundamentals* ini dijalankan dalam sukuan kedua semester dalam tempoh tujuh (7) minggu terakhir. Pelajar perlu menghabiskan lima (5) topik dan menyelesaikan sembilan (9) Pentaksiran Kerja Kursus yang terdiri daripada tiga (3) kuiz, satu (1) Ujian, empat (4) *Laboratory Task* dan satu (1) Projek. Selepas ini pelajar perlu menduduki Peperiksaan Akhir. Sehubungan dengan itu pengkaji ingin mengkaji sejauhmana tahap kefahaman pelajar mengikut topik dalam Peperiksaan Akhir terhadap kursus ini memandangkan masa yang tempoh masa yang diambil untuk menjalani kursus ini hanya tujuh (7) minggu.

Objektif

Kajian ini bertujuan untuk membolehkan penyelidik meninjau sejauhmana tahap pemahaman pelajar terhadap kursus DFC2073-*Programming Fundamentals* dalam pengajaran dan pembelajaran (PdP) bagi pelajar sesi Jun 2018. Secara khususnya, objektif yang kajian ialah :

- i. Menenalpasti tahap pencapaian pelajar dalam Peperiksaan Akhir bagi Kursus DFC2073-*Programming Fundamentals*.
- ii. Menenalpasti penguasaan pelajar bagi Kursus DFC2073-*Programming Fundamentals* dalam Peperiksaan Akhir mengikut topik.
- iii. Menenalpasti kelemahan penguasaan pelajar bagi Kursus DFC2073-*Programming Fundamentals* dalam Peperiksaan Akhir mengikut topik.

Sorotan Karya

Pada amnya, kurikulum adalah alat perancangan aktiviti akademik bagi sesuatu kursus (Ea Ah Meng, 2003). Alat perancangan aktiviti akademik ini merangkumi sukatan pelajaran dan juga beberapa bentuk penilaian. Sementara untuk mengukur penguasaan ke atas sukatan pelajaran ini, beberapa bentuk penilaian perlu disertakan didalam alat perancangan ini. Proses penilaian yang dilaksanakan dapat memberi maklumat tentang pencapaian objektif, kaedah mengajar dan keberkesanan sesebuah kurikulum (Belly et al, 2001). Pencapaian akademik yang dicapai sepanjang proses pembelajaran pelajar menjadi satu ukuran kepada tahap pencapaian pelajar (Ishak Baba, 2003). Tanpa kurikulum yang sesuai dan tepat akan sukar untuk mencapai tujuan dan sasaran pendidikan yang diinginkan (Ardian, 2013).

Pencapaian akademik merangkumi Peperiksaan Akhir bagi sesuatu kursus menjadi satu indikator untuk menilai tahap penguasaan pelajar di dalam sesuatu bidang ilmu pengetahuan. Kerlinger (1973) dalam Ahmad Rizal Madar (2005) menakrifkan pencapaian akademik

dilakukan melalui suatu ujian berasaskan penilaian oleh tenaga pengajar. Oleh itu peperiksaan merupakan salah satu kaedah penilaian bagi menilai sejauh mana pelajar mencapai dan menguasai tahap ilmu pengetahuan berkenaan.

Untuk menguasai bidang pengaturcaraan, pelajar memerlukan strategi pembelajaran untuk membantu mereka mengatasi masalah dalam memahami proses pengaturcaraan serta mendapat cara baru melihat proses pengaturcaraan (Samsurkhar et al, 2012)). Faktor membina minat dalam pengaturcaraan adalah penting untuk menguasai ilmu pengaturcaraan. Menurut Hartel (1997) penguasaan asas prinsip pengaturcaraan menjurus kepada melahirkan *practical programmer* yang berupaya mengaplikasikan asas bahasa pengaturcaraan ke dalam analisis dan rekabentuk bahasa pengaturcaraan pada masa akan datang. Penguasaan kepada sintaksis sesuatu bahasa pengaturcaraan merupakan elemen penting pada Kursus DFC2073-*Programming Fundamentals* ini. Pelajar juga perlu mempunyai asas kongnitif yang tinggi untuk memahami konsep pengaturcaraan yang abstrak (Hartel, 2007). Pemahaman pelajar adalah sangat penting kerana konsep ini dianggap sebagai pembentukan asas struktur kandungan dalam proses pembelajaran pengaturcaraan. Ini turut juga disokong oleh Ala Mutka et al, (2004), di mana konsep pengaturcaraan memerlukan pemahaman yang betul untuk menguasai sesuatu konsep yang abstrak dan sukar untuk dibayangkan.

Memahami konsep merupakan elemen penting didalam penguasaan sesuatu ilmu serta ia akan menghasilkan aras pemahaman yang maksimum. Sebagai pelajar pengaturcaraan, perlulah memahami semula masalah yang ingin diselesaikan serta tepat memahami kehendak masalah berkenaan. Proses yang sistematik peringkat demi peringkat diperlukan untuk menyelesaikan sebarang masalah dalam sesuatu aturcara (Schildt, 2003). Kursus pengaturcaraan diperkenalkan kepada pelajar DDT pada semester pertama supaya mereka dapat menguasai konsep pengaturcaraan dengan baik merupakan perkara penting dalam program DDT. Oleh yang demikian kursus *Programming Fundamentals* amat penting untuk pelajar semester pertama menguasai dengan baik bagi memudahkan mereka melangkah kesemester yang lebih tinggi.

Metodologi Kajian

Kajian ini merupakan kajian berbentuk kuantitatif. Populasi kajian adalah seramai 89 orang pelajar semester satu (1) Diploma Teknologi Maklumat (Teknologi Digital), Politeknik Sultan Abdul Halim Mu'adzam Shah (POLIMAS) yang mengambil kursus DFC2073-*Programming Fundamentals* bagi sesi Jun 2018. Kesemua pelajar ini telah diambil daripada populasi untuk dijadikan sebagai bahan kajian. Menurut Ghazali dan Sufean (2018), populasi adalah menggambarkan kedudukan keseluruhan setiap satu individu dalam sesuatu kelompok.

Kajian ini yang menggunakan data kedua sebagai data utama kajian, iaitu skrip jawapan Peperiksaan Akhir pelajar Sesi Jun 2018. Data kajian ini dianalisis menggunakan perisian *Microsoft Excell 2013*. Kajian ini menjurus kepada analisa bagi mengetahui pencapaian pelajar dalam menjawab soalan-soalan Peperiksaan Akhir.

Kaedah gundalan telah digunakan bagi mengenalpasti peratus pelajar yang menjawab soalan mengikut topik. Markah lulus dan gagal bagi semua topik setiap pelajar dianalisa. Bagi julat markah lulus untuk penguasaan ke atas setiap topik ialah di antara 40 hingga 100. Sementara kelemahan penguasaan ke atas setiap topik ialah 0 hingga 39 markah. Kajian dalam bentuk taburan soalan dan topik peperiksaan akhir dihuraikan dalam bentuk Jadual 1, Jadual 2 dan Jadual 3.

Analisa dan Keputusan

Taburan Soalan dan Topik Peperiksaan Akhir

Ujian Akhir bagi kursus DFC2073-Programming Fundamentals mengandungi soalan objektif (*multiple choice*) dan soalan berstruktur (*structured*). Pecahan pemberatan markah mengikut jenis topik adalah seperti pada Jadual 1, bagi soalan objektif dan Jadual 2, bagi soalan berstruktur.

Jadual 1 : Taburan Topik dan Soalan Objektif Bagi Peperiksaan Akhir

Topik	Nombor Item Soalan (1.5 markah setiap soalan)	Jumlah Markah
1. <i>Introduction of Fundamentals Of Programming</i>	1, 2	3
2. <i>Basic Program Elements</i>	3, 4, 5, 6, 7	7.5
3. <i>Programming Control Structures</i>	8, 9, 10, 11, 12, 13, 14, 15	12
4. <i>Array, Structure and Pointer</i>	16, 17, 18, 19, 20, 21, 22, 23	12
5. <i>Functions</i>	24, 25, 26, 27, 28, 29, 30	10.5
Jumlah Keseluruhan Markah :		45

Dapatan mendapati pemberatan markah bagi setiap soalan objektif ialah bersamaan dengan 1.5 markah. Bilangan soalan objektif adalah sebanyak 30 soalan, oleh itu soalan objektif menyumbang 45 markah kepada keseluruhan markah bagi Peperiksaan Akhir.

Jadual 2 : Taburan Topik dan Soalan Berstruktur Bagi Peperiksaan Akhir.

Topik	Nombor Item Soalan (pemberatan)	Jumlah Markah
1. <i>Introduction of Fundamentals of Programming</i>	1a (2 markah), 1b (2 markah)	4
2. <i>Basic Program Elements</i>	1c (2 markah), 1d (4 markah), 1e (3 markah)	9
3. <i>Programming Control Structures</i>	1f (2 markah), 1g (2 markah), 1h (3 markah), 1i (5 markah)	12
4. <i>Array, Structure and Pointer</i>	2a (2 markah), 2b (5 markah), 2c (2 markah), 2d (6 markah)	15
5. <i>Functions</i>	2e (2 markah), 2f (6 markah), 2g (5 markah), 2h (2 markah)	15
Jumlah Keseluruhan Markah :		55

Dapatan mendapati pemberatan markah bagi setiap soalan berstruktur adalah seperti Jadual 2, di mana Topik 1 menyumbang 4 markah, Topik 2 menyumbang 9 markah, Topik 3 menyumbang 12 markah, Topik 4 menyumbang 15 markah dan Topik 5 menyumbang 15 markah. Jumlah sumbangan markah oleh bahagian soalan berstruktur adalah bersamaan 55 markah.

Jadual 3 : Peratusan Taburan Markah (Objektif dan Struktur) Mengikut Topik Bagi Peperiksaan Akhir

Topik	Pemberatan Markah Soalan Objektif	Pemberatan Markah Soalan Berstruktur	Jumlah Markah (Soalan Objektif + Soalan Berstruktur)	Peratusan (%)
1. <i>Introduction of Fundamentals of Programming</i>	3	4	7	7%
2. <i>Basic Program Elements</i>	7.5	9	16.5	16.5%
3. <i>Programming Control Structures</i>	12	12	24	24%
4. <i>Array, Structure and Pointer</i>	12	15	27	27%
5. <i>Functions</i>	10.5	15	25.5	25.5%
Jumlah Keseluruhan :			100	10

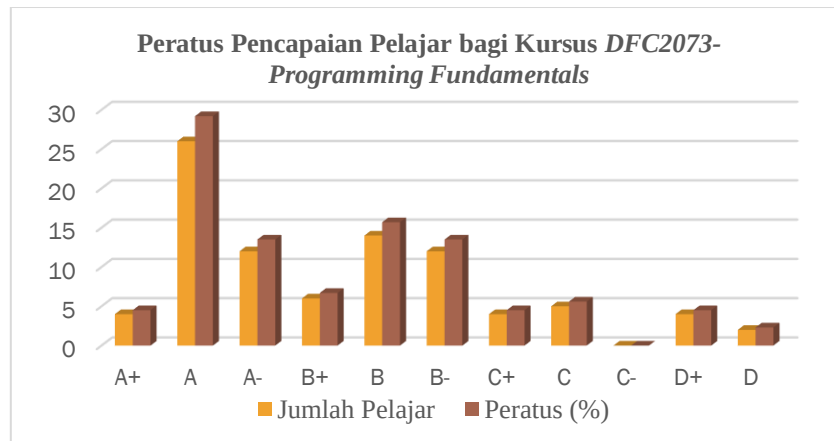
Daripada kajian yang diperolehi menunjukkan pemberatan markah mengikut setiap topik adalah seperti Jadual 3. Hasil dapatan mendapati Topik 1 menyumbang 7%, Topik 2 menyumbang 16.5%, Topik 3 menyumbang 24%, Topik 4 menyumbang 27% dan Topik 5 menyumbang 25.5% markah kepada Peperiksaan Akhir.

Mengenalpasti tahap pencapaian pelajar dalam Peperiksaan Akhir bagi Kursus DFC2073-Programming Fundamentals

Daripada jumlah 89 skrip jawapan Peperiksaan Akhir yang telah dianalisis, pecahan responden mengikut peratus pencapaian pelajar bagi kursus *DFC2073-Programming Fundamentals* adalah seperti yang ditunjukkan pada Jadual 4 dan Rajah 1.

Jadual 4: Peratus pencapaian pelajar bagi kursus *DFC2073-Programming Fundamentals*

Gred	Skala Markah	Jumlah Pelajar	Peratus (%)
A+	90 - 100	4	4.5
A	80 - 89	26	29.2
A-	75 - 79	12	13.5
B+	70 - 74	6	6.7
B	65 - 69	14	15.7
B-	60 - 64	12	13.5
C+	55 - 59	4	4.5
C	50 - 54	5	5.6
C-	47 - 49	0	0
D+	44 - 46	4	4.5
D	40 - 43	2	2.3
Jumlah :		89	100

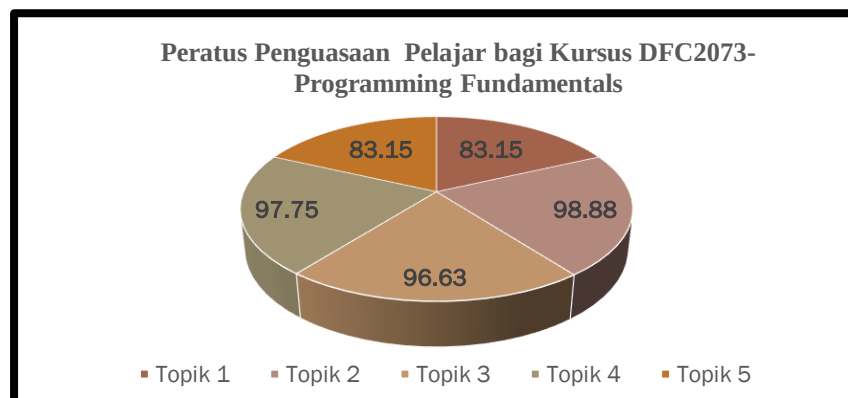


Rajah 1: Peratus Pencapaian Pelajar bagi Kursus DFC2073-Programming Fundamentals

Merujuk kepada Rajah 1, bilangan pelajar yang mendapat gred A+ , A dan A- adalah sebanyak 47.2 peratus iaitu seramai 52 orang pelajar. Pelajar yang mendapat gred B+, B dan B- adalah seramai 32 orang dengan peratusan sebanyak 35.9. Bagi gred C+, C dan C-, seramai 9 pelajar dengan 10.1 peratus. Sementara D+ dan D hanya 6 pelajar dengan peratusan sebanyak 6.8 peratus.

Mengenalpasti penguasaan pelajar bagi kursus DFC2073 – Programming Fundamentals

Daripada jumlah 89 skrip jawapan Peperiksaan Akhir yang telah dianalisis, pecahan responden mengikut peratus penguasaan pelajar bagi kursus DFC 1042 *Problem Solving And Program Design* mengikut topik adalah seperti yang ditunjukkan pada Rajah 2.

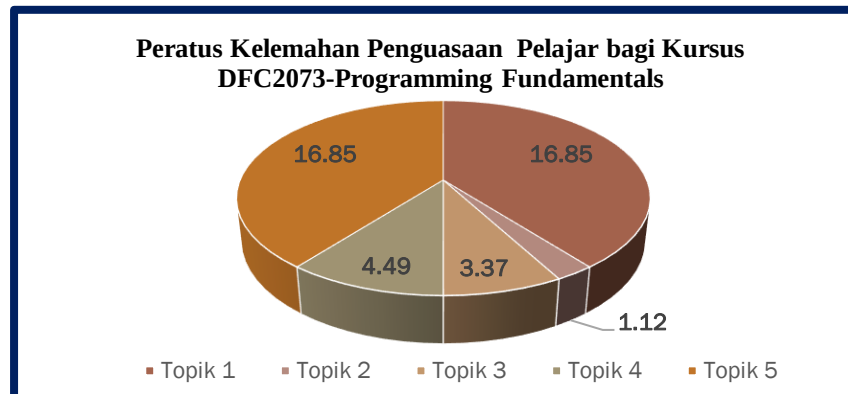


Rajah 2 : Peratus Penguasaan Pelajar bagi kursus DFC2073-Programming Fundamentals Mengikut Topik

Hasil daripada dapatan kajian dan analisis dengan merujuk kepada Rajah 2 menunjukkan peratus penguasaan pelajar bagi kursus DFC2073-Programming Fundamentals mengikut Topik adalah memuaskan di mana peratus penguasaan pelajar untuk kesemua topik melebihi 83 peratus. Pencapaian pelajar pada Topik 1 ialah 83.15 peratus, Topik 2 ialah 98.88 peratus, Topik 3 ialah 96.63 peratus, Topik 4 ialah 97.75 peratus dan Topik 5 ialah 83.15 peratus.

Mengenalpasti kelemahan penguasaan pelajar bagi kursus DFC2073 – Programming Fundamentals

Daripada jumlah 89 skrip jawapan Peperiksaan Akhir yang telah dianalisis, pecahan responden mengikut peratus kelemahan penguasaan oleh pelajar kursus DFC2073-Programming Fundamentals mengikut topik adalah seperti Rajah 3.



Rajah 3 : Peratus Kelemahan Penguasaan Pelajar bagi kursus DFC2073-Programming Fundamentals Mengikut Topik

Hasil daripada dapatan kajian dan analisis dengan merujuk kepada Rajah 3 menunjukkan peratus kelemahan penguasaan oleh pelajar bagi kursus DFC2073-Programming Fundamentals mengikut topik adalah memuaskan di mana semua peratus kelemahan penguasaan untuk semua topik kurang dari 17 peratus. Kelemahan penguasaan pelajar pada Topik1 dan Topik 5 iaitu 16.85 peratus berbanding Topik 2, Topik 3 dan Topik 4. Topik 2 menyumbang kepada peratus kelemahan hanya 1.12 peratus. Manakala Topik 3 menyumbang kepada 3.37 peratus dan Topik 4 menyumbang 4.49 peratus.

Perbincangan dan Cadangan

Secara keseluruhan, berdasarkan kepada kajian yang telah dijalankan menunjukkan bahawa penguasaan pelajar terhadap kursus DFC2073-Programming Fundamentals adalah memuaskan. Bagi menjawab objektif kajian pertama, menunjukkan seramai 52 peratus pelajar mendapat gred A, dari 89 pelajar. Hasil dapatan kepada objektif ke dua iaitu keatas penguasaan pelajar pula, menunjukkan, kesemua pelajar lulus dalam Peperiksaan Akhir yang membawa kejayaan kepada 100 peratus kelulusan untuk kursus DFC2073 ini. Pelajar juga dapat menguasai Topik 2, Topik 3 dan Topik 4 dapat dikuasai oleh pelajar dengan cemerlang di mana peratus penguasaannya adalah melebihi 96%. Topik 1 dan Topik 5 sahaja menyumbang kepada peratus penguasaan yang tidak kurang cemerlang iaitu 83.15 peratus. Semetara bagi objektif ke tiga, dapatan menunjukkan kelemahan penguasaan Topik 1 dan Topik 5 tidak menunjukkan kelemahan yang membimbangkan kerana peratus penguasaan kepada topik berkenaan kurang dari 17 peratus.

Keberhasilan keputusan yang memberangsangkan ini adalah daripada sikap pelajar itu sendiri, di mana ia memainkan peranan penting dalam pembelajaran dengan memberi sepenuh perhatian didalam kelas. Komitmen dan pengalaman tenaga pengajar yang berpengalaman turut membantu meningkatkan keputusan peperiksaan yang memberangsangkan ini. Kepelbagaian teknik pengajaran oleh tenaga pengajar bagi mengujudkan sesi pembelajaran yang tidak membosankan dipraktikkan di sini. Ishak Baba (2009) menyatakan, setiap tenaga pengajar perlu mempunyai kaedah pengajaran yang pelbagai supaya pelajar tidak bosan dan mampu memahami segala yang telah disampaikan dalam sesi pengajaran dan pembelajaran (PdP).

Kepelbagaian bahan bantu mengajar boleh membantu pengajar menarik perhatian pelajar semasa sesi PdP (Norfarizah Mohd Bakhir, 2016). Kaedah mengajar ialah seperti penggunaan perisian yang lebih canggih seperti Frezy, perisian iSpring, Power Point, aplikasi berbentuk *mobile app* boleh dimuat turun ke peranti mudah alih serta mengikut peredaran zaman serta bersesuaian dengan keadaan semasa (Faizah Ja'apar, 2017).

Begitu juga dengan persekitaran pembelajaran yang kondusif di POLIMAS, iaitu kemudahan makmal komputer untuk seorang pelajar dengan sebuah komputer, turut juga menyumbang kepada hasil dapatan ini. Persekitaran fizikal pembelajaran merupakan elemen penting dalam membentuk suasana pembelajaran yang kondusif dan memberangsangkan. Kemudahan yang ada pada ICT (Information and Communication Technology) merupakan salah satu peralatan sokongan yang boleh membantu mewujudkan persekitaran pembelajaran yang kondusif (Shah Rulbani Zakaria, 2017). Menurut Che Nidzam Che Ahmad (2010), persekitaran yang kondusif dapat membantu mewujudkan keselesaan pengajaran dan pembelajaran di samping mengekalkan tumpuan dan minat belajar dalam bilik darjah.

Kesimpulan

Objektif utama kajian ini adalah untuk menganalisa penguasaan pelajar terhadap kursus DFC2073-*Programming Fundamentals* bagi pelajar Diploma Teknologi Maklumat (Teknologi Digital) Semester Pertama di Politeknik Sultan Abdul Halim Mu'adzam Shah. Hasil dapatan menunjukkan penguasaan pelajar ke atas semua topik dalam sukatan pelajaran kursus DFC2073-*Programming Fundamentals* adalah memuaskan dengan nilai peratusan penguasaan pelajar ke atas kesemua topik adalah melebihi 83 peratus walaupun kursus ini dijalankan dalam tempoh tujuh minggu.

