

PROCEEDINGS
THE 8th INTERNATIONAL SYMPOSIUM ON ISLAM, CIVILIZATION
AND SCIENCE (ISICAS 2017)

“Islamic Value System in Post Modern Society”

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Asian and African Area Studies (ASAFAS), Kyoto University, JAPAN**

**Center for Islamic Area Studies (KIAS),
Graduate School of Asian and African Area Studies (ASAFAS),
Kyoto University, JAPAN**

2017

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CONTENTS

CONTENTS	5
PREFACE	7

KEYNOTE PAPER

ISLAMIC VALUE SYSTEM IN POSTMODERN SOCIETY <i>Mohd Yusof Hj. Othman</i>	9
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SESSION 1 ORAL PRESENTATION

INFLUENCE OF ANIME ON SOCIAL PROBLEM: AN INITIAL RESEARCH UPON YOUTHS IN SELANGOR <i>Nor Afian bin Yusof, Fatin Hazwani @ Hasidah binti Siran & Khairudin bin Baharom</i>	17
DEVELOPMENT OF PERSONALITY MODULE FOR YOUTHS IN NATIONAL YOUTH SKILLS INSTITUTES (NYSI) IN MALAYSIA <i>Fazilah Idris, Zuraidah Ali, Khairul Anwar Mastor, Jamiah Manap & Hasnan Kasan</i>	27

SESSION 2 ORAL PRESENTATION

THE ECONOMIC ROLE OF WAQF-BASED CROWDFUNDING IN ALLEVIATING HOUSEHOLD FINANCIAL VULNERABILITY <i>Abidullah Abid & Muhammad Hakimi Mohd Shafiai</i>	39
NURTURING ISLAMIC VALUES IN FAMILY VIA SELF DISCIPLINE <i>Jamiah Manap, Mohammad Reza Hamzah, Aizan Sofia Amin & Arena Che Kasim</i>	55
PARENTS' PERCEPTION ON THE RELEVANCE AND EFFECTIVENESS OF CANING PENALTY ON STUDENTS WHO VIOLATE SCHOOL DISCIPLINE <i>Siti Nordiana Rifai & A'dawiyah binti Ismail</i>	65
THE DEVELOPMENT OF AN INFLUENTIAL PERSONALITY BASED ON RASULULLAH SAW: THE ANALYSIS FROM THE CONTEXT OF ENTREPRENEURSHIP <i>Tengku Maaidah Tengku A Razak, Mohamad Sabri Haron & Muhammad Hilmi Jalil</i>	73

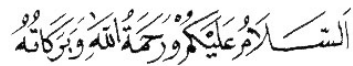
SESSION 3 ORAL PRESENTATION

NEW ENQUIRY IN THE SCIENCE OF <i>KALAM</i> <i>Shahidan Radiman</i>	81
CHEMISTRY IN THE HOLY QURAN <i>Ibrahim N. Hassan, Mohd Yusof Hj Othman & Abdul Latif Samian</i>	87
MODELLING A NON-PROFIT COOPERATIVE CREDIT NETWORK: A MULTI-AGENT SIMULATION FOR BUILDING AN INTEREST-FREE FINANCIAL SYSTEM <i>Fazida Hanim Hashim, Wan Nasyrudin Wan Abdullah, Norazreen Abd Aziz & Afida Ayob</i>	95
THE HISTORY OF ARRIVAL OF ROHINGYA IN MALAYSIA <i>Mohd Irfan Bin Mohd Terin & Muhammad Hilmi Jalil</i>	103

SESSION 4 ORAL PRESENTATION

ISLAMIC VALUES IN PHILOSOPHY OF <i>TAWHIDIC</i> SCIENCE <i>Mohd Yusof Hj Othman, Wan Nasyrudin Wan Abdullah, Faszly Rahim & Aulia Rahman</i>	113
HUMAN CAPITAL DEVELOPMENT AMONG DEATH ROW INMATES <i>Mohammad Ikhwan Ismal & Muhammad Hilmi Jalil</i>	121
TOWN PLANNING CRITERIA BY IBN KHALDUN <i>Nor Syafinaz Md. Safar, Shamsul Azhar Yahya & Ismar MS Usman</i>	127

PREFACE



Alhamdulillah, all praises is due to Allah SWT, the Most Gracious, Most Benificent and Most Merciful. Peace and blessing be upon His Messenger and all his family and companions. This year we are celebrating 10th year anniversary of Institute of Islam Hadhari and we are very thankful that the Proceeding of the 8th International Symposium on Islam, Civilization and Science (ISICAS 2017) has been successfully published.

With gratitude to Almighty Allah, this proceeding presented to the participants of the ISICAS 2017 and readers, in the hope that we can share our research findings, ideas and thoughts regarding Islam, civilization and science. This Symposium is organized annually by Institute of Islam Hadhari (HADHARI), Universiti Kebangsaan Malaysia (UKM); Hadhari Center for Islamic Civilizational Studies (HADHARI-KU) and Center for Kyoto Islamic Area Studies (KIAS), Graduate School of Asian and African Area Studies (ASAFAS); Kyoto University, Japan, has form a good and strong platform starting from 2008 to discuss issues related to Islam, civilization, and science. It demonstrates an active involvement of scholars and postgraduate students from Malaysia and Japan. This year, the theme was 'Islamic Value System in Post Modern Society' and covers sub theme for social, economic, education, law, science & technology, environment and media. The papers presented in this proceeding focus on the theoretical, philosophical aspects of Islam, civilization, science, and case studies, so that the readers can appreciate the role of Islam in realizing civil society.

The contents and the ideas in this proceeding are the thoughts and studies by the authors and the participants presented in ISICAS 2017. The organizers sincerely hope that this proceeding will be beneficial for the readers and participants who attended the Symposium. We also would like to extent our gratitude to the editors of the proceeding for their effort in publishing this proceeding. May Allah SWT reward all those involved in organizing this Symposium with the best blessing and reward.

The organizers of the Symposium would also like to express our sincere appreciation and gratitude to the following research projects who partly contributed to the success of the Symposium:

1. Projek KOMUNITI 2-2014-001: Menguji Kesahan dan Mengimplementasi Modul Bimbingan Anak-Anak Banduan di Penjara.
2. Projek TD-2014-010: Transformasi Tingkah Laku Melayu Islam ke arah Kelestarian Alam Sekitar berasaskan Nilai Islam.
3. Projek GUP-2016-026: Pembentukan Profil Semasa Akidah Remaja Muslim Malaysia: Kajian Penyelesaian Masalah Kerapuhan Akidah

Happy reading and may Allah bless us all with all His Bounty.

Wassalam.

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***Islamic Value System in
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International Symposium on Islam, Civilization and Science (ISICAS 2017)

Islamic Value System in Postmodern Society

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Abstract

Human civilization has evolved from feudal system in the past to democratic/capitalist system, and today we are living in the postmodern or post-democratic/capitalist era. This era is featured by the freedom of individual over community together with the explosion of science and technology with human beings has successfully ventured into nano-sized realms. What was once impossible, today become a reality. People can get information they need from wherever they are. Whatever happens in any country and in the world, the news spread so fast that you can be informed within minutes. Business and currency transactions are now borderless. People do not have to go to the airport to book flight tickets and check-in, because they can do it at any time and any place. Man has become a universal being. The need to liberalize themselves from traditional, cultural and religious value system become more tangible, and the tendency to adopt universal secular system becoming a new norm. A man's identity has been separated from local tradition, custom, culture and religion. Property and business premises are no longer the main commodity. Information technology is a major asset of development. Unfortunately, this sophisticated world is developed based on secular systems with tradition, culture and religion to be ruled out in human, state and environmental development systems. In this Godless ecosystem, how can Islam help and become a major motivator or driver of development in this post-modern era? This paper seeks to discuss the underlying scenario of development now, and how Islam can harmonize and preserve its development ecosystem.