Pengkaji berharap satu kajian yang lebih mendalam akan dijalankan berkaitan tahap penguasaan pelajar terhadap Pentakrifan Kerja Kursus bagi kursus DFC2073-*Programming Fundamentals* supaya tenaga pengajar boleh menilai kemahiran afektif, konaktif dan psikomotor.

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UNSUR PENDIDIKAN DALAM BAHAN PENGAJARAN MULTIMEDIA KARTUN ANIMASI UPIN DAN IPIN UNTUK MURID SEKOLAH RENDAH

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Abstrak: Makalah ini bertujuan untuk mengenal pasti unsur pendidikan ataupun nilai yang terdapat dalam bahan multimedia kartun animasi Upin dan Ipin. Ia dilihat mampu memberi nilai yang baik dan mampu memberi kesan yang besar dalam pendidikan murid sekolah rendah. Pendekatan pengajaran berasaskan multimedia mampu memindahkan sesuatu maklumat daripada buku teks yang statik kepada suatu corak pembelajaran yang menarik. Di sini animasi memainkan peranan penting bagi menceriaikan lagi persembahan sesebuah informasi. Perkara ini penting untuk memastikan murid dapat menumpukan perhatian dan tidak merasa jemu ketika proses pengajaran dan pembelajaran serta mendapat ilmu yang berterusan. Makalah ini akan memanfaatkan teori Konstruktivisme. Menurut Post & Weingartner (1969) konstruktivisme ialah satu pengetahuan baru tentang ilmu pengetahuan dan cara bagaimana manusia memperoleh ilmu pengetahuan. Pandangan baru ini menganggap pelajar bukan hanya menerima pengetahuan secara pasif daripada gurunya tetapi membina pengetahuannya melalui interaksi dengan persekitarannya. Pembelajaran secara konstruktivisme adalah satu fahaman bahawa pelajar membina sendiri pengetahuan atau konsep berdasarkan pengetahuan dan pengalaman sedia ada. Nilai pendidikan yang difokuskan dalam bahan multimedia kartun animasi Upin dan Ipin adalah nilai murni dan ia dapat didefinisikan sebagai perlakuan yang baik, peradaban dan tatasusila individu manusia dalam hubungannya sesama manusia, alam dan tuhan. Wan Mohd. (1988) mentakrifkan nilai-nilai murni merupakan tanggapan berkenaan perkara-perkara yang dihajati dan pada masa yang sama juga menjadi kriteria atau ukuran. Justeru, pendidikan yang kaya dengan nilai-nilai murni khususnya dalam bahan pengajaran terpilih perlu dititikberatkan agar dapat membina modal insan yang lebih cemerlang pada masa akan datang.

Kata kunci: Animasi, Multimedia, Upin Dan Ipin, Sekolah Rendah, Konstruktivisme

Abstract: The purpose of this paper is to identify elements of education or elements that are found in Upin dan Ipin animated cartoon multimedia materials. It is seen to be able to provide good values and give a huge impact on the education of primary school pupils. The multimedia-based teaching approach is able to transfer some information from still textbooks into exciting learning patterns. Here, animation plays a significant role in making the presentation of certain information to be more appealing. This is important to ensure the pupils are able to be attentive and not be bored during the teaching and learning process, and at the same time receive continuous knowledge. This research will capitalise on the Constructivism Theory. According to Post & Weingartner (1969), constructivism is a new form of knowledge about knowledge and how man acquires knowledge. This new standpoint makes the assumption that students do not only receive knowledge passively from their teacher but also construct their

knowledge from their interactions with their surroundings. Constructive learning holds a position where students create their own knowledge or concept based the existing knowledge and experience. The values of education that are focused on in Upin dan Ipin animation cartoon multimedia materials are pure values and they can be defined as good behaviour, being civilised and having individual human decencies in their relationship with man, nature and God. Wan Mohd. (1988) defined pure values as impressions on what is desired and at the same time they become the criteria or standard. Therefore, education that is rich in pure values, especially in selected teaching materials, has to be given much emphasise as so it could create excellent human capitals of the future.

Keywords: Animation, Multimedia, Upin Dan Ipin, Primary Schools, Constructivism

Pendahuluan

Sistem pendidikan negara kini telah mengalami satu fenomena penyesuaian matlamat dan kurikulum selaras dengan perkembangan teknologi maklumat (Kementerian Pendidikan Malaysia-KPM, 1999). Kecanggihan dunia teknologi maklumat dan komunikasi kini telah memberi impak positif dalam pendidikan dunia khususnya negara-negara yang sedang membangun. Kaedah pengajaran berasaskan komputer dan teknologi maklumat berupaya menggantikan kaedah konvensional dengan pelbagai cara. Dalam usaha untuk merealisasikan teknologi maklumat dan komunikasi (TMK) dan teknologi multimedia dalam dunia pendidikan, KPM (1999) telah berusaha memajukan sistem pendidikan yang menerapkan elemen teknologi maklumat dalam bidang pendidikan.

Multimedia mampu memberi kesan yang besar dalam pendidikan. Pendekatan pengajaran berasaskan multimedia mampu memindahkan sesuatu maklumat daripada buku teks yang statik kepada suatu corak pembelajaran yang menarik. Di sini animasi memainkan peranan penting bagi menceriaikan lagi persembahan sesebuah informasi. Perkara ini penting untuk memastikan murid dapat menumpukan perhatian dan tidak merasa jemu ketika proses pengajaran dan pembelajaran.

Berikutan dengan itu, Transformasi Kurikulum Kebangsaan diperkenalkan bertitik tolak daripada keputusan Mesyuarat Susulan Jemaah Menteri Bil.6/2008. Transformasi ini digagaskan sebagai satu usaha penambahbaikan dalam sistem pendidikan negara terutamanya di peringkat sekolah rendah yang dirasakan perlu dilaksanakan supaya kurikulum persekolahan memenuhi keperluan dan cabaran semasa serta akan datang. Tujuan transformasi adalah untuk memastikan murid dibekalkan dengan pengetahuan, kemahiran dan nilai relevan dengan keperluan semasa bagi menghadapi cabaran abad ke-21.

Selaras dengan transformasi tersebut, maka penggunaan multimedia merupakan salah satu langkah permulaan yang terbaik kepada para guru dalam proses pengajaran dan pembelajaran terutamanya untuk mata pelajaran Bahasa Melayu. Menurut Jamalludin dan Zaidatun (2003) serta Zamri dan Nur Aisyah (2011), multimedia membuka ruang kepada pendidik mengaplikasikan pelbagai teknik pengajaran, manakala murid diberi peluang untuk memegang kuasa kawalan bagi sesuatu sesi pembelajaran. Hal ini menunjukkan bahawa multimedia mampu mewujudkan suasana pembelajaran yang lebih menarik berbanding kaedah konvensional yang hanya berpandukan buku teks.

Upin dan Ipin ialah tajuk bagi sebuah siri animasi tayangan singkat yang dihasilkan oleh syarikat animasi Les' Copaque di Malaysia, dan juga nama bagi dua watak utama siri ini. Upin dan Ipin merupakan keluaran sampingan bagi filem *Geng: Pengembaraan Bermula* yang juga menampilkan watak utama siri animasi tersebut. Upin dan Ipin dan Kawan-kawan merupakan siri animasi yang menceritakan kisah sepasang kembar 5 tahun yang menjalani kehidupan mereka sehari-hari yang penuh dengan aktiviti menarik dan pengembaraan yang

mendebarkan. Atas kejayaan menambat hati penonton serantau, Upin dan Ipin disenaraikan dalam *Malaysia Book of Records* sebagai "Animasi Paling Berjaya" pada tahun 2011 (Kosmo, 7 Mei 2014). Disebabkan latar tempat dan latar masa yang sesuai dengan murid sekolah rendah maka siri animasi ini amat sesuai digunakan sebagai bahan bantu mengajar kerana banyak menerapkan unsur pendidikan yang baik.

Metodologi Kajian

Teori Konstruktivisme

Menurut Post & Weingartner (1969) konstruktivisme ialah satu pengetahuan baru tentang ilmu pengetahuan dan cara bagaimana manusia memperoleh ilmu pengetahuan. Pandangan baru ini menganggap pelajar bukan hanya menerima pengetahuan secara pasif daripada gurunya tetapi membina pengetahuannya melalui interaksi dengan persekitarannya. Pembelajaran secara konstruktivisme adalah satu fahaman bahawa pelajar membina sendiri pengetahuan atau konsep berdasarkan pengetahuan dan pengalaman sedia ada. Dalam proses ini, pelajar akan menyesuaikan pengetahuan yang diterima dengan pengetahuan sedia ada untuk membina pengetahuan baru.

Konstruktivisme adalah satu fahaman bahawa pelajar membina sendiri pengetahuan atau konsep secara aktif berdasarkan pengetahuan dan pengalaman sedia ada. Dalam proses ini, pelajar akan menyesuaikan pengetahuan yang diterima dengan pengetahuan sedia ada untuk membina pengetahuan baharu. Pengetahuan yang dipunyai oleh pelajar adalah hasil daripada aktiviti yang dilakukan oleh pelajar tersebut dan bukan pengajaran yang diterima secara pasif. Guru pula berperanan sebagai fasilitator yang membantu pelajar membina pengetahuan dan menyelesaikan masalah. Guru akan mengenal pasti pengetahuan sedia ada pelajar dan merancang kaedah pengajarannya dengan sifat asas pengetahuan tersebut.

Analisis

Selaras dengan Dasar Pendidikan Kebangsaan yang termaktub dalam Akta Pendidikan 1996, Bahasa Melayu menjadi mata pelajaran teras di semua sekolah rendah dan menengah. Kurikulum Bahasa Melayu digubal dengan tujuan untuk memenuhi hasrat Falsafah Pendidikan Kebangsaan bagi melahirkan insan yang seimbang dan harmonis dari segi intelek, emosi, rohani dan jasmani. Kurikulum Bahasa Melayu menyediakan murid untuk menguasai kecekapan berbahasa dan berkomunikasi dan dapat menggunakan tatabahasa secara betul dan tepat. Kurikulum yang disemak semula pada tahun 2003 telah memberikan penekanan kepada nilai murni dan semangat patriotik bagi menyedarkan murid akan peranan dan tanggungjawab mereka sebagai warganegara maju dan masyarakat berilmu. Sehubungan dengan penyemakan semula kurikulum pada tahun 2003 yang memberikan penekanan kepada nilai murni.

Wan Mohd. (1988) mentakrifkan nilai-nilai murni merupakan tanggapan berkenaan perkara-perkara yang dihajati dan pada masa yang sama juga menjadi kriteria atau ukuran. Bohm (1981) dan Katz (1981) mendefinisikan nilai sebagai satu set keutamaan yang memberi panduan dalam kehidupan yang melibatkan hubungan intelektual, fizikal, emosi dan sosial seseorang individu.

Nilai Berani

Dalam rangkuman nilai berani terdapat nilai-nilai yang dimaksudkan hampir sama dengan nilai tersebut seperti tidak takut, dan berjiwa besar. Dalam episod "Gosok Jangan Tak Gosok", nilai keberanian adalah merupakan nilai yang paling dominan. Misalnya watak Upin dan Ipin yang meminta maaf atas kesalahan yang telah dilakukan kepada opah. Ini jelas menunjukkan watak adik beradik tersebut berani mengaku kesalahan yang telah dilakukan terhadap opah mereka walaupun sedar kebarangkalian akan dihukum oleh opah adalah tinggi.

Satu lagi contoh yang menunjukkan nilai berani adalah seperti Ipin yang mengatakan dia tidak takut untuk berjumpa dengan doktor gigi kerana yakin doktor gigi hanya memeriksa gigi sahaja dan tidak akan mencabutnya. Jelas di sini, watak Ipin yang begitu berani ketika Jarjit dengan sengaja ingin menakut-nakutkan kawannya yang lain dengan mengatakan giginya telah dicabut oleh doktor sebanyak tiga batang. Mendengar cerita yang disampaikan oleh Jarjit ini, maka kawan-kawannya yang lain begitu takut sehinggakan ada yang menyorok di bawah meja. Nilai berani ini begitu sinonim dengan dunia kanak-kanak.

Nilai berani ini juga terdapat dalam episod “Istimewa Hari Ibu”. Misalnya watak Ipin yang menanyakan kepada gurunya tentang makna hari ibu. Pertanyaan yang dikemukakan oleh Ipin ini sedikit sebanyak membantu kawan-kawan sekelasnya untuk mengetahui dengan lebih lanjut makna hari ibu kerana sebelum ini terdapat banyak kenyataan yang diberikan oleh kawan-kawan yang lain tentang hari ibu namun semuanya tidak tepat.

Penerapan nilai berani ini secara tidak langsung dapat membentuk peribadi murid seperti yang terkandung dalam huraian Falsafah Pendidikan Kebangsaan (FPK) iaitu “Rakyat Malaysia yang Berkeupayaan Mencapai Kesejahteraan Diri”. Apabila nilai berani ini ada dalam setiap diri murid atau pelajar di Malaysia maka segala cabaran, dugaan dan rintangan ketika berada di dalam sekolah mahupun di luar sekolah dapat ditempuh dengan jayanya.

Jadual 1 berikut menunjukkan nilai berani di dalam episod yang lain selain daripada episod “Istimewa Hari Ibu” dan “Gosok Jangan Tak Gosok” di dalam kartun animasi Upin dan Ipin.

Nilai Berani	Episod	Contoh Dialog atau Perlakuan
- Berani untuk mendapatkan kepastian.	Bila Besar Nanti: Bahagian 1	Upin bertanya kepada Cikgu Jasmin untuk mendapatkan penjelasan mengenai pekerjaan sebagai guru.
- Berani pada diri sendiri.	Bila Besar Nanti: Bahagian 2	Ehsan tampil ke hadapan kelas untuk menceritakan mengenai hasil lukisannya.
- Berani untuk menyatakan sesuatu yang telah dibaca.	Seronoknya Membaca: Bahagian 1	Mei Mei tampil ke hadapan kelas untuk menceritakan apa yang telah dibaca kepada kawan-kawan sekelas dan Cikgu Jasmin.

Jadual 1: Nilai Berani

Berdasarkan Jadual 1, nilai berani juga terdapat dalam episod seperti “Bila Besar Nanti Bahagian 1 dan 2”, dan juga episod “Seronoknya Membaca Bahagian 1”. Ini menunjukkan, nilai berani adalah antara nilai yang paling konsisten dalam kartun animasi Upin dan Ipin. Nilai ini seharusnya dapat memberi kesan yang positif kepada penonton terutamanya mereka yang seusia dengan watak yang terdapat dalam kartun animasi Upin dan Ipin.

Nilai Hormat-menghormati

Selain itu, nilai hormat-menghormati juga adalah antara nilai yang dominan. Watak utama dalam siri animasi ini iaitu Upin dan Ipin sering kali menonjolkan nilai ini. Walaupun kedua-dua beradik ini nakal, namun apabila mereka terserempak dengan orang yang lebih dewasa, mereka pasti akan mengucapkan salam. Disebabkan nilai inilah semua orang yang berada disekeliling mereka begitu sayang kepada dua beradik ini. Misalnya, setiap kali berada di sekolah, Upin dan Ipin akan mengucapkan salam kepada guru kelas mereka iaitu Cikgu Jasmin. Apabila berada di rumah, mereka juga memberi layanan yang baik kepada opah berbanding kakak sulung mereka iaitu Kak Ros.

Tidak menghairankan sekiranya nilai hormat-menghormati ini merupakan antara nilai yang dominan yang terdapat dalam siri animasi Upin dan Ipin. Nilai wujud dalam hubungan antara subjek dengan objek. Islam mengajar dua asas hubungan nilai iaitu hubungan manusia dengan Allah SWT dan hubungan antara manusia dengan manusia. Kita sebagai manusia yang hidup di muka bumi ini perlu menghormati antara satu sama lain. Nilai hormat-menghormati ini terkandung dalam Falsafah Pendidikan Kebangsaan iaitu “Rakyat Malaysia yang dapat Memberi Sumbangan Terhadap Keharmonian dan Kemakmuran, Keluarga, Masyarakat dan Negara. Nilai ini amat bersesuaian diterapkan kepada murid dari sekolah rendah lagi. Bermula dengan menghormati diri sendiri, hormat kepada kedua ibu bapa, rakan-rakan, jiran-jiran, masyarakat sekeliling seterusnya hormat kepada negara.

Nilai hormat menghormati juga merangkumi jujur, mesra dan lain-lain lagi. Merujuk Jadual 2 terdapat nilai baik hati yang lain.

Nilai Menghormati	Hormat	Episod	Contoh Dialog atau Perlakuan
- Memberi salam kepada guru atau orang yang lebih dewasa.	Bila Bahagian 1	Besarnya Bahagian 2	Nanti: Ehsan dan kawan-kawan sekelas yang mengucapkan selamat pagi kepada Cikgu Jasmin.
- Bercakap dengan nada suara rendah di hadapan orang yang lebih dewasa.	Seronoknya Bahagian 1	Membaca:	
- Sentiasa merendah diri walaupun diri sendiri mempunyai kelebihan yang tersendiri.	Seronoknya Bahagian 1	Membaca:	Cikgu Jasmin mengulas cerita “Arnab dengan Kura-kura” mengenai watak arnab yang sering bercakap besar dan sombong.
- Hormat kepada kawan.	Bila Bahagian 2	Nanti:	Perlakuan Mail yang tidak mahu menghormati kawannya Mei Mei

Jadual 2: Nilai Hormat Menghormati

Berdasarkan contoh perlakuan nilai hormat-menghormati tersebut, jelas menunjukkan kepada kita bahawa “jika hendak melentur buluh biarlah dari rebungunya.” Pepatah ini amat bertepatan kepada kita semua jika ingin melahirkan anak yang mempunyai nilai peribadi yang baik seperti nilai hormat-menghormati, maka lakukanlah ketika anak-anak ini masih kecil. Ini dapat dilihat dalam siri animasi Upin dan Ipin yang mana sejak di sekolah lagi Ehsan dan kawan-kawannya telah diajar menghormati guru. Setiap kali Cikgu Jasmin masuk ke dalam kelas, anak didiknya pasti akan mengucapkan salam. Masyarakat Melayu memang terkenal dengan sifat itu. Malah banyak peribahasa Melayu yang menunjukkan nilai menghormati seperti “Jangan menjaga tepi kain orang”, “Yang tua dihormati dan yang muda dikasihi” dan banyak lagi.

Sikap hormat-menghormati itu seharusnya bermula dari rumah. Anak-anak perlu menghormati kedua ibu bapa. Dalam masyarakat pula, anak buah perlu menghormati ketua dan seterusnya. Sekiranya nilai hormat-menghormati ini tidak diamalkan, maka pepatah Melayu dahulu “yang tua dihormati dan yang muda dikasihi” bakal menjadi “yang tua tak perlu dipeduli dan yang muda mesti dikasihi”. Apabila ini berlaku, tidak mustahil sikap menghormati sesama kita terus lenyap seandainya ia dibiarkan berlalu ditambah lagi dengan sifat dengki dan iri hati yang semakin membiak dalam kalangan kita. Akhirnya kita semakin layu.

Nilai Baik Hati

Baik hati boleh diistilahkan sebagai sikap yang sentiasa mengambil berat perasaan dan kebajikan orang lain secara tulus ikhlas. Sikap baik hati ini boleh dilihat dengan menilai tindak-tanduk seseorang terhadap orang lain.

Contoh bentuk baik hati yang merujuk dalam perkataan adalah seperti “Cikgu, biar saya tolong angkat buku ni,” kata Ehsan kepada Cikgu Jasmin. Dalam siri animasi Upin dan Ipin, nilai baik hati ini dapat dilihat dengan perbuatan watak Ehsan yang membantu Cikgu Jasmin membawa beg tanpa perlu disuruh. Perbuatan Ehsan ini memang selalu berlaku di sekolah apabila murid-murid membantu guru-guru mereka membawa beg yang berisi buku untuk dibawa ke bilik guru ataupun ke kelas. Secara tidak langsung, apabila murid sudah biasa dengan kaedah tayangan animasi di dalam kelas, tidak mustahil apabila murid berada di luar atau di dalam lingkungan sesi persekolahan mereka dapat mengingat semula perbuatan tersebut adalah baik hati.

Selain Ehsan, Upin dan Ipin juga ada menunjukkan nilai baik hati. Mereka sering memberi bantuan secara ikhlas kepada Cikgu Jasmin serta rakan sekelas yang lain. Apabila berada di rumah, adik-beradik kembar ini turut akan memberi bantuan kepada opah sama ada ketika diminta atau tidak. Walaupun sering bertekak dengan Kak Ros, namun watak Upin dan Ipin ini juga kadang kala dapat dilihat akan membantu kakak mereka. Berikut adalah contoh nilai baik hati yang lain.

Nilai Baik hati	Episod	Contoh Dialog dan Perlakuan
- Menolong cikgu	- Kami 1 Malaysia	Ehsan membantu Cikgu Jasmin mengangkat barang untuk masuk ke kelas.
- Menolong opah	- Berkebun: Bahagian 1	Upin, Ipin dan Mei Mei membantu opah semasa di kebun.
- Menolong orang yang memerlukan	- Basikal Baru	Tok Dalang membantu menghasilkan basikal yang unik kepada Upin dan Ipin.

Jadual 3: Nilai Baik Hati

Nilai baik hati penting dalam mendidik masyarakat. Mutakhir ini, nilai-nilai murni dalam kalangan masyarakat semakin pudar. Hal ini terjadi demikian kerana sikap ibu bapa yang tidak prihatin terhadap kepentingan nilai-nilai ini dalam diri anak-anak mereka. Jika nilai-nilai murni ini tidak dipupuk maka negara kita akan dahagakan masyarakat yang saling bersatu padu. Oleh itu, nilai-nilai murni ini haruslah dipupuk sejak di bangku sekolah lagi kerana ‘melentur buluh biarlah dari rebungunya’.