Keywords: Post-modernity; Islamic values; social justice; balanced development; *Tawhidic* approach

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1. Introduction

Humans are social creatures. The culmination of their social life and values is the advent of civilization. Human development in this world is achieved through the development of the civilization which they develop continuously over the years. The development of human civilization is achieved through the development of society; social system, political system, the development science & technology and economic & management system. When social, political and economic systems are well managed, they will explore and utilize natural resources to ensure the sustainability of their civilization.

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In the history of human civilization, there have been some evolutionary phases of the civilization as described in Figure 1. From feudal times where the state is the absolute property of the king, and only the king determines the system of governance and the system of government of his country. The king also appointed lords and nobbles who take care of ordinary people and peasants to help him retain his power. People have no right to give insight into the affairs of society and the state. This feudal system was used in the system of government and administration by Pharaoh in Egypt and also in the dynasties system in China and other parts of the world. Although this feudal system appears to be cruel and unjust to the majority of masses, its system has remained for thousands of years.

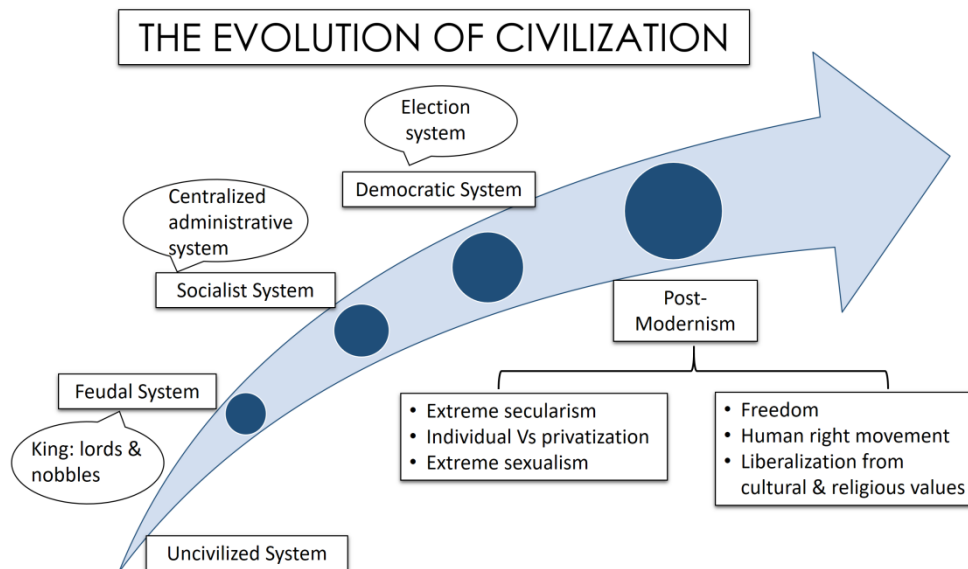


Figure 1: The evolution of civilization: from feudal system to postmodern civilization

The next phase of civilization is a socialist/communist phase, in which the monarchy system was overthrown and replaced by a centralized administrative system. Generally, the majority of citizens or communities have no say and opinion in activities related to the governance and economic system of the state. The bureaucratic system in the distribution of wealth to the masses is very tight so that the wealth of the nation can be distributed and divided into fairly and equally among masses. Citizen has no right to own properties, but is determined by the government through the central agency. People cannot own properties such as land or houses. All factories and industries are also state-owned and managed by the central agency. The civilization developed by the socialist/communist system does not last long as compared to the system of the previous feudal civilization. There are many reasons why this socialist/ communist system does not last long, but the discussion about it is beyond the scope of this paper. More information on this can be read in Hagger's writing (2008).

The next system of civilization is the capitalist/democratic system. In democratic system the leaders were chosen by the matured public. People can own house, land and properties. They can empower themselves by improving their knowledge and skills in whatever field they want. They can choose their own careers and develop their own potential. The central agency, which is elected government by majority of their matured citizen, will provide infrastructures and facilities to develop their nation. Every citizen has right to develop their own individual abilities and creation of wealth. The government provides the policy and regulations so that people can live in harmony and peace. The government introduces taxed system in order to finance their social and infrastructure programs to develop the nation. Theoretically, everyone can participate in the nation building, and the government depends on the creativities and innovations of the citizen to develop the nation. The individual's right is respected. The economic system is driven by the market forces.

2. The Features of Postmodernism

In the postmodern era, as can be seen in Figure 1, every individual continues to be given the freedom to develop and empower himself. Private agencies and non-governmental organizations are also given more

opportunity and freedom to participate in development of their civilization. The role of the government in development of economic, wealth and social systems is reduced, and replaced by the role of individuals and private agencies.

According to Fukuyama (2008), the beginning of postmodernism was introduced by Reagan's administration in USA and Thatcher's administration of the United Kingdom in the early 1980s. They introduced a 'new vision of capitalism to generate wealth and new world order' by introducing two main elements of the post-capitalism or postmodernity era. The first was the reduction of taxes and regulations, and the second was the liberalization of the existing democratic system. This means that laxness was given to entrepreneurs to determine their own appropriate rules and regulations applicable to develop their economic sectors. This was implemented with the hope that European countries and USA may be ready to take on new challenges when Russia and China opened up its market. Despite various objections, the action taken by Reagan was considered correct at the beginning stage. Unfortunately, the new vision of capitalism made it easier for the private sector and entrepreneurs to recruit and arbitrarily dismiss workers.

Citizen and public also have full freedom to optimise their skill and talents to excel and empower themselves through scientific approach and management talents. This contributes to the emergence of human rights movements/activists who seek to free themselves from tradition and cultural ties including religions. Consequently, there exists a movement that seeks to liberate themselves from cultural and religious ties. Subjective knowledge such as cultural and religious values are no longer in the mainstream of people's life, but gradually replaced by objective, scientific and rational argument; any argument based on religious and cultural values must be rejected or confined to individual perception. In the post-modern society, humans are guaranteed by the law to liberate themselves from cultural and religious values that are considered to disrupt the development process. This new phenomena becomes a new norm in the postmodern society.

According to Paul Vitz (2009) this new phenomenon proves "we are coming to an end of the so-called modern period". From here began the era of postmodernism with its people 'attacking the very concept of an objective knowledge that aimed to provide a widely accepted humanistic ethics have undermined much of the previous secular confidence'.

This postmodernism era is characterized by three main features (Vitz 2009). The first is secularism with 'Religion was seen as a thing of the past, which would soon finish withering and disappearing, to be replaced by the modern, rational humanistic secular world'. In fact, issues related to moral values and values of humanity are also seen from a secular and objective approach. Failure to ensure environmental sustainability is referred to solely for the failure of science in resolving issues relating to environmental development, not from a moral point founded on a religious or social system of humanity. While others see the goal of science development as an agenda that has been set by the government or corporate sponsored agenda for their industrial development. Religion and culture have no place in the development of civilization for post-modernism. Religion only exists in the form of rituals, not in the form of a living system (as a way of life) that can support the development of civilization. Islam, Hinduism, Buddhism and Christianity also flourish in the post-modern secularism as we see today, but it is practiced only to fulfil ritual needs, not as human value system to guide nation's development.

Second is the notion of public who considers the ultimate aim of the development is to fulfil one needs, and followed by social needs. These will result in 'the death of socialism'. Every soul needs to be pursued by absolute freedom. Formerly, in the system of socialist civilization, the government determined all the social development of the state. On the other hand, the capitalist system promotes individual freedom and the social society of social development, which creates an individualistic human. Since social needs have been eradicated from individuals and communities, eventually the country needs to organize many social programs. Social programs are no longer developed by the government, but are hand over to the individuals or private sectors and entrepreneurs. Today we see what happening in Iceland, Greece, Spain and some other European countries, nations do not have enough funds to fund their social programs such as providing good medical systems, good infrastructures and facilities, sustainable and justly insurance systems, theatrical facilities for cultural performances and etc. People are no longer convinced that governments will have the money to pay for their huge social programs (Vitz 2009).