Nilai baik hati banyak terdapat semasa watak utama siri animasi Upin dan Ipin ini berada bersama opah. Misalnya dalam episod “Berkebun: Bahagian 1 dan 2”. Hubungan yang rapat antara cucu dan opah ini memungkinan nilai baik hati banyak berlaku semasa mereka duduk bersama. Disebabkan peranan yang dimainkan oleh opah telah menjadikan kedua adik beradik kembar ini sering mengamalkan nilai baik hati. Selain itu, ada juga nilai ini yang menunjukkan Upin dan Ipin yang membantu kawan-kawan yang lain. Misalnya dalam episod “Kami 1 Malaysia”.

Nilai Kejujuran

Jujur dapat diertikan boleh menjaga amanah. Jujur merupakan salah satu sifat manusia yang mulia. Orang yang memiliki sifat jujur biasanya akan mendapat kepercayaan daripada orang lain. Sifat jujur merupakan salah satu rahsia diri seseorang untuk menarik kepercayaan umum

kerana orang yang jujur senantiasa berusaha untuk menjaga amanah. Jika orang yang memegang amanah adalah orang yang jujur maka amanah tersebut tidak akan terabaikan dan dapat terjaga atau terlaksana dengan baik. Begitu juga sebaliknya, jika amanah tersebut jatuh ke tangan orang yang tidak jujur maka ‘keselamatan’ amanah tersebut pasti ‘tidak akan tertolong’.

Dalam siri animasi Upin dan Ipin ini watak Mail sering dikaitkan dengan kejujuran. Mail merupakan antara kawan baik Upin dan Ipin. Walaupun rajin, namun Mail sering kali melakukan perbuatan berbohong kepada kawan-kawan yang lain. Misalnya Mail yang berbohong kepada kawan-kawan dan Cikgu Jasmin bahawa hari lahirnya bakal tiba sedangkan hari lahirnya yang sebenar belum tiba. Murid sepatutnya mengamalkan nilai kejujuran sekiranya ingin berjaya. Masyarakat Melayu itu sendiri amat menitikberatkan nilai kejujuran dalam mendidik anak mereka. Apabila perlakuan jujur ini tidak dilakukan maka akan terdapat hukuman yang akan diberikan sama ada dalam bentuk fizikal mahupun mental. Pepatah Melayu sendiri ada menyebut, “Harapkan pagar, pagar makan padi”. Pepatah ini merujuk kepada ketidakjujuran seseorang individu setelah diberi sesuatu amanah.

Dalam Falsafah Pendidikan Kebangsaan terkandung frasa “Rakyat Malaysia yang Berakhlak Mulia”. Frasa ini jika diuraikan merujuk kepada usaha untuk melahirkan rakyat Malaysia yang mengamalkan perlakuan baik seperti jujur dan menghindari perlakuan buruk yang banyak memberi kesan yang buruk kepada diri sendiri, keluarga, masyarakat dan negara. Contoh lain yang menunjukkan nilai-nilai jujur.

Nilai Kejujuran	Episod	Contoh Dialog dan Perlakuan
-patuh pada arahan	Seronoknya Bahagian 1	Membaca: Mail berbohong kepada Cikgu Jasmin dengan mengatakan dia sudah habis membaca buku cerita “Arnab dengan Kura-kura”.
-tidak bercakap bohong	Berkebun: Bahagian 1	Mail berbohong kepada opah, Kak Ros dan kawan-kawannya bahawa dia yang menanam sayur.

Jadual 4: Nilai Kejujuran

Nilai kejujuran adalah antara nilai yang paling penting dalam kehidupan kita seharian. Sekiranya nilai kejujuran tiada dalam masyarakat, banyak kesan buruk akan berlaku yang menyebabkan kerugian kepada banyak pihak. Dalam pantun Melayu ada menyatakan, “Siakap senohong, gelama ikan duri, bercakap bohong lama-lama mencuri.” Ini jelas kepada kita mengapa nilai kejujuran itu amat penting dihayati dan diamalkan. Dalam siri animasi ini, watak Mail banyak menunjukkan nilai kejujuran yang tidak diamalkan. Akibat sering berbohong, kawan-kawan serta Cikgu Jasmin selalu menegur sikap Mail itu.

Nilai kerajinan

Kerajinan diertikan sebagai usaha yang berterusan penuh dengan semangat ketekunan, kecekalan, kegigihan, dedikasi, dan berdaya maju dalam melakukan sesuatu perkara. Dalam siri animasi Upin dan Ipin, nilai kerajinan dapat ditonjolkan oleh watak Ehsan yang selalu membantu Cikgu Jasmin. Selain itu, Upin dan Ipin juga rajin membantu opah mereka semasa berada di rumah. Misalnya adik-beradik kembar ini membantu opah menyediakan makanan. Nilai kerajinan ini diwujudkan dalam siri animasi Upin dan Ipin adalah untuk memberi tahu kepada murid agar sentiasa melakukan perbuatan yang baik seperti rajin. Selain rajin menolong, rajin juga dapat dilihat ketika belajar. Upin dan Ipin yang rajin membaca buku semasa berada di rumah tanpa perlu disuruh. Nilai kerajinan yang lain.

Nilai Kerajinan	Episod	Contoh Dialog atau Perlakuan
- Selalu membuat kerja rumah	Seronoknya Membaca	Muird-murid kelas Cikgu Jasmin telah menyiapkan kerja yang telah diberikan olehnya.
- Selalu membantu guru	Berkebun	Upin dan Ipin membantu opah berkebun di belakang rumah.
- Selalu membantu opah	Sayang Kak Ros	Upin dan Ipin membantu Kak Ros membersihkan kawasan rumah.
- Selalu membantu Kak Ros		

Jadual 5: Nilai Kerajinan

Dalam masyarakat Melayu itu sendiri, nilai rajin amat dititikberatkan sejak anak mereka masih kecil lagi. Nilai kerajinan ini menjadi cerminan kepada orang lain sekiranya didapati anak mereka itu malas. Akan timbul persepsi kegagalan ibu dan bapa mendidik anak. Misalnya, apabila seseorang murid berada di sekolah rajin membantu guru, maka tanggapan kepada ibu dan bapa murid tersebut adalah positif. Begitu juga sebaliknya. Jadi, amat bersesuaian siri animasi Upin dan Ipin ini dijadikan antara bahan bantu belajar murid. Banyak nilai-nilai baik dijelmakan dan murid-murid secara tidak langsung mudah untuk mencontohi nilai yang baik tersebut.

Kesimpulan

Justeru, pendekatan pengajaran berasaskan multimedia mampu memindahkan sesuatu maklumat daripada buku teks yang statik kepada suatu corak pembelajaran yang baik. Di sini, animasi memainkan peranan penting bagi menceriakan lagi persembahan sesebuah informasi. Perkara ini penting untuk memastikan murid dapat menumpukan perhatian dan tidak merasa jemu ketika proses pengajaran dan pembelajaran berlaku. Kekuatan yang ada dalam kartun animasi Upin dan Ipin seperti budaya yang ditonjolkan amat sesuai untuk digunakan dalam proses pengajaran dan pembelajaran. Masyarakat yang berbilang bangsa boleh hidup dalam suasana aman dan damai serta saling memerlukan, amat sesuai dalam menerapkan unsur nilai kepada murid.

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PENILAIAN PROGRAM IJAZAH SARJANA MUDA PENDIDIKAN BERASASKAN MODEL CIPP

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Abstrak: Kajian ini bertujuan untuk mengenal pasti pengaruh Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program terhadap Keberkesanan Program Ijazah Sarjana Muda Pendidikan (ISMP). Kajian ini menggunakan kaedah tinjauan. Populasi kajian adalah 520 orang pelajar ISMP di Universiti Utara Malaysia. Pemilihan responden kajian ini dibuat dengan menggunakan persampelan berstrata tidak berkadar berdasarkan program pengajian dan persampelan rawak mudah. Data kajian telah dikumpul daripada sampel seramai 219 orang pelajar ISMP. Soal selidik kajian ini mengandungi 30 item dan mempunyai tahap kebolehpercayaan 0.96. Data kuantitatif dianalisis dengan menggunakan statistik deskriptif dan Analisis Regresi. Dapatan kajian menunjukkan bahawa variabel Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program ISMP mempunyai pengaruh signifikan dan positif terhadap Keberkesanan Program ISMP. Variabel-variabel Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program menjadi peramal yang signifikan kepada Keberkesanan Program ISMP. Ini menjelaskan bahawa kedua-dua variabel tersebut perlu dititikberatkan dalam pelaksanaan program ISMP supaya dapat mewujudkan program yang berkesan.

Kata Kunci: Penilaian Program, Sarjana Muda, Pendidikan, Model CIPP

Pengenalan

Transformasi pendidikan yang dicadangkan oleh kerajaan melalui Pelan Pembangunan Pendidikan Malaysia (PPPM) 2013-2025 (KPM, 2012) membuktikan kepekaan terhadap perkembangan sistem pendidikan yang disediakan untuk rakyat. Mohamad Fadzil dan Abdul Jaleel (2013) berpendapat sistem pendidikan yang berkesan merupakan elemen yang penting bagi sesebuah negara yang merancang ke arah pencapaian status negara maju. Justeru, bagi memastikan rakyat negara ini bersedia untuk menghadapi cabaran persaingan global kurikulum pendidikan masa kini perlu disemak dan ditambahbaik secara berterusan pada semua peringkat pendidikan. Dengan itu, komponen penilaian dianggap dapat memberikan input serta data berkaitan dengan kejayaan pelaksanaan sesuatu program (Centers for Disease Control and Prevention, 2011; Child Trends, 2007).

Penyataan Masalah

Masyarakat menuntut akauntabiliti yang tinggi dari institusi pendidikan. Oleh yang demikian, Institusi Pengajian Tinggi (IPT) dikehendaki mengeluarkan graduan yang relevan dan memenuhi keperluan masyarakat dan negara dengan kos yang efektif dan kualiti yang terjamin. Keperluan ini sebaliknya sentiasa berubah-ubah disebabkan pertubuhan mendadak dalam pengetahuan global dan kemajuan dalam sains, teknologi serta pendidikan yang tersebar secara pantas melalui jaringan elektronik. Bagi menghadapi cabaran-cabaran ini, institusi pendidikan

sebagai institusi dinamik perlu sentiasa mengkaji, memantau dan mengawasi secara sistematik isu-isu yang berkaitan perancangan dan pelaksanaan program. Jamal Ali, Lim Hock Eam, Russayani Ismail, Fauziah Abdul Rahim, Filzah Md Isa dan Ismi Arif Ismail (2014) menyatakan bahawa kaedah pelaksanaan dan, masa dan tempoh program memainkan peranan yang penting dalam memastikan pelajar-pelajar berminat untuk menyertai sesuatu program pengajian dan dapat merasai kesan daripada program tersebut. Stufflebeam (2011) menyatakan bahawa pembelajaran akan lebih seronok, berkesan dan lebih bermakna kepada pelajar jika pengajar berwibawa, berpengetahuan dan berketrampilan.

Tujuan utama penilaian adalah untuk mengkaji kesesuaian, kerelevanan dan keberkesanan program ISMP di Universiti Utara Malaysia ke arah meningkatkan lagi prestasi dan kecemerlangan latihan keperguruan. Penilaian ini juga bertujuan untuk memastikan program ISMP di UUM diurus dengan cekap dan berkesan selaras dengan keperluan semasa, dan menghasilkan guru permulaan terlatih bagi memenuhi keperluan sekolah.

Kajian ini bertujuan untuk menilai program ISMP untuk memastikan bahawa program yang ditawarkan mempunyai kurikulum yang baik, memenuhi kehendak pelajar dan benar-benar mampu merealisasikan objektifnya. Kajian ini akan membantu pihak UUM dalam usaha berterusan untuk memperbaiki dan menghasilkan graduan yang pintar, berilmu dan cekap serta untuk meningkatkan kualiti program yang ditawarkan serta untuk meningkatkan lagi prestasi dan kecemerlangan latihan keguruan.

Objektif Kajian

Secara khususnya kajian ini bertujuan untuk:

1. Mengenal pasti pengaruh Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program terhadap Keberkesanan Program ISMP.

Tinjauan Literatur

Penilaian Program ISMP Menggunakan Model CIPP

Model Penilaian CIPP (Context, Input, Process & Product) dibangunkan oleh Stufflebeam pada tahun 1971. Model ini menyatakan bahawa tujuan utama penilaian adalah mendapatkan maklumat yang berguna untuk membuat keputusan. Tujuan kedua ialah untuk membolehkan pemahaman tentang strategi program. Pendekatan model ini adalah berasaskan kepada dua andaian utama tentang penilaian. Andaian yang pertama ialah penilaian memainkan peranan yang penting dalam merangsang dan merancang perubahan. Manakala andaian kedua pula ialah penilaian adalah komponen pelengkap kepada program-program institusi yang biasa (James, 1993).

Model CIPP merupakan model penilaian yang bertujuan untuk menilai sesuatu program dengan tujuan untuk menambah baik program tersebut khususnya program-program yang ditawarkan dalam bidang pendidikan dan perkhidmatan manusia. Stufflebeam (2000; 2008) mengakui bahawa CIPP merupakan model penilaian yang dapat menjadi alat (tools) bagi membantu menjadikan sesuatu program lebih baik untuk manfaat manusia yang dimaksudkan. Menurut Stufflebeam (1967), “pendekatan CIPP adalah berdasarkan pandangan, tujuan utama penilaian adalah bukan untuk membuktikan tetapi untuk memperbaiki”. Berdasarkan kepada petikan di atas, jelas menunjukkan bahawa tujuan utama CIPP bukanlah untuk membuktikan tetapi untuk memperbaiki.

Model penilaian ini terbahagi kepada empat aspek penilaian sesuatu program iaitu penilaian daripada konteks, input, proses dan produk. Penilaian boleh dilakukan terhadap sesuatu program dengan menggunakan keempat-empat aspek tersebut iaitu konteks, input, proses dan produk atau menggunakan salah satu daripadanya. Penggunaan aspek penilaian bergantung kepada matlamat program.

Penambahbaikan Kualiti yang Berterusan

Proses penambahbaikan dan pemantapan program ISMP dilaksanakan dengan menjadikan Model Penambahbaikan Kualiti yang berterusan oleh Kaizen (1986) sebagai asas. Model ini menjelaskan bahawa proses penambahbaikan program ISMP perlu dilaksanakan secara berperingkat bermula dari tentukan matlamat penambahbaikan sehingga mengambil tindakan pembedahan. Model ini juga menegaskan proses penilaian dan penambahbaikan program perlu mengutamakan aspek kualiti. Ini kerana kualiti memenuhi kehendak pelanggan atau melebihi daripada yang diharapkan oleh pelanggan dan ia berhubungkait dengan produk, perkhidmatan, manusia, proses, dan persekitaran.

Metodologi Kajian

Kajian ini menggunakan pendekatan kuantitatif. Kaedah tinjauan digunakan untuk mengumpul data kajian. Populasi kajian ini adalah 520 orang pelajar ISMP di Universiti Utara Malaysia. Berdasarkan Jadual Penentuan Saiz Sampel Krejcie dan Morgan (1970), bilangan sampel yang sesuai untuk populasi pelajar ISMP seramai 520 orang ialah 226 orang. Persampelan berstrata tidak berkadar berdasarkan program pengajian dan persampelan rawak mudah telah digunakan untuk memilih sampel kajian.

Jadual 1: Nilai Kebolehpercayaan Instrumen Kajian

Dimensi Utama	Item	α
Pensyarah dan Kemudahan		.91
Kerelevanan dan Kesesuaian Program		.92
Keberkesanan Program ISMP		.93
Jumlah		.94

Jawapan yang dikumpul dari pelajar ISMP melalui borang soal selidik disemak oleh penyelidik dan dianalisis dengan menggunakan “*Statistical Package for Social Science*” (SPSS) versi 15.0. Analisis regresi dijalankan untuk mengenal pasti pengaruh Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program terhadap Keberkesanan Program ISMP.

Dapatan Dan Perbincangan Kajian

Latar Belakang Responden

Jadual 2: *Latar Belakang Responden Kajian*

bil	frekuensi	%
1a		
Lelaki	42	19.2
perempuan	177	80.2
2a		
Program		
BEd (BA)	62	2
BEd (ACCT)	25	
BEd (IT)	51	
BEd (Pendidikan Moral)	36	
BEd (Bimbingan & Kaunseling)	45	1
		2
		1
		2

Dapatan kajian (Jadual 2) menunjukkan bahawa bilangan responden pelajar perempuan adalah lebih ramai (80.2%) berbanding responden pelajar lelaki (19.2%). Dari segi program pula, dapatan menunjukkan pelajar dari program BEd (BA) merupakan responden yang paling ramai terlibat dalam kajian ini. Manakala kumpulan pelajar dari program BEd (ACCT) merupakan kumpulan yang mempunyai peratusan yang paling rendah iaitu 11.4% atau 25 orang guru.

Pengaruh Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program terhadap Keberkesanan Program ISMP

Jadual 3: *Pengaruh Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program terhadap Keberkesanan Program ISMP*

	Variabel Bersandar Keberkesanan Program ISMP				
	Beta Tak Terpiawai	Std. Error	Beta Terpiawai	Nilai t	Sig.
Variabel Bebas					
Pensyarah dan Kemudahan	0.255	0.048	0.290	4.18	.000
Kerelevanan dan Kesesuaian Program	0.303	0.052	0.561	7.78	.000
Nilai F	107.84				.000
R ²	0.781				
R ² Terlaras	0.656				

Sig. pada $p < .05$

Keputusan analisis regresi berganda (Jadual 4) menunjukkan wujud hubungan yang signifikan antara variabel Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program dengan Keberkesanan Program ISMP. Nilai $R^2 = 0.78$ menunjukkan bahawa kedua-dua variabel tersebut telah menjelaskan 78 peratus varians dalam Keberkesanan Program ISMP. Ujian **Analisis Varians Satu Hala (ANOVA)** daripada regresi menunjukkan bahawa nilai F ialah 107.84 dan signifikan pada $p < 0.05$. Ini menunjukkan bahawa model regresi yang ditunjukkan adalah signifikan dan boleh diterima pakai untuk menerangkan “variability” Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program terhadap Keberkesanan Program ISMP.

Faktor Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program dikendalikan secara kolektif dalam regresi berganda dan dapatan analisis menunjukkan variabel bebas tersebut adalah peramal yang signifikan kepada Keberkesanan Program ISMP. Model regresi berganda Keberkesanan Program ISMP adalah 0.56 (Kerelevanan dan Kesesuaian Program) dan 0.29 (Pensyarah dan Kemudahan). Gall, Gall dan Borg (2003) menyatakan sumbangan ini boleh diterima pakai sebagai peramal dan sesuatu model yang menunjukkan nilai lebih daripada lima peratus varians adalah model yang baik memandangkan dalam pendidikan terdapat banyak faktor yang mempengaruhi guru adalah di luar kawalan kajian ini.

Variabel Kerelevanan dan Kesesuaian Program mempunyai pengaruh yang signifikan dengan nilai koefisien piawai yang tertinggi ($\beta = 0.56$) berbanding dengan Pensyarah dan Kemudahan. Ini menunjukkan bahawa variabel Kerelevanan dan Kesesuaian Program mempunyai pengaruh yang paling kuat untuk mempengaruhi Keberkesanan Program ISMP. Dapatan kajian ini adalah selari dengan kajian Harun (2014) dan Mohd Mustamam et al. (2004) yang mendapati faktor kerelevanan dan kesesuaian program menjadi faktor utama dalam pemilihan sesuatu program. Ini kerana dapatan kajian mereka menunjukkan bahawa pelajar-pelajar cenderung untuk memilih kursus-kursus dan program pengajian akademik yang ditawarkan berkualiti dan relevan dengan keperluan semasa dan menjamin peluang kerja.

Selain itu, Pensyarah dan Kemudahan merupakan penyumbang varians yang kedua tertinggi ($\beta = 0.29$) dan peramal yang signifikan yang mempengaruhi Keberkesanan Program ISMP. Dapatan kajian ini adalah sama dengan kajian Mohd Mustamam et al. (2004), Zainuddin Abu Bakar, & Nor Hisham Muhamad Nor. (2011) dan Mohd Yusri Ibrahim, & Aziz Amin. (2014) yang mendapati faktor pengajar dan kemudahan perlu diberi perhatian dalam penawaran

sesuatu program. Mereka menyatakan bahawa aspek utama yang perlu ditekankan adalah memantapkan kualiti pensyarah, mempertingkatkan kemudahan teknologi pendidikan dan ICT, memperbaiki prasarana makmal dan perpustakaan dan memastikan kurikulum pengajian yang ditawarkan selaras dengan keperluan sekolah.

Dapatan ini menjelaskan bahawa keberkesanan program ISMP di universiti bergantung kepada faktor Pensyarah dan Kemudahan dan Kerelevanan dan Kesesuaian Program. Kedua-dua faktor tersebut adalah saling berkait dan perlu diberi perhatian untuk memastikan program ISMP mempunyai kualiti dan dapat meningkatkan keberkesanan program ISMP.

Implikasi Dapatan Kajian

Berdasarkan perbincangan dan huraian, kajian ini mempunyai beberapa implikasi kepada pihak yang bertanggungjawab melaksanakan program Ijazah Sarjana Muda Pendidikan (ISMP).

- Dapatan kajian ini membuktikan bahawa keberkesanan dalam pelaksanaan program Ijazah Sarjana Muda Pendidikan bergantung kepada variabel-variabel Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program. Justeru, hasil kajian mendapati variabel-variabel Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program mempunyai pengaruh yang signifikan dan positif terhadap Keberkesanan Program ISMP. Dengan itu, dapat dirumuskan bahawa pelaksanaan program Ijazah Sarjana Muda Pendidikan perlu menitikberatkan variabel-variabel Pensyarah dan Kemudahan, dan

Kerelevanan dan Kesesuaian Program kerana peningkatan dalam variabel-variabel tersebut turut mempengaruhi Keberkesanan Program ISMP.

- Selain itu, dapatan kajian ini telah menjelaskan variabel Kerelevanan dan Kesesuaian Program mempunyai pengaruh yang signifikan terhadap Keberkesanan Program ISMP. Dapatan ini menunjukkan bahawa pihak universiti harus memastikan program ISMP yang dilaksanakan adalah relevan dan sesuai dengan keperluan pelajar pendidikan. Ini menjelaskan bahawa program ISMP yang ditawarkan perlu memenuhi keperluan pasaran dan industri.