Thirdly, is the new norm of society develops based on sexualism, the term used by Paul Vitz (2009). By sexualism, he means:

the sexual revolution with its continued push toward more and more varied and extreme sexual expression. This general attitude is familiar to all and is presently found in pressures for same sex marriage and now increasingly a return to polygamy or poly-amorous relationships as they are called in progressive circles. And the first serious criticisms of this way of life even in the university world have begun to appear even among former feminists. The idea that your youthful days will be wonderful if you can hook up sexually with anyone you happen to feel attracted to after a few beers is far from convincing, especially for young women who often pay a heavier price for such pseudo-bonding. One could interpret the whole preoccupation with date rape as an indirect expression of female college student's despair over the present relation between the sexes. Although sexual modernism and post-modernism seem firmly in place in our society, I would not be surprised to see emerge in future decades a counter-revolution expressed by intelligent and idealistic young people, a reaction tied to religious commitments. In any case, sexualism as a new exciting personal and social idea has certainly lost its novelty and through the problems it causes has begun to create a serious re-evaluation. Thus, sexualism along with socialism and secularism is becoming a completed or exhausted movement.

For Vitz (2009) these three norms; Secularism, the death of socialism and the emergence of individual extreme right and sexualism are a new norm in post-modernism.

Another feature of the postmodern society is the existence of extreme human rights groups that violate social norms as a result of liberalization of value based systems on religion and culture to individual system of values. The individual system of values is actually the value lies in the will and need of the self. These groups are urging them to be given the right to do anything even though it is against their cultural and religious norms. Collectively, they move in groups they call 'human right' groups, such as the groups that support right to abortion, the right to live as husband and wife without being married, the right to practice LGBT (lesbian, gay, bisexual and transgender), and sometimes they ask for the right to practice things which are against their religious teaching, but still they consider themselves as religious adherents. When the rights claimed are contrary to religious values (which is subjective in nature), they will interpret the religious teachings according to their common sense, rational and scientific objective arguments.

3. Islamic Value System in Postmodern Society

In the 7th International Symposium on Islam, Civilization and Science 2016 (ISICAS 2016) last year at Kyoto University, I discussed about *tawhidic value system* in my keynote paper entitles '*Empowerment of Islamic Civilization in Postmodernity*' (Mohd Yusof 2016). I have no intention to repeat here about the Islamic value system in the concept of Tawhidic Science (Mohd Yusof 2016). I would like to emphasize again that in Islam, attention need to be given to three important entities; God, man and nature. These three entities are in one accord, blended together in the system of belief in Islam, which I call it as 'blended integration' as in Figure 2.

TAWHIDIC VALUE SYSTEM

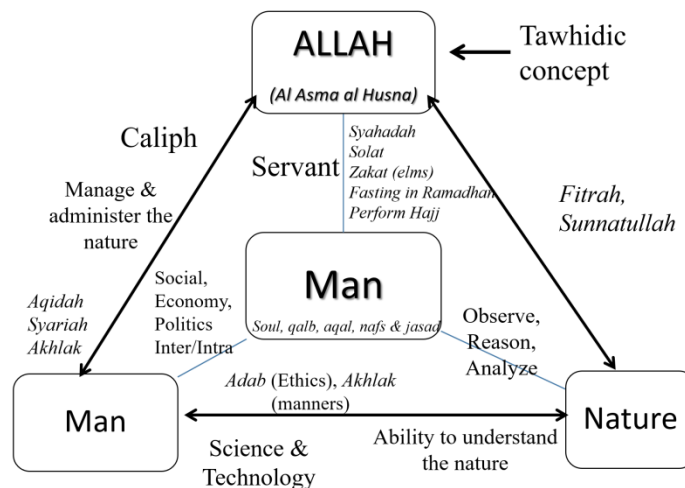


Figure 2: Three main entities in *Tawhidic* value system in Islam: Allah (God), Man and Nature