Kesimpulan

Dapatan kajian ini menunjukkan bahawa variabel-variabel Pensyarah dan Kemudahan, dan Kerelevanan dan Kesesuaian Program menjadi peramal yang signifikan kepada Keberkesanan Program ISMP. Kedua-dua variabel ini mempunyai pengaruh yang signifikan dan positif terhadap variabel bersandar kajian ini. Dapatan kajian menunjukkan program ISMP yang ditawarkan ini adalah relevan dan sesuai dengan keperluan pelajar, di samping mempunyai pensyarah yang pakar dan prasarana yang disediakan adalah baik.

Dapatan kajian ini menjelaskan bahawa penawaran program ISMP dengan Kepujian ini adalah memenuhi keperluan organisasi kerajaan dan swasta. Penawaran program ISMP adalah selaras dengan hasrat KPM yang sentiasa memerlukan guru yang terlatih dalam bidang Pendidikan. Keperluan KPM adalah untuk mendapatkan guru terlatih bagi mengendalikan bukan sahaja masalah salah laku pelajar tetapi untuk memberi bimbingan dan penasihat pembelajaran, kerjaya dan pembangunan pelajar. Untuk menjayakan hasrat murni ini, pendidik yang berpengetahuan dan mahir amat diperlukan dan program ISMP dengan Kepujian ini dapat menjadi wadah melatih pendidik tersebut.

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KEPIMPINAN GURU BESAR DENGAN EFIKASI GURU SEKOLAH RENDAH

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Abstrak: Tujuan kajian ini dijalankan untuk mengenal pasti hubungan antara tingkah laku kepimpinan guru besar dengan efikasi guru. Kajian ini menggunakan kaedah kuantitatif yang mengaplikasikan pendekatan tinjauan. Sampel kajian terdiri daripada 130 orang guru dari empat buah sekolah rendah di dalam daerah Kuala Nerus. Instrumen kajian tingkah laku kepimpinan guru besar ini terdiri daripada 49 item. Dimensi efikasi sendiri guru pula terdiri daripada tiga dimensi yang terdiri daripada 12 item keseluruhannya. Instrumen efikasi sendiri guru mempunyai nilai pekali Cronbach alpha 0.92 dan instrumen tingkah laku kepimpinan guru besar 0.91. Data kajian ini telah dianalisis dengan menggunakan statistik inferensi iaitu korelasi. Dapatan kajian menunjukkan terdapat hubungan yang signifikan dan positif antara tingkah laku kepimpinan guru besar dengan tahap efikasi sendiri guru. Dapatan kajian ini menjelaskan bahawa tingkah laku kepimpinan guru besar juga dilihat sebagai salah satu pemangkin yang bertindak sebagai medium untuk memastikan guru-guru sentiasa komited untuk melaksanakan tugas sebagai pendidik dan kekal bermotivasi sepanjang perkhidmatan.

Kata Kunci: Kepimpinan, Tingkah Laku, Efikasi Kendiri, Guru Besar, Guru

Pengenalan

Pendidikan merupakan suatu perkara yang sangat penting dalam pembangunan sesebuah negara. Dalam menghadapi persaingan ekonomi global pada masa kini, kejayaan sesebuah negara amat bergantung kepada ilmu pengetahuan, kemahiran dan kompetensi yang dimiliki oleh rakyatnya (Kementerian Pendidikan Malaysia, 2013). Segala perancangan yang direncanakan dalam Pelan Pembangunan Pendidikan Malaysia (PPPM) 2013-2025 memerlukan komitmen yang tinggi daripada seluruh warga sekolah. Tugas ini tidak boleh dipikul oleh guru besar selaku pemimpin sekolah secara sendirian tetapi perlu dilaksanakan secara kolaboratif bersama guru dan murid.

Penyataan Masalah

Guru yang mempunyai tahap efikasi diri yang tinggi akan mampu menyampaikan isi pelajaran dengan baik dan berkesan (Nurahimah Mohd Yusoff & Rafisah Osman, 2010). Namun begitu, laporan PPPM 2013-2025 mendapati, hanya 12% pengajaran guru disampaikan pada standard yang tinggi, manakala 38% lagi berada pada standard memuaskan dan 50% pengajaran guru disampaikan pada tahap tidak memuaskan (Shafinaz et al., 2016).

Dalam aspek kepimpinan pula, guru besar selaku pemimpin sekolah turut memainkan peranan utama dalam usaha meningkatkan efikasi guru yang mana pemimpin perlulah sentiasa memantau keperluan guru serta mampu memberi bimbingan dan sokongan dalam usaha

meningkatkan efikasi guru (Tschannen-Moran & Hoy, 2001). Gallante (2015) pula menyatakan, corak kepimpinan guru besar dalam mempengaruhi perkembangan efikasi guru masih belum difahami dengan baik. Pandangan-pandangan tersebut jelas menunjukkan tingkah laku kepimpinan pemimpin sekolah dan efikasi guru adalah amat penting kepada sesebuah sekolah.

Dalam konteks di Malaysia, kebanyakan kajian lebih berfokus kepada gaya kepimpinan dan efikasi guru (Masitah Mohammad Yusof et al., 2013; Baharuzaini Baharin et al., 2016; Shafinaz et al., 2016). Justeru, ruang yang ada ini mendorong pengkaji untuk meneroka tingkah laku kepimpinan. Di samping itu, kajian-kajian lepas juga lebih memfokuskan kajian berkaitan gaya kepimpinan berbanding mengkaji aspek tingkah laku tertentu dalam sesebuah gaya kepimpinan (Baharuzaini Baharin et al., 2016; Rosnarizah Abdul Halim, & Husien Ahmad, 2015).

Kajian berkaitan efikasi pula lebih menjurus kepada efikasi guru dalam melaksanakan pengajaran bagi mata pelajaran tertentu (Masitah Mohammad Yusof et al., 2013). Selain itu, kebanyakan pengkaji lebih gemar mengkaji aspek-aspek perkembangan efikasi diri dan faktor yang boleh mempengaruhi tahap efikasi diri (Nurahimah Mohd Yusoff & Rafisah Osman, 2010). Atas keperluan dan permasalahan yang dinyatakan di atas, kajian ini bertujuan mengenal pasti hubungan tingkah laku kepimpinan guru besar dengan tahap efikasi guru dalam melaksanakan tugas mereka agar dapat memenuhi kehendak dan harapan bagi meningkatkan keberhasilan murid sekaligus menyumbang kepada peningkatan prestasi sekolah.

Objektif Kajian

1. mengenal pasti hubungan tingkah laku guru besar dengan efikasi guru.

Tinjauan Literatur

Efikasi Guru

Salah satu aspek terpenting yang mempengaruhi guru dalam melaksanakan tugas-tugasnya sebagai seorang tenaga pengajar ialah efikasi kendirinya (Masitah Mohammad Yusof et al., 2013). Ini kerana efikasi guru sering dikaitkan sebagai kunci kepada peningkatan kualiti persekolahan (Nurahimah Mohd Yusoff & Rafisah Osman, 2010). Efikasi guru adalah kepercayaan guru pada keupayaan mereka untuk mempengaruhi pembelajaran pelajar (Ashton et al., 1982). Menurut Bandura (1986), efikasi sendiri terbentuk dan berkembang menerusi empat sumber maklumat, iaitu pengalaman lepas, pengalaman *vicarious*, pengaruh sosial serta keadaan fisiologi dan emosi (Aziah Ismail, Loh, & Abdul Ghani Kanesan Abdullah, 2015). Baharuzaini et al. (2016) pula menyatakan efikasi guru sebagai kepercayaan seseorang guru itu akan keupayaan diri sendiri untuk menjalankan proses pembelajaran dan pengajaran yang mampu meningkatkan prestasi murid.

Tingkah Laku Kepimpinan

Tingkah laku pemimpin ialah cara pemimpin bertindak, berinteraksi, mengawal emosi dan berkomunikasi dengan kakitangan dalam organisasi (Yukl, 2013). Tingkah laku kepimpinan merujuk kepada sepuluh tingkah laku kepimpinan pengajaran yang diutarakan oleh Murphy dan Hallinger (1987). Menurut Abdul Ghani Abdullah, Abd. Rahman Abd. Aziz, dan Mohammed Zohir Ahmad (2008) sepuluh tingkah laku kepimpinan sebagaimana yang dinyatakan oleh Murphy dan Hallinger (1987) adalah; menetapkan matlamat sekolah, menjelaskan matlamat, menyelia dan menilai pengajaran, mengurus kurikulum, memantau kemajuan pelajar, mengawal waktu pembelajaran, keterlibatan, memberi insentif pengajaran, menggalakkan peningkatan profesional dan memberi insentif pembelajaran. Kesemua sepuluh tingkah laku ini dirumuskan oleh Bulach, Boothe, dan Michael (1999) dalam lima dimensi

yang dinilai menggunakan instrumen SSB iaitu hubungan kemanusiaan, kepercayaan/membuat keputusan, kepimpinan pengajaran, kawalan dan konflik.

Kepimpinan dan Efikasi Guru

Gallante (2015) mendapati terdapat hubungan yang signifikan antara kepimpinan instruksional bagi konstruk penglibatan dan konflik. Berdasarkan model efikasi guru, hubungan dengan pengetua terbina melalui sokongan, bimbingan, dan struktur yang disediakan oleh pengetua. Dapatan kajian oleh Baharuzaini Baharin et al. (2016) pula menunjukkan terdapat hubungan yang signifikan antara gaya kepimpinan instruksional, transformasional dan demokratik dengan tahap efikasi guru. Dapatan ini sejajar dengan hasil kajian Çalik et al. (2012) yang mendapati kepimpinan pengajaran atau kepimpinan instruksional mempunyai kesan langsung dan positif yang ketara terhadap efikasi guru secara kolektif.

Di samping itu, dapatan kajian juga menunjukkan tahap hubungan yang sederhana antara kepimpinan pengajaran dan efikasi guru secara kolektif. Mehdinezhad dan Mansouri (2016) pula mendapati terdapat hubungan yang signifikan antara komponen tingkah laku kepimpinan pengetua dan efikasi guru. Dapatan kajian juga menunjukkan bahawa kedua-dua komponen tingkah laku kepimpinan pengetua, iaitu pengaruh yang ideal dan rangsangan intelek, boleh meramal perubahan terhadap efikasi guru. Secara umumnya, didapati bahawa, efikasi guru mempunyai hubungan langsung dengan kepimpinan pemimpin utama sekolah.

Metodologi Kajian

Reka Bentuk Kajian

Kajian ini menggunakan kaedah kuantitatif dengan menggunakan pendekatan tinjauan (*survey*) melalui soal selidik. Populasi kajian adalah tertumpu kepada guru sekolah rendah daerah Kuala Nerus, Terengganu. Berdasarkan kepada jadual penentuan sampel oleh Krejcie dan Morgan (1970), dianggarkan seramai 130 orang sampel dipilih secara rawak mudah.

Jadual 1: *Instrumen Kajian*

Pembolehubah	Bilangan Item	Sumber Item	Cronbach alpha
Efikasi Kendiri guru	12	<i>Tschannen-Moran and Woolfolk Hoy(2001)</i>	0.92
Tingkah laku kepimpinan Guru Besar	49	<i>Bulach et al.(2006)</i>	0.91

Dapatan kajian rintis menunjukkan instrumen efikasi kendiri guru mempunyai nilai pekali *Cronbach alpha* 0.92 dan instrumen tingkah laku kepimpinan guru besar 0.91. Data kajian ini telah dianalisis dengan menggunakan statistik inferensi iaitu korelasi.

Dapatan Dan Perbincangan Kajian Latar Belakang Responden

Jadual 2: Taburan Demografi Guru Berdasarkan Kepada Jantina Dan Umur

Jantina	Frekuensi (n)	Peratus (%)
Lelaki	32	24.6
Perempuan	98	75.4
Umur		
26 – 32 tahun	4	3.1
33 – 39 tahun	28	21.5
40 – 46 tahun	44	33.9
47 – 53 tahun	39	30.0
54 – 60 tahun	15	11.5
Keseluruhan	130	100

Berdasarkan kepada analisis data dan dapatan kajian yang diperolehi seperti di dalam Jadual 2, dapatan menunjukkan bahawa majoriti responden adalah daripada kalangan guru perempuan iaitu seramai 98 (75.4%) orang berbanding dengan guru lelaki. Manakala taburan responden mengikut umur pula didapati bahawa lingkungan umur 40 – 46 tahun adalah yang paling ramai yang terlibat sebagai responden kajian iaitu 33.9% dan yang paling rendah bilangan responden adalah daripada lingkungan umur 26 – 32 tahun sebanyak 3.1%.

Hubungan Yang Signifikan Antara Tingkah Laku Kepimpinan Guru Besar Dan Efikasi Guru

Jadual 3: Hubungan Antara Tingkah Laku Kepimpinan Guru Besar dan Efikasi Guru

Pembolehubah	Efikasi Guru
Tingkah Laku Kepimpinan Guru Besar	0.19*

*p < 0.05

Berdasarkan kepada jadual 3, dapatan menunjukkan bahawa nilai korelasi yang diperolehi adalah signifikan iaitu dengan nilai $r = 0.19$ ($p < 0.05$). Analisis data mendapati terdapat hubungan positif yang sangat lemah dan signifikan antara tingkah laku kepimpinan guru besar dengan efikasi guru sekolah rendah. Berdasarkan model efikasi guru, hubungan dengan pengetua terbina melalui sokongan, bimbingan, dan struktur yang disediakan oleh pengetua. Dapatan kajian oleh Baharuzaini Baharin et al. (2016) pula menunjukkan terdapat hubungan yang signifikan antara gaya kepimpinan instruksional, transformasional dan demokratik dengan tahap efikasi guru. Dapatan ini sejajar dengan hasil kajian Calik et al. (2012) yang mendapati kepimpinan pengajaran atau kepimpinan instruksional mempunyai kesan langsung dan positif yang ketara terhadap efikasi guru secara kolektif.

Mehdinezhad dan Mansouri (2016) pula mendapati terdapat hubungan yang signifikan antara komponen tingkah laku kepimpinan pengetua dan efikasi guru. Dapatan kajian juga menunjukkan bahawa kedua-dua komponen tingkah laku kepimpinan pengetua, iaitu pengaruh yang ideal dan rangsangan intelek, boleh meramal perubahan terhadap efikasi guru. Secara umumnya, didapati bahawa, mempunyai kepimpinan pemimpin utama sekolah hubungan langsung dengan efikasi guru.

Secara keseluruhannya, dapatan kajian ini telah membuktikan bahawa mungkin terdapat faktor-faktor lain yang mempengaruhi hubungan signifikan antara tingkah laku kepimpinan guru besar dengan efikasi guru. Ini kerana hasil dapatan menunjukkan hubungan positif yang sangat lemah antara tingkah laku kepimpinan guru besar dan efikasi guru. Perkara mengenai langkah-langkah kepimpinan yang ditunjukkan mungkin tidak berkaitan dengan amalan di sekolah yang berbeza. Tingkah laku kepimpinan guru besar adalah termasuk perkara-perkara yang mengukur dalam membuat keputusan dan menilai pembangunan profesional. Kepimpinan Pendidikan termasuklah ukuran budaya sekolah dan juga membuat keputusan secara bersama. Tingkah laku kepimpinan guru besar ditunjukkan dalam kalangan pasukan kerja, memberi tumpuan kepada memperkasakan pasukan (Carson et al., 2006). Aspek-aspek kepimpinan guru besar yang ditunjukkan mungkin mempunyai kurang keberkesanan terhadap efikasi guru.

Implikasi Dapatan Kajian

Dapatan kajian menyediakan maklumat akan amalan tingkah laku yang perlu dipraktikkan dalam sesebuah pengurusan terutamanya organisasi sekolah agar mampu meninggalkan impak yang positif terhadap tahap efikasi guru dan seterusnya secara langsung meningkatkan prestasi sekolah. Dalam kajian ini, tingkah laku kepimpinan guru besar yang dikenal pasti mampu menyumbang kepada kecemerlangan sekolah telah diamalkan oleh pihak pengurusan pada tahap yang tinggi secara keseluruhannya. Oleh itu, tingkah laku kepimpinan guru besar ini perlu dikekalkan juga dan dijadikan contoh ke arah memastikan semua guru dapat meningkatkan efikasi mereka dan seterusnya bergerak seiring dalam mencapai visi dan misi sekolah seterusnya menyahut cabaran menyediakan pendidikan bertaraf dunia.

Selain itu, data yang diperolehi dari kajian ini juga boleh digunakan sebagai panduan oleh pihak JPNT atau KPM sendiri dalam merangka dasar-dasar pendidikan negara agar pelaksanaannya tidak membebankan serta mengambil kira tahap efikasi sendiri guru. Hal ini demikian kerana kebanyakan dasar-dasar yang diperkenalkan oleh kedua-dua pihak iaitu JPNT dan KPM dikenal pasti menyumbang kepada penurunan tahap efikasi sendiri guru. Kajian oleh Nor Mohamad Zulhairi Ismail et al. (2016) menyenaraikan faktor beban tugas yang banyak menjadi punca guru berasa tiada kepuasan untuk bekerja. Keadaan ini akan menjejaskan komitmen para guru terhadap sekolah (Nahid, 2011). Natijahnya, wujudnya situasi di mana tahap efikasi guru dalam melaksanakan tugas menurun sehingga akhirnya akan menjejaskan prestasi kerja. Kesannya, pencapaian murid akan merosot sehingga menyumbang kepada penurunan prestasi sekolah secara keseluruhannya.

Kesimpulan

Perbincangan dalam bab ini telah menyentuh dapatan kajian yang signifikan dan kaitannya dengan kajian-kajian oleh pengkaji terdahulu serta aspek-aspek teoritikal kajian yang mana efikasi guru sekolah rendah bergantung kepada tingkah laku kepimpinan guru besar di peringkat sekolah. Ini kerana tingkah laku kepimpinan guru besar dalam bidang pengurusan dan pentadbiran di sekolah mampu menjadi faktor yang dapat meningkatkan tahap efikasi guru. Tingkah laku kepimpinan guru besar juga dilihat sebagai salah satu pemangkin yang bertindak sebagai medium untuk memastikan guru-guru sentiasa komited untuk melaksanakan tugas sebagai pendidik dan kekal bermotivasi sepanjang perkhidmatan.

Selain itu, dapatan hasil kajian ini diharapkan dapat memberi sumbangan ilmu yang bermakna kepada pelbagai pihak antaranya guru, sekolah, Pejabat Pendidikan Daerah (PPD), Jabatan Pendidikan Negeri (JPN) dan Kementerian Pendidikan Malaysia (KPM). Di samping itu, cadangan kajian lanjutan dikemukakan bagi memberi idea kepada pengkaji-pengkaji yang lain untuk membuat penerokaan yang lebih mendalam berkaitan isu yang diketengahkan. Kajian ini seterusnya juga berperanan sebagai rujukan kepada semua pihak yang komited

dalam bidang penyelidikan bagi memantapkan profesion ini khususnya dalam bidang pengurusan dan pentadbiran di sekolah.

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KEUSAHAWANAN SOSIAL INSTITUSI MASJID PEMANGKIN MODAL INSAN BERKUALITI

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Pengenalan

Masjid merupakan institusi yang dekat dengan umat Islam sebagai pusat kegiatan dan pentadbiran kehidupan. Perpaduan umat Islam bermula daripada institusi masjid. Seiring dengan peranannya, masjid muncul sebagai pusat perpaduan dan tumpuan kehidupan masyarakat Islam setempat.

Menurut Ahmad Fauzi M.S. dan Muhammad Yusuf Marlon A. (2016) menyatakan bahawa terdapat pengurusan masjid yang hanya menjurus aktiviti berbentuk keagamaan semata-mata. Justeru pandangan sebegini perlulah diubah agar peranan masjid dapat dilihat dari perspektif yang lebih luas. Transformasi kepimpinan masjid perlu untuk pemerkasaan fungsi masjid. Kualiti kepimpinan masjid perlu dipertingkatkan kerana ia adalah nadi penting melahirkan modal insan yang cemerlang.

Institusi masjid boleh menjana aktiviti ekonomi dan keusahawanan dengan menyediakan ruang kedai atau tapak bazar di luar masjid bagi usahawan yang berminat menjual barangan keperluan masyarakat Islam (Nor Azlina A.W., Norafifah A.H., dan Norajila C.M., 2016) . Menurut Amran (2009) bahawa budaya menerima sumbangan derma perlulah seiring dengan garapan pelbagai aktiviti ekonomi yang berteraskan keusahawanan.

Keusahawanan sosial telah bermula sejak puluhan tahun dahulu lagi. Namun masih ramai yang merasakan keusahawanan sosial ini merupakan satu fenomena baru. Dalam menguruskan perniagaan kadangkala kita bertindak sebagai seorang yang menjalankan aktiviti keusahawanan sosial, biarpun kita tidak mengatakan sedemikian.

Menurut Dees (2001) dalam artikel yang ditulis oleh Muhamad Yusof (2012) menyatakan bahawa keusahawanan sosial menggabungkan semangat misi sosial dengan imej perniagaan seperti disiplin, inovasi dan penentuan. Selain itu, keusahawanan sosial menggunakan pendekatan keusahawanan untuk membongkar masalah sosial dan menanganinya dengan cara yang mendatangkan kemenangan kepada kedua-dua pihak.

Latar Belakang Kajian

Menurut Suwanto (2012) menyatakan perkataan masjid berasal daripada bahasa arab ‘sajada’ yang bermaksud sujud atau tempat menyembah Allah.

Menurut Datuk Seri Mukhriz Mahathir yang dipetik daripada Utusan online 18 Oktober 2009 menyatakan bahawa institui masjid disaran menceburi bidang keusahawanan. Bidang keusahawanan juga merupakan satu ibadah dan ia mampu menarik lebih ramai ahli masyarakat mendekatkan diri dengan masjid.

Institut keusahawanan Negara juga pernah menganjurkan seminar pembangunan usahawan kariah masjid untuk memberi pendedahan kepada kariah masjid mengenai perancangan dan potensi serta memupuk semangat dalam bidang perniagaan. (Utusan online, 18 Oktober 2009)

Gerai-gerai jualan yang dibangunkan secara teratur atau tapak-tapak jualan memberi peluang kepada mereka yang ingin menceburi bidang perniagaan secara kecil-kecilan. Usaha ini mampu mengangkat martabat masjid bukan sekadar tempat ibadat wajib tetapi juga ibadah lain seperti mendorong pembangunan ekonomi berterusan.

Selain itu juga, masjid-masjid di Malaysia perlulah menjalani proses transformasi seiring perkembangan masyarakat Islam kontemporari. Kewujudan pusat penginapan muslim di perkarangan masjid memberi nafas baru kepada aktiviti keusahawanan masjid.

Pernyataan Masalah

Berdasarkan pelan strategik Jabatan Hal Ehwal Agama Islam Pulau Pinang (JHEAIPP) 2016 – 2020 telah menggariskan enam isu dan cabaran utama dalam menguruskan hal ehwal agama Islam. Salah satu isu dan cabaran utama adalah langkah yang perlu diambil bagi menangani persepsi negatif terhadap pihak pengurusan hal ehwal Islam .

Justeru bagi menangani cabaran atau permasalahan berkenaan JHEAIPP menggariskan lima teras strategik. Salah satu teras strategik berkenaan adalah pembangunan institusi masjid dan surau sebagai teras pembentukan khaira ummah.

Selain itu juga, senario persekitaran didorong faktor luaran dan dalaman termasuk pelbagai persepsi masyarakat umum terhadap fungsi institusi masjid di bawah seliaan JHEAIPP. Justeru, JHEAIPP menyedari beberapa aspek dalam institusi masjid yang perlu diperkukuh dan diperkasakan. Antara permasalahan yang perlu diperkukuh adalah pemeraksanaan kepimpinan masjid yang kompeten dan professional dengan melibatkan kepimpinan masjid dengan majlis ilmu dan perkongsian pintar seperti aktiviti keusahawanan masjid.

Permasalahan dalam aspek pengimarah masjid menerusi program yang berkualiti turut ditekankan dalam pelan strategik JHEAIPP 2016-2020. Institusi masjid memerlukan inisiatif khusus bagi memantapkan lagi program pengimarah masjid yang pelbagai dan menyeluruh kepada segenap lapisan masyarakat seperti program perkongsian pintar dengan pelbagai agensi bagi menganjurkan aktiviti keusahawanan sekaligus menyemarakkan lagi program pengimarah masjid dan menjadikan masjid sebagai pusat pembangunan ekonomi ummah.

Persoalan Kajian

- i. Apakah ciri-ciri keusahawanan sosial terbaik institusi masjid di Seberang Perai Utara dalam menangani persepsi negatif terhadap pihak pengurusan hal ehwal Islam?
- ii. Apakah faktor-faktor yang menyumbang ke arah pengimarah institusi masjid secara menyeluruh melalui program pembangunan keusahawanan sosial masjid?

Objektif Kajian

- i. Menenal pasti ciri-ciri keusahawanan sosial terbaik institusi masjid di Seberang Perai Utara dalam menangani persepsi negatif terhadap pihak pengurusan hal ehwal Islam.
- ii. Menenal pasti faktor-faktor yang menyumbang ke arah pengimarah institusi masjid secara menyeluruh melalui program pembangunan keusahawanan sosial masjid.

Skop Kajian

Kajian ini melibatkan beberapa buah masjid di daerah Seberang Perai Utara yang aktif dalam pembangunan keusahawanan sosial melalui program masjid. Oleh itu keputusan kajian ini tidak boleh digeneralisasikan kepada masjid di kawasan lain.

Kepentingan Kajian

Secara teori, peranan masjid dalam masyarakat kontemporari telah banyak dibincang dan ditulis. Namun peranan secara praktikalnya memerlukan setiap kepimpinan institusi masjid

mempunyai kemahiran, latihan dan kesungguhan dalam bidang keusahawanan agar dapat merangka program serta aktiviti berbentuk keusahawanan yang menjadi nilai tambah kepada sumber pendapatan masjid.

Kajian ini adalah penting dalam memberi garis panduan kepada institusi masjid akan ciri-ciri terbaik keusahawanan sosial institusi masjid. Di samping itu juga, kajian ini penting untuk menentukan faktor-faktor yang menyumbang ke arah pengimarahkan masjid secara menyeluruh melalui program keusahawanan sosial masjid.

Kajian Literatur

Terdapat beberapa tafsiran berkenaan masjid. Masjid secara maknawi didefinisikan sebagai erti khudu' yang membawa maksud tunduk dan merendah diri. Ibn Manzur memberi makna masjid sebagai sujud padanya atau di dalamnya. (Jamal al-Din Muhammad bin Makram Ibn Manzur al Afriqi, 1990).

Pengertian masjid dalam Islam bukan sekadar tempat mendirikan solat sahaja bahkan masjid menurut pandangan Islam mempunyai maksud dan tujuan yang lebih luas. Ia bukan sahaja tempat ibadat, tetapi juga sebagai tempat untuk menyelesaikan urusan keagamaan dan keduniaan bagi umat Islam.

Memakmurkan masjid menurut pandangan Yusuf Al-Qardawi ialah mendirikan sembahyang di dalamnya, berdoa, berzikir dan menegakkan syiar-syiarinya (Yusuf Al Qardawi, 1990)

Peranan Masjid

Masjid merupakan satu institusi yang amat penting dalam perkembangan masyarakat. Peranan masjid bukan sekadar tempat mendapatkan ilmu dalam ruang lingkup keimanan semata-mata tetapi juga merupakan platform pembangunan social dan ketamadunan masyarakat.

Kini terdapat lebih kurang 5490 buah masjid di seluruh negara samada kedudukannya sebagai masjid negara, masjid negeri, masjid jamek daerah, masjid institusi, masjid kariah, masjid mukim atau surau Jumaat. Jika diteliti aspek peruntukan dana bagi tujuan pembinaan dan membaiki pulih masjid, kerajaan telah memperuntukan sebanyak RM71 juta dalam Rancangan Malaysia Ke-9. Berasaskan kenyataan tersebut membuktikan bahawa betapa luas dan pentingnya peranan institusi masjid dalam konteks pembangunan Insan yang memerlukan perancangan serta pengurusan masjid yang sistematik dan professional. (Roslan Mohamed 228:4-5)

Isu penting yang dibahas dalam penulisan Ahmad Fauzi M.S. dan Muhammad Yusuf M.A. (2016) menyatakan bahawa Masjid hanya dilihat tempat melakukan ibadat khusus, tempat kenduri dan majlis akad nikah semata-mata. Dalam masa yang sama, masjid juga kurang tarikan kepada golongan belia mengimarahkannya. Kegiatan yang bersifat ekonomi kurang diberi perhatian untuk diadakan di persekitaran masjid. Di sini menunjukkan perlunya satu bentuk pengurusan serta kepimpinan bersifat professional yang memiliki kredibiliti yang mampu mengimarahkan masjid dengan program yang sistematik.

Keusahawanan Sosial Masjid

Menurut Dato Seri Mukhriz Mahathir menyatakan bahawa institusi masjid disaran menceburi bidang keusahawanan. Bidang keusahawanan juga merupakan satu ibadah dan ia mampu menarik lebih ramai ahli masyarakat memakmurkan diri dengan masjid. (Utusan online, 18 Oktober 2009) Gerai-gerai jualan yang dibangunkan secara teratur atau tapak-tapak jualan memberi peluang kepada mereka yang ingin menceburi perniagaan secara kecil-kecilan. Usaha ini mampu mengangkat martabat masjid bukan sekadar tempat ibadat wajib tetapi juga ibadah lain seperti mendorong pembangunan ekonomi berterusan. (Utusan Online, 17 Jun 2016)

Melalui penyertaan institusi masjid dalam koperasi yang dibentuk, pihak masjid secara teorinya akan memperoleh pendapatan yang lebih baik jika perniagaan yang diceburi koperasi memperoleh keuntungan. Tambahan pula pihak koperasi perlu melantik panel-panel yang berkelayakan bagi menentukan bidang keusahawanan yang mampu membawa keuntungan kepada institusi masjid. (Mohd Yahya et.al , 2015)

Disamping itu juga institusi masjid yang dibentuk melalui koperasi dapat membina lot-lot kedai di perkarangan masjid dan membuka peluang kepada ahli masyarakat bergiat dalam bidang keusahawanan.

Selain itu, masjid-masjid di Malaysia perlu melakukan perubahan seiring perkembangan masyarakat Islam moden. Kewujudan pusat penginapan muslim di perkarangan masjid memberi nafas baru. Institusi masjid dapat diperkukuhkan lagi peranannya dengan mewujudkan rumah tumpangan (homestay) bagi menjana ekonomi masjid di samping membantu para musafir dan seiring dengan itu dapat memperluas dakwah kepada pelancong (Ahmad Fauzi dan Muhammad Yusuf, 2016)

Kewujudan At-Taqwa Inn di Masjid At Taqwa Bertam , Kepala batas, seberang Perai Utara Pulau Pinang boleh dijadikan contoh untuk menjadikan masjid sebagai salah satu pusat penginapan para pelancong muslim sekaligus memudahkan para musafir untuk beribadah. Keusahawanan social.

Metodologi Kajian

Metodologi kajian mestilah mengandungi penerangan dan huraian tentang reka bentuk, metode dan prosedur yang digunakan dalam melakukan kajian. Biasanya metode kajian terdiri daripada kajian perpustakaan dan kajian lapangan. Othman Mohamed menyatakan, metodologi adalah pendekatan yang digunakan dalam penyelidikan bagi mengumpul data. Bagi menerangkan metodologi

Sumber Data

Bagi mengumpulkan data dan maklumat yang diperlukan, kajian ini menggunakan dua kaedah penyelidikan iaitu penyelidikan perpustakaan dan penyelidikan lapangan.

1. Penyelidikan Perpustakaan

Kajian perpustakaan dilakukan ialah untuk melihat sejauh mana pengkaji- pengkaji terdahulu telah melakukan penyelidikannya dan melihat apa kekuatan dan apa pula kelemahannya.

Melalui kaedah ini pengkaji dapat mengetahui apa cara yang perlu diambil bagi menyempurnakan kajian tersebut. Melalui kajian perpustakaan data-data boleh diperoleh melalui buku, jurnal, kertas kerja, laporan bertulis, buletin akhbar, majalah dan lain-lain sumber yang dapat memberi keterangan di dalam mendapatkan bahan dan maklumat yang tepat berhubung dengan tajuk kajian serta kajian dokumentasi.

Dokumentasi ialah suatu cara penyelidikan terhadap dokumen-dokumen yang berhubung dengan kajian yang dilakukan. Dokumen-dokumen yang digunakan meliputi bahan-bahan yang berbentuk lisan seperti surat-surat, catatan harian, laporan bahan kajian dan sebagainya. Kaedah ini dilakukan melalui pembacaan sambil menganalisis semua dokumen yang berkaitan dan bersesuaian dengan tajuk kajian. Hasil daripada analisis dan penelitian tersebut, data-data serta maklumat akan diolah bersesuaian dengan kehendak matlamat kajian.

2. Penyelidikan Lapangan

Metode kajian lapangan mempunyai berbagai cara bagi mendapatkan maklumat. Metode kajian lapangan juga adalah sebahagian daripada kaedah untuk mendapatkan data dan maklumat. Menurut Ghazālī Dārussalām dalam sesuatu kajian lapangan lazimnya mengandungi metode temu bual, metode pemerhatian dan metode soal selidik. kaedah temu bual dan kaedah pemerhatian akan dianalisis menggunakan cara kualitatif.

Kesimpulan

Sokongan dan dorongan untuk mengembalikan peranan yang lebih banyak kepada institusi masjid perlu digerakkan agar ianya tidak terhad kepada bidang keagamaan semata-mata. Kepimpinan masjid yang professional dapat mengerakkan pelbagai aktiviti keusahawanan yang menjadi faktor nilai tambah yang berkesan dalam menjayakan program pengimarahkan masjid secara menyeluruh melalui program keusahawanan sosial sebagaimana yang digariskan di dalam pelan strategik Jabatan Hal Ehwal Agama Islam Pulau Pinang berkenaan peranan masjid.

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UNSUR PENDIDIKAN DALAM SYAIR SITI ZUBAIDAH: PENCETUS KONFLIK PERTEMBUGAN NILAI DAN TRAGEDI

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Abstrak: Makalah ini bertujuan untuk mengenal pasti fungsi nilai yang terdapat dalam watak wanita melalui teks Syair Siti Zubaidah. Makalah ini juga menghuraikan bagaimana Syair Siti Zubaidah menampilkan konflik tentang wanita yang meletakkan wanita tradisi sebagai seorang yang berani serta keluar daripada nilai tradisi wanita-wanita sebelumnya. Makalah ini akan memanfaatkan pendekatan struktural dan sosiologikal. Teori struktural melihat teks sebagai dunia kata-kata yang autonomous dan rujuk sendiri yang melihat teks sebagai dunia yang tertutup. Bacaannya memberi tumpuan kepada aspek-aspek intrinsik teks terutama yang difokuskan adalah aspek-aspek tema. Walaupun tertutup tetapi teori struktural membenarkan teks dikaitkan dengan teks-teks lain “does not look through and beyond the text but concentrates on matters of style, internal organization and cross reference to other literary works” (Barthes, 1987). Analisis kontekstual pula bertitik tolak daripada teori sosiologi sastera yang melihat sastera sebagai produk budaya “art is a social product” (Janet Wolff, 1979). Dalam Syair Siti Zubaidah, tema tentang wanita lebih berfokus kepada kebebasan wanita untuk berdikari, setia kepada suami sehingga menjadikannya wanita pejuang, bersaing seiring dengan lelaki dan berani memperjuangkan hak demi menuntut kebenaran. Peranan tokoh wanitanya adalah berlandaskan konteks zaman Islam yang sememangnya adalah agama pertama yang memberi emansipasi kepada golongan wanita. Syair ini adalah syair yang banyak memaparkan konflik-konflik yang dialami oleh watak wanitanya dan latar zaman yang mempengaruhi perkembangan watak wanita ini menyebabkan sikap watak wanitanya amat berbeza dengan watak wanita zaman sebelumnya.

Kata kunci: Syair, Wanita, Emansipasi Wanita, Sosiologi Sastera, Struktural

Abstract

This paper aims to identify the function of values that are found in the female roles in Syair Siti Zubaidah text. This paper will elaborate how Syair Siti Zubaidah brings to fore the conflicts on women that position traditional women as those who are brave and go out from the previous traditional women values. This paper will also capitalise on the structural and sociological approaches. The structural theory views texts as an autonomous world of words as well as self-referral that sees texts as a closed world. The reading focuses on the text's intrinsic aspects, especially on the thematic aspects. Although being closed, the structural theory allows texts to be associated with other texts, as it “does not look through and beyond the text but concentrates on matters of style, internal organization and cross reference to other literary works” (Barthes, 1987). On the other hand, contextual analysis is derived from the literature sociology theory that sees literature as a product of culture, where Janet Wolfe (1979) stated that “art is a social product”. In Syair Siti Zubaidah, the theme about women is more focused

on the freedom of women to be self-reliant, be faithful to her spouse to the extent of making her be a female fighter, to be competitive with the men and dare to fight for the rights in the name of truth. The role of the female figure is based on the context of the Islamic era that undeniably is the earliest religion which gives emancipation to the women. This poetry features the conflicts experienced by the women characters and the background of the era that influenced the development of the roles of the women which causes the characteristics of the women to be very different from those before them.

Keywords: Poetry, Women, Women Emancipation, Literature Sociology, Structural

Pendahuluan

Abdul Mutalib Abdul Ghani (1991) merupakan penyelenggara kepada *Syair Siti Zubaidah Perang China*. Dalam bahagian awal teks ini beliau telah membuat analisis tentang syair tersebut dengan menggunakan pendekatan intrinsik sepenuhnya. Penulis telah memfokuskan kajian dengan melihat unsur tema, motif, plot, perwatakan dan latar. Beliau melihat Siti Zubaidah sebagai seorang wanita yang ideal sesuai dengan kehendak Islam. Siti Zubaidah digambarkan sebagai seorang wanita yang begitu sempurna kepada seorang lelaki dan juga bercita-cita untuk mengislamkan raja negeri China.

Karya ini dilihat sebagai sebuah karya Islam yang cuba berdakwah berkenaan imej wanita Islam yang memenuhi ciri-ciri wanita Islam dari segi moral dan tingkah lakunya. Walaupun begitu beliau tidak memberi perhatian yang mendalam terhadap tema tentang wanita yang mungkin berlainan sikapnya daripada Siti Zubaidah seperti yang dikehendaki oleh Islam dan mengapa mereka bersikap begitu. Pertentangan antara watak-watak ini di dalam merebut kasih sayang akan mencetuskan suatu pengajaran kepada suami isteri dan mengapa Siti Zubaidah pula yang berperanan di dalam menyelesaikan masalahnya atau konflik dengan madunya dan bukannya diselesaikan oleh Zainal Abidin sendiri sehingga dapat dirasakan, sekiranya Siti Zubaidah tidak bersikap merendah diri berkemungkinan besar konflik-konflik itu akan terus berlanjutan tambahan lagi apabila terdapatnya campurtangan ibu mertua. Bertitik tolak daripada ini maka wajarlah dilihat bagaimana pengarang mewajarkan pertembungan nilai itu berlaku bersesuaian dengan kehendak konteks budaya dan zaman yang melatari syair tersebut berbanding syair-syair yang bertemakan wanita sebelumnya.

Metodologi Kajian

Makalah ini akan memanfaatkan pendekatan struktural dan sosiologikal. Teori struktural melihat teks sebagai dunia kata-kata yang *autonomous* dan rujuk sendiri yang melihat teks sebagai dunia yang tertutup. Bacaannya memberi tumpuan kepada aspek-aspek intrinsik teks terutama yang difokuskan adalah aspek-aspek tema. Walaupun tertutup tetapi teori struktural membenarkan teks dikaitkan dengan teks-teks lain “*does not look through and beyond the text but concentrates on matters of style, internal organization and cross reference to other literary works*” (Barthes, 1987: 53). Pendekatan struktural dengan demikian membenarkan penerokaan aspek tema dan dibincangkan dengan membandingkannya dengan teks-teks lain. Unsur-unsur tema ini kemudiannya akan dihubungkan pula dengan konteks, sosio-budaya yang melatari teks tersebut. Pendekatan struktural dengan demikian dapat menampilkan aspek-aspek dalaman teks yang kemudiannya akan dihubungkan dengan luar melalui bacaan kontekstual.

Analisis kontekstual pula bertitik tolak daripada teori sosiologi sastera yang melihat sastera sebagai produk budaya “*art is a social product*” (Janet Wolff, 1979: 1). Justeru ia bukan sahaja melahirkan atau mencerminkan dunia zamannya tetapi juga amat dipengaruhi dan ditentukan oleh zamannya “*the productions of the human mind, like those of animated nature, can only be explained by their milieu*” (H.Taine, 1875: 34). Menurutnyanya lagi, bahawa

kesusasteraan itu dikatakan tidak wujud dalam *vacum*, ia bersandar kepada faktor masa, bangsa dan suasana.

Analisis

Tema wanita pendekar atau perkasa

Tema wanita perkasa telah membezakan syair ini dengan syair sebelumnya. Ia merubah stereotaip kedudukan wanita yang selama ini hanya dikatakan lemah dan bergantung hidup kepada lelaki. Melalui tema ini maka taraf dan kedudukan wanita telah diangkat bukan sahaja sebagai seorang isteri yang harus taat kepada suami malah turut menjadi penyelamat kepada keluarga dan kerajaan pimpinannya. Berdasarkan peranan wanita ini maka Islam jelas sekali telah meletakkan wanita di suatu tempat yang istimewa di samping suami, keluarga, masyarakat dan alam di sekelilingnya.

Walaupun cerita panji seperti *Hikayat Panji Semirang* turut memaparkan tema wanita perkasa namun ia dipaparkan dalam konteks yang berbeza. Perjuangan Panji Semirang adalah untuk mencari tunangnya manakala perjuangan Siti Zubaidah adalah untuk menyelamatkan suaminya.

Walaupun kelahiran Siti Zubaidah tidak diperincikan, namun perincian terhadap perwatakan telah diberikan. Ia dikatakan kuat beribadat, bersopan dan berbudi bahasa. Ia juga dikatakan mempunyai rupa paras yang istimewa (*Syair Siti Zubaidah*: 44):

Baik parasnya bukan kepalang,
tubuhnya seperti dewa di kayangan,
cahaya durja gilang gemilang,
jika ditentang roh melayang.

Jika dicari dengan makrifat,
cukup kepadanya syarat yang empat,
habis kepadanya sempurna sifat,
bandingannya sukar di dapat.

Keelokan atau kecantikan paras Siti Zubaidah yang diungkapkan “sedang sederhana” dilengkapkan oleh tujuh sifat melalui gambaran patuh kepada agama, lembut tutur bicara, iaitu diungkapkan sebagai “halus manis bunyi bermadah”, Lela Bestari atau bijaksana, dermawan, berhati mulia, mengutamakan jiwa iaitu peka serta menghargai perasaan dan sempurna berbakti. Ketujuh-tujuh sifat yang mendukung nilai-nilai rohaniah ini apabila melengkapi kecantikan lahiriah akan mewujudkan kehidupan “sebenar perempuan” seperti yang diungkapkan melalui impian dan penemuan Zainal Abidin (Dharmawijaya, 1937: 158):

Inilah rupanya perempuan sempurna,
sifatnya lengkap 7 laksana,
sukar dicari barang di mana,
parasnya elok sedang sederhana.

Tiadalah lagi aku mencari,
belayar segenap desa negeri,
sudah ditunjukkan Malikul-bari,
Siti Zubaidah lela bestari.

Syair Siti Zubaidah turut mengungkapkan tema yang sama seperti tema-tema cerita penglipurlara sebelumnya. Tema penganiayaan ini mungkin stereotaip seperti cerita-cerita sebelumnya seperti *Syair Ken Tambuhan* dan *Syair Bidasari*. Mungkin nasib Siti Zubaidah yang sama seperti Ken Tambuhan kerana didera oleh mertua mewujudkan keselarian di antara mereka. Penganiayaan yang berlaku kepada Siti Zubaidah oleh mertuanya tidak

menjadikannya sebagai seorang wanita pasif seperti Bidasari dalam *Syair Bidasari* ataupun seperti Ken Tambuhan dalam *Syair Ken Tambuhan*. Siti Zubaidah tidak terus dianiayai kerana telah keluar daripada istana dan berani mengembara untuk menyelamatkan suaminya. Contohnya (*Syair Siti Zubaidah*: 237):

Sedikit juga syak hatinya,
berperang tidak memberitahunya,
sebab dilarang oleh bondanya,
itupun hilang sudah di hatinya.

“Hampir mati kakanda nan gerang,
kerana sudah ditangkap orang,
tinggal patik dagang seorang,
apalah jadi gerangan sekarang”.

“Baiklah engkau puteri Cina,
kuturut juga barang ke mana,
biarlah aku sertanya fana,
bersama dengan raja yang fana”.

Tema penganiayaan dimasukkan oleh pengarang yang bertujuan untuk memperkasakan lagi watak Siti Zubaidah dan tema penganiayaan ini berbeza dengan *Syair Bidasari* sebelumnya yang melemahkan watak Bidasari kerana tidak berani bertindak untuk menyelamatkan diri sendiri serta pasif.

Walaupun penganiayaan turut berlaku kepada Siti Zubaidah oleh mertuanya namun tindakannya adalah berbeza dengan wanita sebelumnya yang langsung tidak bertindak apabila dianiaya malah hanya berserah kepada nasib. Walaupun begitu tindakan Siti Zubaidah keluar dari istana sebaik sahaja diketahui Zainal Abidin berada di medan perang menjadikan watak wanita ini amat berbeza. Apa yang berlaku kepada Siti Zubaidah adalah sebaliknya.

Siti Zubaidah dicerca oleh mertuanya kerana berasal dari kalangan orang biasa. Adalah tidak layak baginya untuk bersama Zainal Abidin. Justeru itu Siti Zubaidah bukan sahaja dipandang sepi selaku isteri pertama Zainal Abidin malah mertuanya telah melarang Zainal Abidin dari mengunjunginya. Pandangan rendah ini diterimanya kerana wujudnya watak yang menjadi saingan iaitu puteri Sajarah yang berasal dari istana Yaman. Watak ini dikatakan lebih setaraf buat Zainal Abidin kerana dia berdarah raja. Tegasnya, kehadiran watak saingan yang berasal dari istana inilah yang pada asalnya menerbitkan penganiayaan terhadap wirawati ini. Kehadiran watak saingan inilah yang menyebabkan wirawati ini menerima penghinaan daripada mertuanya. Atas faktor penganiayaan inilah maka kita dapati kedudukan Siti Zubaidah sebagai isteri yang penyabar, setia dan tidak gentar walaupun ditindas telah membentuk dirinya menjadi seorang individu yang tidak mementingkan diri sendiri, berinisiatif, berani dan cekal mengharungi cabaran dalam hidup.

Sebenarnya penganiayaan yang diterima oleh Siti Zubaidah adalah disebabkan kekaburan tentang asal usulnya. Sememangnya Siti Zubaidah adalah dari keturunan raja yang besar juga kerajaannya. Siti Zubaidah merupakan puteri dari kerajaan Iraqan Kastan. Tindakan mertuanya mengenyahkan kehadirannya di istana Kembayat dihadapi dengan tenang, atas satu keyakinan pasti suatu ketika mertuanya akan insaf. Atas prinsip inilah maka ia tidak pernah meratapi ketidakhadiran suaminya. Atas keyakinan bahawa suaminya tetap menyintainya, keadaan itu diterima dengan penuh tabah.

Siti Zubaidah keluar mengembara kerana ingin menyelamatkan suaminya. Hal ini berbeza dengan cerita penglipurlara sebelumnya yang memperlihatkan pengembaraan berlaku disebabkan ingin mencari kekasih dan itu bukanlah suatu perhubungan yang sah sepertimana yang berlaku pada Siti Zubaidah. Perbezaan ini boleh dilihat dalam *Hikayat Panji Semirang*,

Panji Semirang keluar mengembara kerana ingin mencari tunangnya Raden Inu Kertapati. Tunangnya itu ditemui di medan perang setelah berlaku pertempuran di antara rakyat Panji Semirang dengan orang-orang Kuripan. Perbuatan Panji Semirang yang mencari kekasihnya itu menunjukkan nilai moral yang rendah dalam sudut pandangan Islam. Dalam Islam, hanya percintaan (dalam konteks hubungan lelaki dan perempuan) di antara suami dan isteri sahaja yang dihalalkan. Maka wajarlah Siti Zubaidah melakukan suatu pengorbanan yang besar demi kecintaannya kepada suaminya.

Untuk memunculkan ketokohan Siti Zubaidah ini maka Zainal Abidin dijadikan tokoh yang tidak berdaya oleh pengarang. Contohnya (*Syair Siti Zubaidah*: 163):

Demikian konon ceteranya itu,
permaisuri bencikan menantu,
puteranya tidak diberi ke situ,
mendapat Zubaidah dilarang tentu.

Kerana takut akan bondanya,
berbuat derhaka melalui titahnya,
diturutkan juga barang katanya,
tetapi sebal rasa hatinya.

Sikap pasif Zainal Abidin dapat dilihat dalam situasinya menangani masalah yang dihadapi Siti Zubaidah dengan ibu Zainal Abidin. Kerana takut dikatakan menderhaka, ia menurut segala perbuatan dan kehendak bondanya. Atas permintaan bondanya, Siti Zubaidah tidak dikunjungi walhal ia amat menyayangi isterinya itu. Ia bukanlah bertujuan untuk merendahkan martabat kaum lelaki tetapi apa yang dipentingkan dalam syair ini ialah dunia emansipasi wanita.

Pengarang meletakkan Zainal Abidin sebagai seorang anak raja yang tidak berpengalaman dalam peperangan. Zainal Abidin berkahwin dengan puteri Sajarah adalah melalui tipu helah yang dikenakan ke atas Raja Menggala. Walaupun pada awalnya Raja Menggala ingin menyerang kerajaan negeri Raja Yaman namun pengarang tidak meneruskan hasrat tersebut. Peperangan itu dapat dielakkan apabila Zainal Abidin dan Raja Yaman berpakat untuk menipu Raja Menggala. Contohnya (*Syair Siti Zubaidah*: 113-125):

“Siapa mengalahkan Raja Menggala,
negeri Yaman terserah segala,
dijadikan dia raja ter’ala,
dibuat menantu ia nan pula.

Lalu menangis Raja Menggala,
mukanya merah bernyala-nyala,
menghempaskan cepiau dari kepala,
lalu seperti orang gila.

Setelah dilihat muda ketiga,
raja Menggala terlalu duka,
ia tersenyum sedikit juga,
hendak tertawa takutkan murka.

Bawa tahu isinya negeri,
tiada mati tuannya puteri,
sebab diperdayakan raja bestari,
Raja Menggala hendak diunduri.

Ketiadaan pengalaman berperang menyebabkan Zainal Abidin telah tewas di tangan puteri China. Kekalahan Zainal Abidin di tangan wanita terutamanya dalam peperangan dengan negeri China telah meletakkan watak Zainal Abidin adalah lemah. Contohnya (*Syair Siti Zubaidah*: 201):

“Malunya kita bukan sebarang,
masyurlah warta kepada orang,
orang perempuan datang berperang,
tidak terlawan kita nan gerang.

“sangatlah patik menanggung malu,
dikata orang hilir dan hulu,
Sultan Abidin takut terlalu,
orang perempuan datang memalu”.

Zainal Abidin dijadikan pasif oleh pengarang di dalam syair ini dan ia berbeza dengan watak Raden Inu Kertapati dalam *Hikayat Panji Semirang*. Sememangnya ketokohan watak lelaki dalam cerita panji ataupun penglipurlara menuntut watak lelaki ini sebagai wira. Dalam *Hikayat Panji Semirang*, Raden Inu Kertapati tidak mudah tunduk dalam mempertahankan haknya. Dari itulah ia telah keluar dari istana Daha setelah didapatinya isterinya itu bukannya Galoh Cendera Kirana (yang menjadi tunangnya) tetapi sebaliknya Galoh Ajeng. Hal ini berbeza dengan Zainal Abidin yang tidak berjaya menyelamatkan negerinya daripada serangan musuh.

Zainal Abidin perlu diselamatkan oleh seorang wira yang lain. Ketokohan sifat keperwiraan ini terdapat pada diri Siti Zubaidah. Untuk menyelamatkan suaminya daripada tawanan puteri negeri China, terlebih dahulu Siti Zubaidah memperlengkapkan dirinya dengan ilmu kepahlawanan. Contohnya (*Syair Siti Zubaidah*: 255):

Tidaklah hamba berbanyak peri,
pergilah sudah keduanya puteri,
diam bersama tuannya puteri,
belajar ilmu sehari-hari.

Beberapa ilmu gagah berani,
menyebut Isim Tuhan sejati,
diajarkan Syeikh dengan yakini,
terlalu suka usul yang seni.

Bagi memperlihatkan sifat keperkasaan Siti Zubaidah, pengarang telah memperincikan episod serangan ke atas China. Siti Zubaidah dimunculkan sebagai watak yang dapat mengalahkan ke tujuh-tujuh puteri China yang tidak terlawan oleh watak lain. Bagi watak-watak lain, umpamanya Zainal Abidin, puteri itu memang tangkas dan tidak berupaya untuk ditewaskan. Namun bagi Siti Zubaidah, untuk menewaskan mereka adalah sesuatu yang amat mudah sekali kecuali Kilan Syamsu. Contohnya (*Syair Siti Zubaidah*: 309):

Sultan Yunan lalulah berlawan,
Kilan Johan puteri pilihan,
terlalu manis barang kelakuan,
seperti kilat di dalam awan.

Lakunya pantas bukan kepalang,
menyalahkan palu tiada berselang,
Kilan Johar tangan dipegang,
dihempaskan ke bumi tunggang langgang.

Tindakan Siti Zubaidah yang berani mengangkat senjata walaupun dia adalah seorang wanita adalah bukti kewiraannya. Ini memperlihatkan bahawa dia berani berdepan dengan musuh dan beradu senjata sebagaimana seharusnya seorang wira. Kepahlawanan Siti Zubaidah dalam mengalahkan musuh ini mengagumkan watak-watak lain yang turut sama berperang.

Kekaguman yang dilahirkan oleh watak ini telah sendirinya memperjelaskan betapa hebatnya Siti Zubaidah yang ketika itu bergelar Sultan Yunan. Kejayaannya dalam mengalahkan tentera China itu menjelaskan bahawa ia berkewibawaan untuk memimpin angkatan tentera dan wajar sekali diangkat sebagai wanita yang ideal. Siti Zubaidah tidak membenarkan suaminya terus menyertai perang kerana masih lemah dan pengarang telah meletakkan Siti Zubaidah sebagai watak pelindung kepada suaminya. Contoh di bawah menunjukkan Siti Zubaidah sebagai seorang wira yang kuat semangat dan berani (*Syair Siti Zubaidah*: 308):

Lalu bertitah sultan mengindera,
kepada sultan Kembayat Negara,
“Undurlah kakanda dengan segera,
biarlah beta ganti bermara”.

Sultan Abidin mendengar kata,
dilarang oleh sultan mahkota,
lalu undur raja yang pokta,
rasanya lemah sendi anggota.

Dalam *Syair Siti Zubaidah*, halangan dalam pengembaraan Siti Zubaidah ialah kerana dia seorang perempuan, oleh itu bersama-sama puteri Rokiah dia terpaksa menyamar sebagai lelaki untuk membolehkannya memegang senjata dan seterusnya berhadapan dengan rintangan lain yang mungkin merbahaya bagi wanita. Hal yang sama turut terjadi pada tokoh wanita yang bernama Siti Rafeah dalam *Syair Sultan Abdul Muluk*. Penyamaran sebagai lelaki mungkin perlu dalam proses menyelamatkan insan yang tersayang iaitu suami mereka. Sekiranya mereka tidak menyamar sebagai lelaki pastinya mereka masih berada dalam cengkaman kezaliman, ketidakadilan dan penderitaan.

Siti Zubaidah menyamar sebagai lelaki adalah untuk memudahkannya bertindak. Siti Zubaidah telah menuntut ilmu kepahlawanan dengan Tuan Sheikh (diikuti oleh watak pembantu iaitu puteri Rokiah). Siti Zubaidah amat handal dalam bermain senjata. Pihak lawan dapat dikalahkan dengan mudah sekali. Dalam masa sehari sahaja Siti Zubaidah telah dapat menawan China (*Syair Siti Zubaidah*: 318):

Bertambah pulak hairan hatinya,
Sultan Yaman sangat gagahnya,
sama sehari juga perangnya,
negeri China sudah didapatnya.

Alasan Siti Zubaidah menyamar sebagai lelaki adalah untuk mempermudah segala tindakan diambil dan demi menjamin keselamatannya. Di samping itu dengan menyamar sebagai lelaki, mereka telah mendapat kepercayaan dari rakyat setelah sesebuah negeri itu ditakluki. Setelah berjaya menawan Raja Maheran, Siti Zubaidah kemudiannya telah dilantik sebagai Sultan Yunan tanpa diketahui bahawa ia adalah wanita. Kepatuhan dan ketaatan rakyat terhadap pemerintahannya menjelaskan bahawa ia juga berkelayakan menjadi pemimpin dan pemerintah. Ini terbukti apabila rakyat Yunan memberikan sepenuh sokongan kepadanya untuk melakukan serangan ke atas China.

Kesimpulan

Dalam *Syair Siti Zubaidah*, Siti Zubaidah diperlihatkan sebagai wirawati yang “serba boleh”. Sejak ia diperkenalkan kepada audien hinggalah tamatnya cerita, ia dimunculkan sebagai watak yang sentiasa bertindak sama ada untuk mengatasi penganiayaan ke atas dirinya ataupun orang lain. Tuntut bela ke atas negeri China membuktikan bahawa ia mampu bertindak ke atas orang perorangan dan juga negara seluruhnya. Sesungguhnya, segala tindakan yang diambil oleh watak ini dalam *Syair Siti Zubaidah* seluruhnya memperlihatkan ciri-ciri unggul seorang watak utama yang dimilikinya.

Daripada seorang gadis yang lemah lembut dan bersopan santun, Siti Zubaidah bertukar menjadi pahlawan yang sukar ditandingi. Dia akhirnya berjaya menyelamatkan suaminya daripada puteri China. Dasar cerita yang hampir sama turut ditemui dalam *Hikayat Maharaja Ali*, *Hikayat Qamaruz Zaman*, *Syair Abdul Muluk* dan *Syair Siti Zawiah*. Dalam syair-syair ini, puteri ini bertukar bentuk dengan menyamar sebagai perwira yang gagah berani dan dalam banyak contoh lebih berani daripada suami atau kekasih sendiri. Mereka keluar lepas bebas menjelajah beberapa negeri, berperang dan kemudian pulang semula ke negeri masing-masing menjadi permaisuri yang hidup bahagia di samping suami.

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INTERAKSI GURU DENGAN KANAK-KANAK MENGUNAKAN KEMAHIRAN BERFIKIR ARAS TINGGI

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Abstrak: Interaksi guru dengan kanak-kanak merupakan faktor penting dalam kejayaan proses pengajaran dan pembelajaran di prasekolah. Melalui interaksi semasa proses pengajaran dan pembelajaran di prasekolah, kanak-kanak boleh melibatkan diri dalam aktiviti yang dijalankan dan membantu kanak-kanak berfikir. Oleh itu, kajian ini bertujuan untuk mengkaji amalan interaksi guru dengan kanak-kanak yang berlaku semasa aktiviti bercerita menggunakan kemahiran berfikir aras tinggi. Kajian yang berbentuk kualitatif ini menggunakan instrumen pemerhatian dan temu bual. Sesi rakaman video telah dijalankan sebanyak empat sesi yang berdurasi 30 minit setiap sesi di kelas prasekolah sewaktu aktiviti bercerita. Kemudian video tersebut dianalisis untuk mengenalpasti amalan interaksi antara guru dengan kanak-kanak menggunakan kemahiran berfikir aras tinggi. Sesi temu bual juga turut dijalankan bersama seorang guru sebagai sokongan kepada dapatan kajian. Hasil kajian menunjukkan bahawa guru menggunakan kemahiran berfikir aras rendah sahaja. Melalui hasil kajian yang dijalankan, para guru dapat mencari jalan untuk mengenalpasti penguasaan kemahiran berfikir aras tinggi dan dapat menjana daya pemikiran murid dengan lebih baik.

Kata Kunci: *Interaksi, Kemahiran Berfikir Aras Tinggi, Bercerita*

Pengenalan

Interaksi guru dengan kanak-kanak yang melibatkan kemahiran berfikir aras tinggi (KBAT), perlu dirancang dengan baik bagi menepati penggunaan aras soalan dalam proses pengajaran dan pembelajaran yang berkesan. Guru hendaklah bersedia dari segi pengetahuan KBAT dan menerapkan KBAT semasa berinteraksi dengan kanak-kanak.

Kajian Literatur

Pengetahuan guru

Guru perlu mempunyai pengetahuan tentang kemahiran berfikir aras tinggi yang disampaikan kepada muridnya supaya murid dapat menguasai kemahiran tersebut. Walau bagaimanapun, guru mempunyai pengetahuan yang kurang jelas tentang makna KBAT (Kassim dan Zakaria, 2015). Kajian Abdullah, Aris, Saud, Boon dan Awang Ali (2015) juga mendapati guru mengetahui aras kognitif Taksonomi Bloom secara asas namun mereka masih tidak memahami perbezaan dan fungsi bagi setiap aras dalam Kemahiran Berfikir Aras Rendah (KBAR) dan KBAT. Guru perlu menggunakan pengetahuan dan peluang semasa berinteraksi dengan murid dalam aktiviti kelas.

Elemen KBAT dalam Pengajaran dan Pembelajaran

Aras mengaplikasi, menganalisis, menilai dan mencipta menjadi asas definisi KBAT yang diguna pakai dalam Kurikulum Standard Prasekolah Kebangsaan (KSPK 2016) berdasarkan hierarki Taksonomi Bloom (1956) serta Taksonomi Bloom semakan Anderson & Krathwohl (2001). Bagi melaksanakan KBAT dalam pengajaran dan pembelajaran, guru perlu membuat rujukan kepada standard pembelajaran yang dinyatakan dalam KSPK (2016) . Standard pembelajaran merupakan pernyataan tentang apa yang murid patut ketahui dan boleh lakukan. Rancang pengajaran dan pembelajaran, dengan menyediakan rancangan pengajaran harian dan nyatakan objektif pembelajaran secara eksplisit. Guru perlu menyediakan aktiviti yang membolehkan murid menggunakan KBAT dan bahan bantu belajar yang dapat menggalakkan KBAT. Guru melaksanakan pengajaran dan pembelajaran dengan mengemukakan soalan yang boleh menggalakkan KBAT. Suasana bilik darjah juga hendaklah membantu murid menggunakan KBAT. Selain itu, guru perlu memastikan terdapat soalan KBAT dalam pentaksiran dan membuat refleksi tentang keberkesanan pengajaran dan pembelajaran dalam menggalakkan KBAT. Aktiviti bercerita dapat digunakan sebagai satu strategi untuk melatih kemahiran KBAT.

Guru perlu merancang dan melaksanakan KBAT melalui pelbagai strategi yang bersesuaian dengan objektif pengajaran dan pembelajaran. Antara strategi pengajaran dan pembelajaran yang boleh digunakan adalah seperti belajar melalui bermain, pembelajaran kontekstual dan pendekatan bertema. Strategi yang betul dan tepat akan membantu mewujudkan suasana bilik darjah yang membolehkan murid berfikir. Pelbagai strategi pengajaran boleh digunakan oleh guru untuk meningkatkan kemahiran berfikir aras tinggi murid dan disesuaikan dengan tajuk dan tema yang dipilih agar ia bertepatan serta menarik perhatian dan minat murid (Cocklin, 2012). Strategi pengajaran yang sesuai akan memberikan impak terhadap pengajaran dan pembelajaran yang diikuti oleh murid. (Fullan 2011). Oleh itu, interaksi guru dengan murid perlu menggunakan KBAT sewaktu bercerita secara maksimum agar murid berpeluang mempelajari KBAT secara tidak langsung.

Metodologi Kajian

Reka Bentuk Kajian

Kajian ini dijalankan secara kualitatif. Kaedah ini bersesuaian dengan tujuan kajian untuk mengkaji amalan interaksi guru dengan kanak-kanak yang berlaku semasa aktiviti bercerita menggunakan kemahiran berfikir aras tinggi.

Persampelan

Kajian ini menggunakan pensampelan bertujuan iaitu lokasi dan individu dipilih dengan sengaja untuk memahami fenomena utama kajian. Maka, sampel kajian terdiri daripada 4 orang guru tadika di daerah Batang Padang Perak.

Instrumen Kajian

Data dikumpul dengan membuat triangulasi kepada kaedah dan sumber. Kaedah pengumpulan data yang digunakan adalah temu bual, pemerhatian, dan analisis dokumen. Sumber-sumber kepada data merupakan guru tadika dan dokumen pengajaran dan pembelajaran. Temu bual secara separa terbuka telah dijalankan dengan guru tadika terlibat. Menurut Creswell (2012) beberapa pemerhatian perlu dibuat agar pengkaji dapat lebih memahami lapangan kajian dan individu yang terlibat. Pengkaji telah membuat pemerhatian sebanyak dua kali untuk setiap orang guru sebagai bahan untuk menjayakan kajian ini. Aktiviti bercerita menggunakan 8 cerita iaitu Papatung Yang Bongkak, Kebijaksanaan Sang Kancil, Raja Rimba, Ali yang baik hati, Arnab dan Kura-kura, Anjing yang tamak, Dua sahabat dan seekor beruang dan Helang dengan gagak. Penggunaan pelbagai kaedah pengumpulan data dapat memberikan data yang lebih

dipercayai, mendalam, mewujudkan kesahan konstruk dan memberi gambaran holistik tentang pengajaran yang berlaku di dalam kelas (Muhammad Yaumi, 2014).

Dapatan kajian dan perbincangan

Interaksi guru dengan kanak-kanak menggunakan kemahiran berfikir aras tinggi

Berdasarkan pemerhatian yang telah dibuat, didapati guru hanya menggunakan kemahiran berfikir aras rendah sahaja iaitu aras mengingat dan memahami. Berikut merupakan data yang diperolehi setelah pemerhatian dilakukan.

Cerita 1 Papatung yang bongkak

Guru : Tengok Muka burung, suka ke marah?

Murid : Marah

Guru : Ini gambar apa kawan- kawan?

Murid : Pokok

Cerita 2 Kebijakann Sang Kancil

Guru : Ini apa?

Murid : buaya.

Guru : ini ?

Murid : lembu.

Guru : kenapa buaya mengerang kesakitan?

Murid : kena kayu

Guru : iya, kena hempap kayu. Ok. Siapakah yang menolong sang buaya ?

Murid : lembu

Guru : kenapa buaya mengigit kaki si lembu? Sebab apa?

Murid : jahat

Guru : Binatang apa yang selamatkan si lembu?

Murid : kancil.

Cerita 3 Raja rimba

Guru : Raja Rimba siapa tahu? Raja Rimba tu apa?

Murid: Harimau

Guru :Ok lepas itu kita tak boleh biarkan sang harimau buat seperti ini. Apa kata kita minta bantuan Sang Kancil cadang Sang Monyet.Ok semua haiwan bersetuju dengan cadangan Sang Monyet.Ok dia nak minta bantuan siapa?

Murid : Sang Monyet..

Guru : Bukan..Sang Monyet cadang nak minta bantuan siapa?

Murid : Sang Kancil

Guru : Sang Kancil kata boleh..dia boleh tolong tapi salah seekor binatang di hutan tu kena berjumpa dengan siapa?

Murid : Harimau

Guru : Tenggiling tahu tak binatang macam mana?

Murid : Tak tahu

Guru : Hei Sang Kancil kau tidak takut pada aku ya?Kata Sang Harimau pada siapa?

Murid : Sang Kancil.

Guru : Kalau kau ganggu aku,aku akan pukul kau.Kata siapa?

Murid : Sang Kancil

Cerita 4 Pematong kayu yang jujur

Guru : Tiba-tiba kapaknya jatuh didalam sungai. Bolehkah si pematong kayu ambil?

Murid : Boleh.

Guru : Dengan apa ?

Murid : Dengan tangan.

Guru : Tiba-tiba seorang puteri pula keluar daripada ? Apa ini ?

Murid : Dari dalam air.

Cerita 5 Arnab dan Kura-kura

Guru : Lepas tu arnab lari depan sana.Pastu arnab cakap kura-kura mesti kalah sebab kura kura lari apa?

Murid : Lari lambat

Guru : Siapa yang menang tadi?...Kura-Kura lah (Bersama kanak-kanak)Tapi arnab apa? Arnab kalah.Sebab apa arnab kalah tadi?

Murid :Dia tidur

Cerita 6 Anjing yang tamak

Guru : Apa tajuk buku cerita?

Murid : Anjing yang tamak.

Guru : Haiwan apa ini?

Murid : Anjing.

Guru : Anjing pergi kedai mana tadi?

Murid : Diam.

Guru :Anjing suka ikan tak?

Murid : Tidak suka.

Guru : Apa yang anjing cari?

Murid : Anjing cari tulang.

Guru : Ya,anjing mencari tulang untuk dimakan.

Guru : Berapa tulang yang anjing jumpa??

Murid : Dua tulang.

Cerita 7 Dua sahabat dan seekor beruang

Guru : Siapa takut ?

Terdapat 3 orang murid yang mengangkat tangan

Guru : Macam mana pura-pura mati?

Guru bersandar di patung beruang (reaksi pura-pura mati)

Cerita 8 Helang dengan gagak

Guru : Selain daripada kambing biri-biri apa lagi yang awak dapat lihat pada buku cerita?.

Murid : Batu,burung helang,burung gagak dan kambing biri-biri.

Guru : Pengembala itu memotong kepak siapa?

Murid : Burung gagak.

Guru : Kepak burung gagak itu di bawa balik ke mana?

Murid : Ke rumah.

Guru : Burung gagak boleh atau tidak menangkap anak kambing biri-biri?

Murid : Tidak boleh.

Guru : Siapa yang boleh menangkap kambing biri-biri?

Murid : Burung helang.

Guru : Burung helang besar ke kecil?

Murid : Besar.

Berdasarkan pemerhatian di atas, guru hanya menggunakan kemahiran berfikir aras rendah sahaja, iaitu mengingat dan memahami. Guru didapati tidak menggunakan kemahiran berfikir aras tinggi berdasarkan hierarki Taksonomi Bloom (1956) serta Taksonomi Bloom semakan Anderson & Krathwohl (2001). Ini selaras dengan kajian mendapati guru masih kurang pengetahuan khususnya tentang KBAT, kurang kemahiran terhadap penerapannya serta sikap guru yang tidak menunjukkan komitmen yang tinggi untuk melaksanakannya (Mohd Nazri Hassan, Ramlee Mustapha, Nik Azimah Nik Yusuf & Rosnidar Mansor, 2017).

Pembentukan pemikiran aras tinggi dalam kalangan murid bermula dengan penyediaan item KBAT yang melibatkan skop yang luas, kepelbagaian kaedah dan bahan rangsangan serta mencabar tetapi boleh ditaksir (KPM, 2013b). Guru perlu merancang dan melaksanakan item

KBAT dalam pengajaran dan pembelajaran agar murid dapat menggunakan pemikiran aras tinggi sejak kecil lagi. Kajian ini sesuai dengan kajian Sukiman et al. (2012) mendapati guru kurang mengamalkan soalan terbuka aras tinggi. Soalan berbentuk tersebut boleh menggalakkan pemikiran jika digunakan secara berkesan.

Guru sepatutnya mendapatkan maklumat bagi perkaitan sesuatu perkara daripada murid berbanding mengabaikan jawapan murid yang tidak relevan. (Williams 2015). Situasi ini mampu menggalakkan pemikiran aras tinggi dalam kalangan murid di samping membentuk pemikiran inovatif. Oleh hal yang demikian, guru perlu menggalakkan interaksi dengan murid menggunakan KBAT semasa bercerita agar pemikiran aras tinggi dapat ditanamkan kepada murid.

Kesimpulan

Guru memainkan peranan penting dalam menentukan proses pengajaran dan pembelajaran dengan menggunakan KBAT. Penggunaan KBAT semasa di tadika dapat melatih pemikiran aras tinggi murid di peringkat awal kanak-kanak. Penekanan KBAT di tadika adalah selaras dengan transformasi Pelan Pembangunan Pendidikan Malaysia (PPPM) 2013-2025 adalah untuk melahirkan generasi yang mempunyai pemikiran kritikal (KPM, 2013a). Dalam hal ini, guru perlu bersedia dan mempunyai pengetahuan yang luas mengenai KBAT agar elemen KBAT ini dapat diterapkan semasa proses pengajaran dan pembelajaran. Sokongan daripada pelbagai pihak terutama Kementerian Pendidikan Malaysia perlu lebih dikhususkan dalam menguasai pengetahuan dan kemahiran KBAT untuk pembangunan professional guru-guru. Guru perlu yakin bahawa menggunakan kemahiran berfikir aras tinggi dapat membantu murid menjadi lebih aktif dalam proses pembelajaran.

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AMALAN PENTAKSIRAN KEMAHIRAN PROSES SAINS OLEH GURU SAINS SEKOLAH MENENGAH DI NEGERI JOHOR

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Abstract: *This study aims to examine the practice of the Science Process Skills (SPS) assessment conducted by science teachers in secondary schools in Johor. A total of 254 teachers became survey respondents who answered 28 questions on the assessment methodology practiced in assessing the skills of the student science process skills in the classroom. In this study, four most commonly used assessment methods were selected based on the initial studies conducted. The four methods of assessment are oral questioning, test papers, worksheets and practical work. The information in this study was obtained through survey method using questionnaire instrument. Respondents made the choice of practice form of SPS assessment used by respondents in the classroom by frequency. The reliability index of the respondent is 0.90 showing a high and very good value with Cronbach Alpha value of 0.93. The findings of the study show that the method of worksheet is the most commonly used method with average measurements of -0.32 followed by practical work method (-0.19), oral questioning method (0.21) and most commonly used for estimating SPS is the test paper method (0.24). Although the range of each method is very small, it shows the four methods used by the teacher consistently during the assessment of SPS.*

Keywords: *Science Process Skill, Classroom Assessment, assessment practice*

Pengenalan

Pembelajaran sains mengutamakan kaedah inkuiri dan penyelesaian masalah, di mana kemahiran saintifik dan kemahiran berfikir digunakan. Kemahiran saintifik merupakan kemahiran yang penting untuk menjalankan sebarang aktiviti mengikut kaedah saintifik seperti menjalankan eksperimen dan projek. Kemahiran saintifik ini terdiri daripada kemahiran proses sains dan kemahiran manipulatif. Kemahiran proses sains adalah proses kognitif yang berlaku semasa murid menjalankan penyiasatan dan berbeza dengan kemahiran manipulatif yang berbentuk psikomotor (Gott & Dugan, 1995). Kemahiran proses sains ialah kemahiran yang membolehkan murid menjalankan penyiasatan dan mencari jawapan terhadap sesuatu fenomena atau kejadian secara bersistem (Harlen, 2000). Kemahiran proses sains setiap murid perlu diukur dan dinilai bagi membuktikan proses pembelajaran yang telah dijalankan berkesan atau tidak. Pelbagai cara dan kaedah pentaksiran digunakan oleh guru bagi mengesan perkembangan pembelajaran dan pencapaian akademik murid (Stiggins & Bridgeford, 1984). Cara dan kaedah pentaksiran juga bergantung pada tujuan sesuatu pentaksiran itu dijalankan (Ng, 1991).

Kemahiran Proses Sains

Kemahiran proses sains boleh dibahagikan kepada dua iaitu kemahiran proses sains asas dan kemahiran proses sains bersepadu (Padilla, 1980). Kemahiran proses sains asas (KPSA) merangkumi memerhati, mengelas, mengukur dan menggunakan nombor, membuat inferens, meramal, berkomunikasi dan menggunakan perhubungan ruang dan masa. Manakala kemahiran proses sains bersepadu (KPSB) pula merangkumi mentafsir maklumat, mendefinisi secara operasi, mengawal pembolehubah, membuat hipotesis dan mengeksperimen. Memerhati adalah satu proses utama dalam menjalankan penyiasatandengan menggunakan deria penglihatan, pendengaran, sentuhan, rasa atau bau untuk mengumpulkan maklumat tentang objek dan fenomena. Mengelas adalah proses, mengasingkan dan mengumpulkan objek atau fenomena berdasarkan persamaan dan perbezaan yang dikenal pasti melalui proses pemerhatian yang telah dijalankan. Kemahiran mengukur dan menggunakan nombor adalah kemahiran yang membolehkan murid mengira dan membandingkan bilangan item dalam kumpulan yang berlainan, mengenali pola dalam jadual, menggunakan skala dan menerangkan nisbah dan lain-lain operasi melibatkan pengiraan dan menggunakan alat pengukuran. Inferens ialah kesimpulan awal yang dibuat untuk menerangkan sesuatu kejadian berdasarkan pengumpulan data dan pengalaman lalu untuk membuat kesimpulan dan menerangkan sesuatu peristiwa. Meramalkan adalah proses membuat jangkaan tentang sesuatu peristiwa berdasarkan dari pemerhatian yang ekstensif dan teliti serta ukuran yang jitu. Kemahiran berkomunikasi merangkumi kebolehan menggunakan perkataan, simbol grafik seperti jadual, graf, rajah atau model untuk menerangkan tindakan, objek atau peristiwa serta mendengar idea orang lain dan bertindak balas terhadap idea tersebut. Menggunakan perhubungan ruang dan masa pula adalah kemahiran untuk memperihalkan perubahan parameter seperti lokasi, arah, bentuk, saiz, isipadu, berat dan jisim dengan masa (PPK, 1994). Semua kemahiran asas tersebut mesti dikuasai oleh murid bagi membuktikan proses pembelajaran sains adalah berkesan (Roadranga *et al.* , 1996).

Pentaksiran Pendidikan

Pentaksiran pendidikan didefinisikan sebagai proses mengumpul, mensintesis dan mentafsir maklumat bagi membantu guru membuat kesimpulan terhadap tahap pencapaian dan proses pembelajaran yang telah dijalankan (Black, 1998). Payne (2003), mentafsirkan pentaksiran sebagai gabungan dari proses pengujian, pengukuran dan juga penilaian. Pentaksiran merangkumi proses pengujian, pengukuran dan penilaian serta proses mengesan kelemahan dan akhirnya disusuli dengan langkah penambahbaikan (Abu Bakar & Bhasah, 2008). Pentaksiran pendidikan sentiasa berkembang mengikut peredaran masa dan persekitaran. Penstrukturan semula sistem pentaksiran dilakukan agar dapat menyediakan hubungan yang lebih kuat antara pengajaran, pembelajaran dan pengukuran (Sedlacek, 2004; Sadler, 1989). Pentaksiran moden dikategorikan kepada 3 bahagian iaitu Pentaksiran Untuk Pembelajaran (PUP), Pentaksiran Sebagai Pembelajaran (PSP) dan Pentaksiran Tentang Pembelajaran (PTP) (KPM, 2018). PUP dikenali sebagai pentaksiran formatif yang merupakan sebahagian daripada proses PdP. Maklumat yang diperoleh daripada PUP boleh digunakan untuk merancang strategi atau langkah seterusnya dalam pengajaran ke arah meningkatkan pembelajaran murid dan tahap penguasaan mereka. PUP juga dikenali sebagai pentaksiran diagnostik. PSP berlaku apabila murid membuat refleksi dan menilai perkembangan pembelajaran masing-masing melalui pentaksiran sendiri dan pentaksiran rakan sebaya. Murid akan lebih memahami tujuan pembelajaran dan apa yang patut dilakukan bagi menguasai objektif pembelajaran. PSP memberi petunjuk kepada murid tentang tahap penguasaan mereka dalam pembelajaran. PTP dijalankan pada akhir sesuatu tempoh atau tajuk pembelajaran seperti ujian sumatif. PTP juga boleh dijalankan dalam bentuk pembentangan hasil projek dan lain-lain. Dapatan data

pentaksiran bukan bertujuan untuk membandingkan antara murid tetapi digunakan untuk membantu meningkatkan tahap penguasaan murid (KPM, 2018).

Amalan Pentaksiran

Amalan pentaksiran adalah aktiviti yang biasa dilakukan atau sering dipraktikkan oleh guru dalam proses mengumpul maklumat tentang pembelajaran murid (Mohamad Azhar & Shahrir, 2007). Dalam kajian ini amalan pentaksiran adalah tertumpu hanya kepada kaedah bagaimana guru menjalankan pentaksiran terhadap kemahiran proses sains murid di dalam bilik darjah semasa proses pengajaran dan pembelajaran berlangsung. Kaedah pentaksiran boleh dibahagikan kepada dua kategori iaitu kaedah tradisional dan kaedah autentik. Kaedah tradisional adalah ujian yang menggunakan pensil dan kertas manakala kaedah autentik pula adalah pelbagai seperti kuiz, kertas kerja, kerja amali, soal selidik dan sebagainya (Doran et al. 1994). Antara kaedah yang biasa diamalkan semasa pentaksiran dalam bilik darjah adalah ujian bertulis, pemerhatian dan penyoalan lisan (Abu Bakar Nordin, 1986; Airasian, 2008; Stiggins & Bridgeford, 1984). Memberi latihan dan kerjarumah juga merupakan satu amalan pentaksiran yang sering dilakukan oleh guru (Airasian, 2008). Kaedah pentaksiran lain yang boleh diamalkan terutama bagi mata pelajaran sains adalah ujian amali, kertas kerja, projek, soal selidik, inventori, perbincangan, senarai semak, skala sendiri, portfolio, dan temu bual (Alias, 2001). Dalam kajian ini, empat kaedah pentaksiran yang paling kerap diamalkan dipilih berdasarkan kajian awal yang telah dijalankan. Empat kaedah tersebut adalah penyoalan lisan, kertas ujian, lembaran kerja dan kerja amali.

Penyoalan lisan

Penyoalan lisan merupakan kaedah yang boleh membantu dalam proses pengajaran dan pembelajaran yang berkesan (Cimer, 2007). Aktiviti soal jawab antara guru dan pelajar boleh menjadi pengukur kepada keberkesanan proses pembelajaran (Berci & Griffith, 2005; Sahin, 2007). Kaedah penyoalan lisan amat diperlukan dalam proses penyiasatan secara saintifik terutamanya semasa kelas amali (Berci & Griffith, 2005). Penyoalan lisan yang dilakukan dengan teknik yang betul oleh guru mampu merangsang pemikiran pelajar dan mencungkil pengalaman lalu untuk mengetahui dengan lebih lanjut bagaimana untuk mendapatkan jawapan. Proses ini seterusnya akan meningkatkan Kemahiran Proses Sains pelajar semasa aktiviti amali dijalankan (Martin, Sexton, & Franklin, 2009). Pelajar sendiri dapat menilai tahap pemahaman mereka terhadap sesuatu konsep melalui proses soal jawab secara lisan ini (Muijs & Reynolds, 2005). Guru pula boleh menggunakan kaedah penyoalan lisan untuk mendapatkan maklumat tentang tahap pemahaman pelajar terhadap pembelajaran yang dijalankan secara seta merta (Martin et al., 2009). Penyoalan lisan yang dimaksudkan dalam kajian ini adalah soalan yang diucapkan oleh guru bagi tujuan menilai tahap kemahiran proses sains asas murid.

Kertas Ujian

Kertas ujian adalah tugas yang memerlukan murid memberikan respons secara bertulis dalam bentuk objektif atau subjektif (Lembaga Peperiksaan, 2014). Pentaksiran menggunakan alat ujian kertas dan pensel sering digunakan untuk mendapat maklumbalas tentang prestasi pelajar. Ujian boleh dibina samada ujian objektif atau ujian subjektif. Ariston (2007) menyatakan dalam melaksanakan pengukuran tahap pencapaian pelajar, kertas ujian berperanan penting untuk menilai status pemikiran pelajar. Dalam kajian ini kertas ujian yang dibina oleh guru adalah bertujuan untuk menilai tahap kemahiran proses sains asas murid di dalam bilik darjah.

Lembaran Kerja

Lembaran kerja adalah terdiri dari tugas yang memerlukan murid membuat laporan atau dokumen mengikut spesifikasi atau format yang ditetapkan, menghasilkan karya kreatif, ciptaan dan gubahan dalam bentuk tulisan atau bertulis (Lembaga Peperiksaan, 2014). Helaian tugas perlulah mengandungi soalan-soalan latihan untuk merangsang minda, menguji kefahaman dan mengaplikasikan pengetahuan pelatih berdasarkan teori yang telah dipelajari. soalan disediakan merujuk kepada hasil pembelajaran dengan menggunakan pelbagai jenis soalan dan lain-lain kaedah yang bersesuaian dengan tugas seperti kajian kes, perbincangan kumpulan dan sebagainya (Institut Pendidikan Guru, 2011). Dalam konteks kajian ini, lembaran kerja adalah helaian tugas yang diberikan kepada pelajar untuk diselesaikan bagi menilai tahap kemahiran proses sains asas murid.

Kerja Amali

Pentaksiran kerja amali adalah tugas yang memerlukan murid melakukan suatu proses kerja dan/atau menghasilkan sesuatu produk (Lembaga Peperiksaan, 2015). Collete & Chiapetta (1994) menyatakan bahawa kerja amali dapat membentuk sikap positif terhadap sains, sikap saintifik, inkuiri saintifik, pembinaan konsep dan kemahiran teknikal yang penting dalam pembelajaran sains. Pentaksiran kerja amali di Malaysia bermula sekitar tahun 1972 kepada pelajar tingkatan 4 dan tingkatan 5 sebagaimana peperiksaan amali sains yang dijalankan di Britain (Alias, 2001). Pada tahun 1999, berlaku perubahan kepada sistem pentaksiran sains apabila pentaksiran kemahiran proses sains dijalankan secara formatif melalui kaedah rujukan kriteria yang dilaksanakan oleh guru di dalam bilik darjah yang dikenali sebagai PEKA Sains (Lembaga Peperiksaan, 1999). Dalam kajian ini kerja amali yang dijalankan oleh murid adalah bertujuan untuk menilai tahap kemahiran proses sains asas murid di dalam bilik darjah.

Methodologi Kajian

Kaedah yang digunakan untuk mendapatkan maklumat dalam kajian ini ialah kaedah tinjauan menggunakan instrumen soal selidik kerana ianya dapat mengumpul maklumat yang banyak daripada sampel berskala besar (Fraenkel & Wallen, 2012). Kaedah tinjauan juga membantu memperolehi maklumat yang dapat menerangkan fenomena dengan bertanya kepada individu mengenai persepsi, sikap, tingkah laku atau nilai-nilai (Fraenkel & Wallen, 2012). Kaedah ini sangat sesuai digunakan untuk mengukur pendapat, sikap dan tingkahlaku (Chua, 2011). Penyelidikan yang digunakan dalam kajian ini adalah penyelidikan kolerasi yang merupakan penyelidikan jenis deskriptif (Wan Azlinda, 2013). Penyelidikan korelasi dikelaskan sebagai salah satu daripada kajian kuantitatif. Penyelidikan deskriptif sesuai digunakan untuk mengkaji tentang sesuatu kejadian yang sedang berlaku. Penyelidikan korelasi mencari hubungan antara dua atau lebih pemboleh ubah dengan menggunakan kaedah statistik. Penyelidikan ini mampu menilai kekuatan dan arah hubungan antara pemboleh ubah tetapi tidak boleh digunakan untuk menentukan sebab atau penyebab kepada hubungan tersebut (Graziano & Raulin, 2013).

Kaedah Persampelan yang digunakan dalam kajian ini adalah menggunakan kaedah persampelan rawak kelompok atas kelompok. Populasi kajian ini terdiri dari guru-guru yang mengajar mata pelajaran Sains KBSM di sekolah menengah kebangsaan (SMK) harian biasa di bawah seliaan Jabatan Pendidikan Negeri Johor. Populasi guru yang mengajar mata pelajaran sains menengah rendah adalah di antara 458 orang hingga 687 orang. Bagi memastikan data yang dikumpul mewakili populasi secara optimum nilai maksimum bilangan guru diambil sebagai nilai populasi guru yang mengajar sains menengah rendah di negeri Johor. Berdasarkan jadual persampelan Krejcie dan Morgan (1970), apabila bilangan populasi adalah seramai 700 orang, bilangan sampel yang diperlukan adalah 248 orang dengan tahap keyakinan

95% dan margin ralat 0.05. Sebanyak 55 buah sekolah telah dipilih dengan setiap sekolah diwakili 5 orang guru yang mengajar mata pelajaran sains. Persampelan yang dilakukan untuk memilih sampel sekolah adalah melalui kaedah persampelan rawak kelompok atas kelompok bermula dari peringkat negeri (JPN), daerah (PPD), sekolah (SMK) dan akhirnya menggunakan persampelan bertujuan untuk memilih lima orang guru yang mengajar mata pelajaran sains (Najib, 2003). 256 respon yang boleh digunakan telah diterima dalam kajian ini. Ini bermakna 93.0% instrumen telah dijawab dan dipulangkan semula kepada pengkaji untuk dianalisis. Baki 7.0% lagi instrumen adalah bermasalah sama ada tidak dipulang kembali atau tidak dijawab dengan sempurna oleh responden.

Analisis data kajian adalah berdasarkan Model Pengukuran Rasch. Analisis yang dijalankan menggunakan Perisian Winstep 3.72.3 adalah analisis kebolehppercayaan individu (person reliability), indeks pengasingan (separation index), kesesuaian individu (person fit), kesesuaian item (fit item), ketidaksepadanan item (misfit item), polariti item (item polarity), peta item-individu (item-person map), analisis residual dimensionaliti (analysis of residual dimensionality) dan skala pemeringkatan (rating scale) (Bond & Fox, 2007; Pallant & Tennant, 2007). Data juga akan dianalisis dengan menggunakan perisian Statistical Package for Social Science (SPSS) 22 bagi mendapatkan nilai regrasi dan kolerasi. Analisis Korelasi digunakan untuk menentukan hubungan antara Amalan Pentaksiran Kemahiran Proses Sains (APKPS), terhadap kemahiran-kemahiran proses sains itu sendiri. Terdapat beberapa item statistik digunakan untuk mencari korelasi antara dua pemboleh ubah tersebut seperti Khi Kuasa Dua, Spearman dan Pearson.

Instrumen Kajian

Dalam kajian ini, pengkaji menggunakan kaedah kuantitatif sepenuhnya. Kajian ini dijalankan secara tinjauan (survey) dengan objektif untuk meninjau Amalan Pentaksiran KPS (APKPS). Instrumen yang digunakan adalah instrumen Soal Selidik yang akan diedarkan kepada guru-guru sains Sekolah Menengah Kebangsaan. Instrumen ini yang merangkumi Bahagian Demografi Gurudan Bahagian APKPS. Instrumen ditadbir ke atas 249 orang responden yang terdiri dari guru-guru yang mengajar Sains di SMK di negeri Johor. Soal selidik digunakan bagi membolehkan penyelidik melihat taburan sampel mengikut item dan konstruk yang ditetapkan. 28 item yang merupakan pilihan amalan atau bentuk pentaksiran KPS yang digunakan oleh responden dalam bilik darjah mengikut kekerapan. Berdasarkan kajian awal yang dijalankan, empat amalan yang dipilih adalah penyoalan lisan, lembaran kerja, kertas ujian dan kerja amali (Gronlund, 2006; Stiggins & Conklin, 1992). Skala yang digunakan adalah merupakan skala kekerapan 1 hingga 5 dengan penafsiran seperti berikut:

- 1: Tidak pernah digunakan
- 2: Paling jarang digunakan
- 3: Jarang digunakan
- 4: Kerap digunakan
- 5: Paling Kerap digunakan

Ciri-ciri psikometrik instrumen yang digunakan berdasarkan Nilai Cronbach Alpha adalah 0.93 yang menunjukkan keupayaan instrumen boleh dipercayai dan diterima (Chua, 2006; Jamil, 2010) untuk mengukur konsep kajian dengan sangat baik dan efektif serta mempunyai tahap konsistensi yang tinggi (Bond & Fox 2007). Indeks pengasingan responden adalah 4.02 yang mampu membahagi responden kepada empat tahap sangat tinggi, tinggi, sederhana, dan rendah. Indeks kebolehppercayaan item adalah 0.84 menunjukkan nilai yang tinggi, baik dan boleh diterima. Ini menunjukkan item adalah stabil dan konsisten jika digunakan kepada responden yang lain dengan ciri-ciri yang sama. Indeks pengasingan item adalah 2.33 yang menjelaskan terdapat dua aras kekerapan item yang berbeza dalam kajian ini. Semakin tinggi aras

pengasingan item ini maka instrumen pengukuran adalah lebih baik kerana diasingkan dengan kesukaran yang berbeza-beza. nilai maksimum outfit/infit adalah 1.55/1.51 menunjukkan semua item adalah dalam julat kesesuaian. Nilai minimum Outfit/Infit adalah 0.65/0.51 menunjukkan item adalah sesuai atau fit dengan model pengukuran Rasch berdasarkan nilai yang boleh diterima baik.

Dapatan Kajian

Dapatan kajian ini adalah berkaitan analisis demografi responden dan Analisis Amalan Pentaksiran KPS (APKPS).

Analisis Demografi

Jadual 1 menunjukkan demografi responden bagi kajian ini adalah seramai 256 orang yang terdiri dari guru-guru yang mengajar mata pelajaran Sains di sekolah menengah di negeri Johor.

Jadual 1: Analisis demografi responden

Faktor Demografi	Faktor	Frekuensi, n	Peratus,%
Jantina	Lelaki	49	19.1
	Perempuan	207	80.9
Kelulusan Iktisas	Diploma Perguruan	31	12.1
	Ijazah Sarjana Muda	210	82.0
	Sarjana	14	5.5
	Doktor Falsafah	1	0.4
Bidang/Opsyen Iktisas	Sains dan Matematik	237	92.6
	Sains Kemasyarakatan	5	2.0
	Bahasa	1	0.4
	Teknik dan Vokasional	11	4.3
Pengalaman Mengajar	Kurang dari 5 tahun	109	44.3
	5 ke 10 tahun	62	24.2
	10 ke 15 tahun	40	15.6
	15 ke 20 tahun	31	12.1
	Lebih 20 tahun	4	1.6
Kehadiran ke Program Peningkatan Profesionalisme berkaitan pentaksiran	Pernah	169	66.5
	Tidak pernah	85	33.5
Kehadiran ke Program Peningkatan Profesionalisme berkaitan KPS	Pernah	113	52.6
	Tidak pernah	118	47.4

Responden terdiri dari 49 orang lelaki dan 207 orang perempuan. Ini bermakna 80.9% responden adalah dari kalangan guru perempuan. Responden yang terlibat dalam kajian ini keseluruhannya mempunyai kelulusan ikhtisas dalam bidang pendidikan bagi melayakkan mereka mengajar di sekolah menengah. Golongan yang paling ramai adalah guru yang mempunyai kelayakan peringkat Ijazah Sarjana Muda seramai 210 (82.0%) diikuti oleh guru berkelulusan Diploma Perguruan 12.1%, Sarjana Pendidikan 5.5% dan seorang guru berkelulusan Doktor Falsafah bidang pendidikan mewakili 0.4%.

Responden yang terlibat dalam kajian ini hampir keseluruhannya dari bidang/opsyen ikhtisas Sains dan Matematik. Walaubagaimanapun terdapat 4.3% guru sains dari bidang Teknik dan Vokasional, 2% dari bidang Sains Kemasyarakatan dan 0.4% dari bidang Bahasa yang merupakan guru yang mengajar di luar opsyen masing-masing. Pengalaman mengajar responden kajian ini dibahagikan kepada lima kategori iaitu kurang lima tahun, lima hingga 10 tahun, 10 hingga 15 tahun, 15 hingga 20 tahun dan lebih 20 tahun. Hasil dapatan mendapati

golongan paling ramai yang mengambil bahagian sebagai responden adalah yang mempunyai pengalaman mengajar kurang dari lima tahun mewakili 44.3%, diikuti guru berpengalaman lima hingga 10 tahun 24.2%, berpengalaman 10 hingga 15 tahun 15.6%, berpengalaman 15 hingga 20 tahun 12.1%, guru baru kurang dari tiga tahun pengalaman 10.5% dan guru berpengalaman lebih 20 tahun 1.6%.

Didapati 33.5% responden terdiri dari guru yang menjalankan pentaksiran terhadap pelajar tidak pernah menghadiri Program Peningkatan Profesionalisme yang berkaitan tentang pentaksiran. Walaubagaimanapun 66.5% daripadanya pernah menghadiri program tersebut. Bagi kehadiran ke Program Peningkatan Profesionalisme yang berkaitan tentang Kemahiran Proses Sains pula, didapati 52.6% responden yang terdiri dari guru mata pelajaran sains pernah menghidirinya, manakala 47.4% lagi tidak pernah menghadiri program tersebut. Didapati juga 102 orang guru pernah menghadiri kedua-dua Program Peningkatan Profesionalisma yang berkaitan pentaksiran dan KPS, 67 orang pernah menghadiri Program Peningkatan Profesionalisma yang berkaitan pentaksiran sahaja, 17 orang pula menghadiri Program Peningkatan Profesionalisma yang berkaitan KPS sahaja manakala 70 orang lagi tidak pernah menghadiri mana-mana Program Peningkatan Profesionalisma yang berkaitan pentaksiran atau KPS.

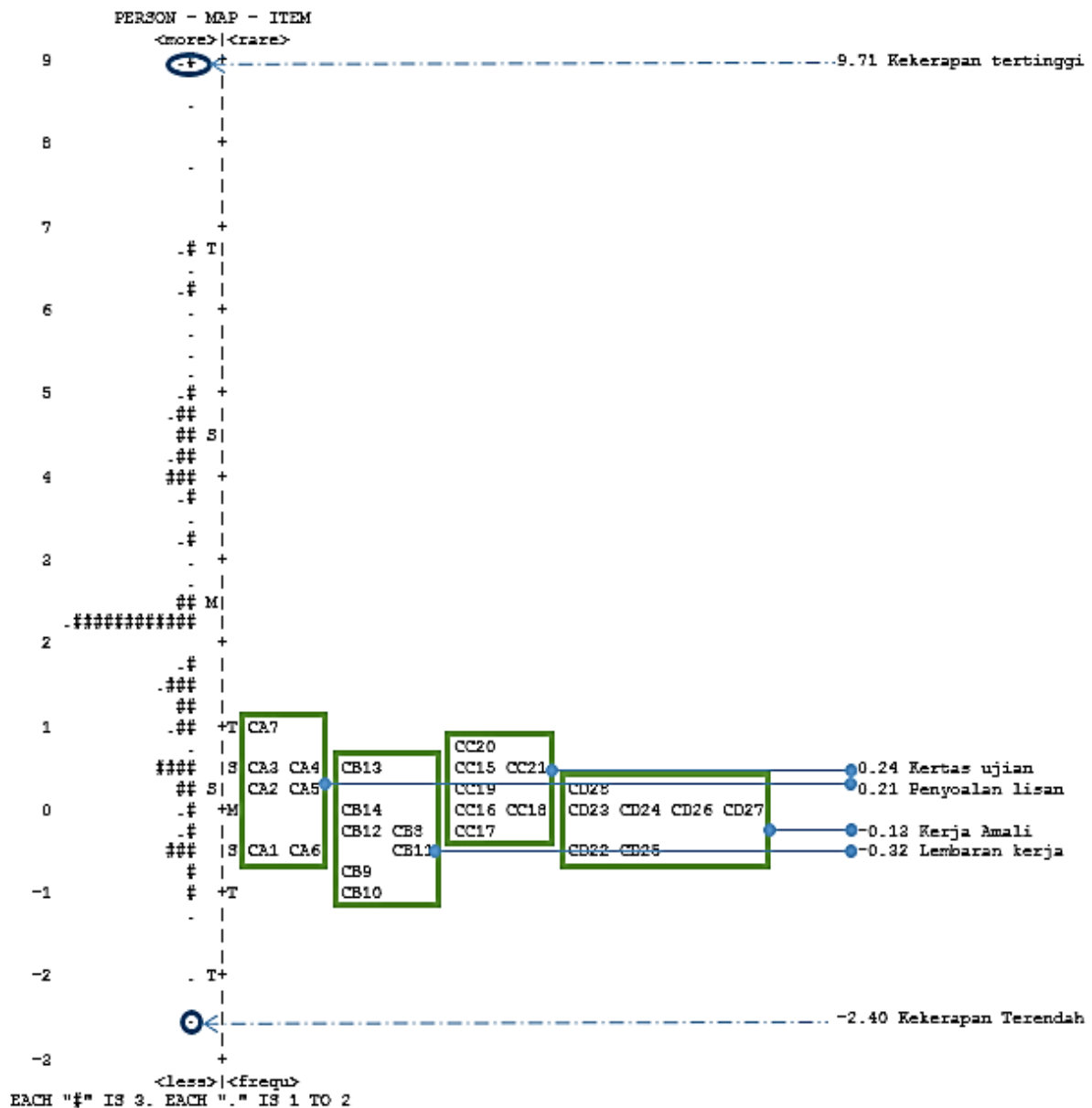
Analisis Amalan Pentaksiran KPS (APKPS)

Merujuk Rajah 1, dari peta tersebut dapat dilihat kedudukan lengkung responden adalah lebih tinggi berbanding item. Ini menggambarkan bahawa responden mengamalkan setiap kaedah pentaksiran dengan kerap. Taburan item-item agak terkumpul pada bahagian tengah peta yang bermaksud item-item mempunyai aras kekerapan yang hampir sama. Ini menunjukkan guru-guru menggunakan pelbagai kaedah semasa menjalankan pentaksiran KPS. Jadual menunjukkan susunan kaedah lembaran kerja adalah kaedah yang paling kerap digunakan 2 dengan ukuran purata -0.32 diikuti dengan kaedah kerja amali (-0.19), kaedah penyoalan lisan (0.21) dan yang paling jarang digunakan untuk mentaksir KPS adalah kaedah kertas ujian (0.24). Walaupun begitu julat antara setiap kaedah adalah amat kecil yang menunjukkan keempat-empat kaedah digunakan oleh guru secara konsisten semasa menjalankan pentaksiran KPS.

Jadual 2: Susunan kaedah pentaksiran mengikut aras persetujuan

Kaedah	Pengukuran	Interpretasi
Lembaran kerja	-0.32	Paling kerap digunakan
Kerja amali	-0.19	
Penyoalan lisan	0.21	
Kertas ujian	0.24	Paling jarang digunakan

INPUT: 256 PERSON 28 ITEM REPORTED: 195 PERSON 28 ITEM 4 CATS WINSTEPS 3.72.3

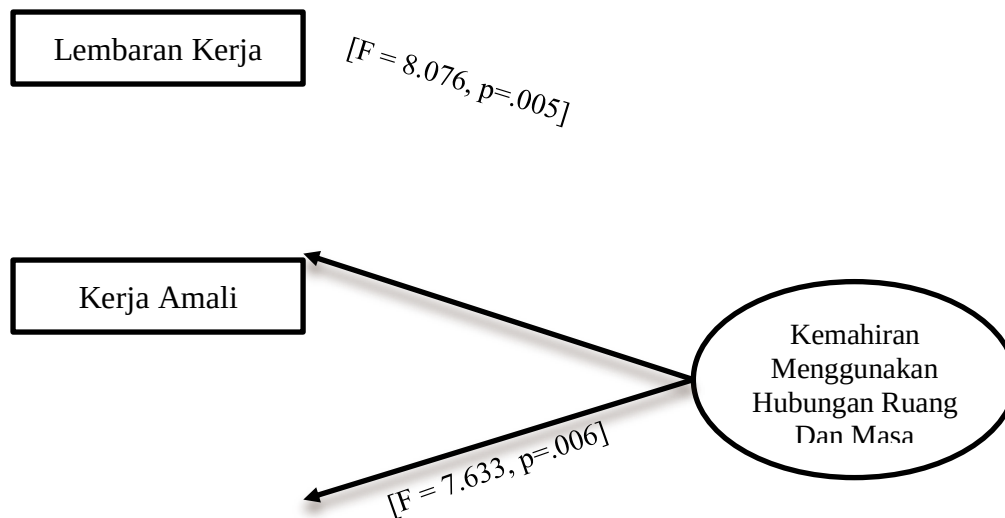


Rajah 1 : Wright Map Taburan Item dan Kebolehan Responden Bagi Item APKPS

Analisis APKPS Terhadap KPS

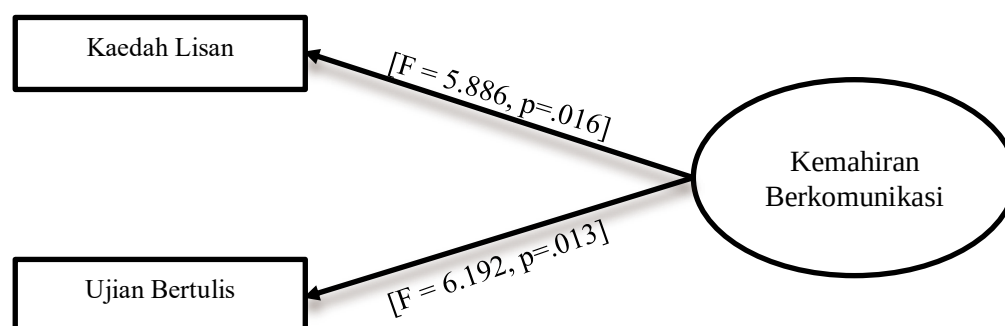
Keputusan analisis regresi pelbagai menunjukkan bagi populasi 254 orang guru sains hanya satu variabel peramal iaitu kemahiran menggunakan hubungan ruang dan masa merupakan faktor peramal kepada amalan pentaksiran KPS menggunakan kaedah lembaran kerja dan pentaksiran melalui kerja amali. Kemahiran-kemahiran proses sains lain bukan merupakan faktor bagi kekerapan penggunaan kaedah pentaksiran menggunakan kaedah lembaran kerja dan kerja amali. Secara signifikan, kemahiran berkomunikasi [$F(1,254) = 8.076, p<.05$] menyumbang kepada 3.1 peratus varian ($R^2 = .031$) dalam kekerapan penggunaan kaedah lembaran kerja. Ini bererti bahawa kemahiran menghubungkan ruang dan masa ($\beta = .18, p<.05$) merupakan petunjuk utama penggunaan kaedah lembaran kerja. Kemahiran berkomunikasi [$F(1,254) = 7.633, p<.05$] juga menyumbang kepada 2.5 peratus varian ($R^2 = .025$) dalam kekerapan penggunaan kaedah kerja amali. Ini bererti bahawa kemahiran menghubungkan

ruang dan masa ($\beta=.17$, $p<.05$) merupakan petunjuk utama penggunaan kaedah kerja amali. Rajah 2 menunjukkan hubungan faktor peramal kepada amalan pentaksiran KPS menggunakan kaedah lembaran kerja dan pentaksiran melalui kerja amali



Rajah 2 : Faktor Peramal Bagi APKPS Lembaran Kerja Dan Kerja Amali

Bagi amalan pentaksiran KPS menggunakan kaedah lisan dan ujian bertulis pula hanya satu variabel peramal yang merupakan faktor peramal iaitu kemahiran berkomunikasi. Kemahiran-kemahiran lain bukan merupakan faktor bagi kekerapan penggunaan kaedah pentaksiran lisan dan ujian bertulis. Secara signifikan, kemahiran berkomunikasi [$F(1,254) = 5.886$, $p<.05$] menyumbang kepada 2.3 peratus varian ($R^2 = .023$) dalam kekerapan penggunaan kaedah lisan. Ini bererti bahawa kemahiran berkomunikasi ($\beta = .15$, $p< .05$) merupakan petunjuk utama penggunaan kaedah lisan. Kemahiran berkomunikasi [$F(1,254) = 6.192$, $p<.05$] juga menyumbang kepada 2.4 peratus varian ($R^2 = .024$) dalam kekerapan penggunaan kaedah ujian bertulis. Ini bererti bahawa kemahiran berkomunikasi ($\beta = .15$, $p< .05$) merupakan petunjuk utama penggunaan kaedah ujian bertulis. Rajah 3 menunjukkan faktor kepada kaedah ujian lisan dan ujian bertulis.



Rajah 3 : Faktor Peramal Bagi APKPS Kaedah Lisan Dan Ujian Bertulis

Kesimpulan

Hasil dapatan kajian ini menunjukkan bahawa Amalan Pentaksiran Kemahiran Proses Sains yang sering dijalankan di dalam bilik darjah adalah pelbagai bergantung kepada keperluan dan kesesuaian kemahiran yang akan ditaksir. Kaedah pentaksiran yang paling kerap digunakan adalah kaedah lembaran kerja, diikuti dengan kaedah kerja amali, kaedah penyoalan lisan dan yang paling jarang digunakan adalah kaedah kertas ujian. Faktor utama pemilihan kaedah

lembaran kerja dan kerja amali adalah pentaksiran kemahiran menghubungkan ruang dan masa manakala faktor pemilihan kaedah pentaksiran lisan dan ujian bertulis pula ialah pentaksiran kemahiran berkomunikasi.

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