The relationship between man and God is a man is the servant of God. He must worship God by performing prayers, fasting in Ramadan, alms-giving (*zakat*) and performing pilgrimage, and conforming himself to what he has to do or what he has to abstain himself from as instructed by Allah SWT. The relationship between God and man is man is a vicegerent (caliph) of God. The duty of a Caliph is to manage and administer this world with full responsibility to God; follow instruction from God as stated in His Book (al-Qur'an) and the practices and says of His Prophet Muhammad SAW. In order to be able to perform his duty as a caliph, God Almighty empowers human with the elements of *ruh, qalb, aqal, nafs* and physical body. In order to develop all these elements, a Muslim is required to improve his faith, follows the *shari'ah* (the rules that he has to follow when conducting his duty) and steadfast to the Islamic moral conduct and ethics (*adab* and *akhlak*) that they possess.

The second relationship is human relations developed based on good social system; respect each other, fulfilling their duties to community, neighbours, children, work places, their superior, and fulfilling their right according to Islamic teaching. Thus family relationships, relationships with the community and relationships with those who interact with him need to be respected and given due recognition.

Whereas the third relationship the relationship between man and nature. The physical realm in this world has a certain nature that has been specified by Allah SWT which we referred to as *sunnatullah*. It means the nature follows certain rules which can be studied by humans. Developing knowledge to understand the properties of the nature is called science, while technical knowledge to take advantage and application of the natural features understood is called technology.

Another knowledge that human beings need to live and be a good caliph in this world will be built up upon these three main entities. It can change from time to time based on the need, but it must be based on this foundation. For example, the knowledge related with knowing God (*ma'rifatullah*) and the knowledge on the fundamental of Islam is called *usuluddin*; knowledge related to all the rules required by man is called *shari'a*, and the knowledge on manners (proper conduct) and morals conducts (human qualities) (*adab* and *akhlak*) are needed to ensure that the practice is done – done as best as possible.

In general, knowledge relating to human relationships is referred to as social sciences, anthropology, psychology, politics and leadership. This knowledge needs to be developed in order that human beings can be interconnected, understood and respected with each other, cooperation among themselves and live in harmony and peace either locally or globally. Knowledge relating to the exploitation of natural resources is called science and technology (S&T), and knowledge on distributing the resources fairly and justly among the people and the natural environment is referred to as *muamalat* or economics and management.

5. Conclusion

We can conclude that in the Islamic value based civilization proposed by Islam, its value system built on three main entities; God, man and nature. By understanding these three entities and its functions, we can develop other knowledge such as Islamic worldview (*Tasawur Islami*), *Aqidah*, *Syariah*, *Adab & Akhlak*, S&T, Engineering, Health, Agriculture, Biotechnology, Environment, Tradition, Culture & Arts, Economics & Management, Leadership & Politics, Anthropology, Sociology, Psychology, and so forth as can be summarized in Figure 3. But the knowledge built upon the Islamic value system must not overlook the value system built on these three main entities.

Unfortunately, civilization developed by postmodern society has ignored or put aside God's entity. The only entities involve in the development of the civilization are human and nature. Humans develop themselves and nature based on their own knowledge without relating their responsibility to God. He sees this realm as the target to fulfil his desires and what he wants. Human desires and want have no limit, but natural and human resources are limited. Therefore, there is handicap and shortcoming in the development of the civilization as mentioned by Harry Lewis (2006) in his book entitled 'Excellence without a soul', Roy (1990) in his article 'Literates, uneducated', or 'Highly skilled barbarians' as mentioned by Steven Muller, former President of John Hopkins University, USA (Ulin 1980). The same statement was put forward by Abelson (2011) about the behaviour of Wall Street in the United States.

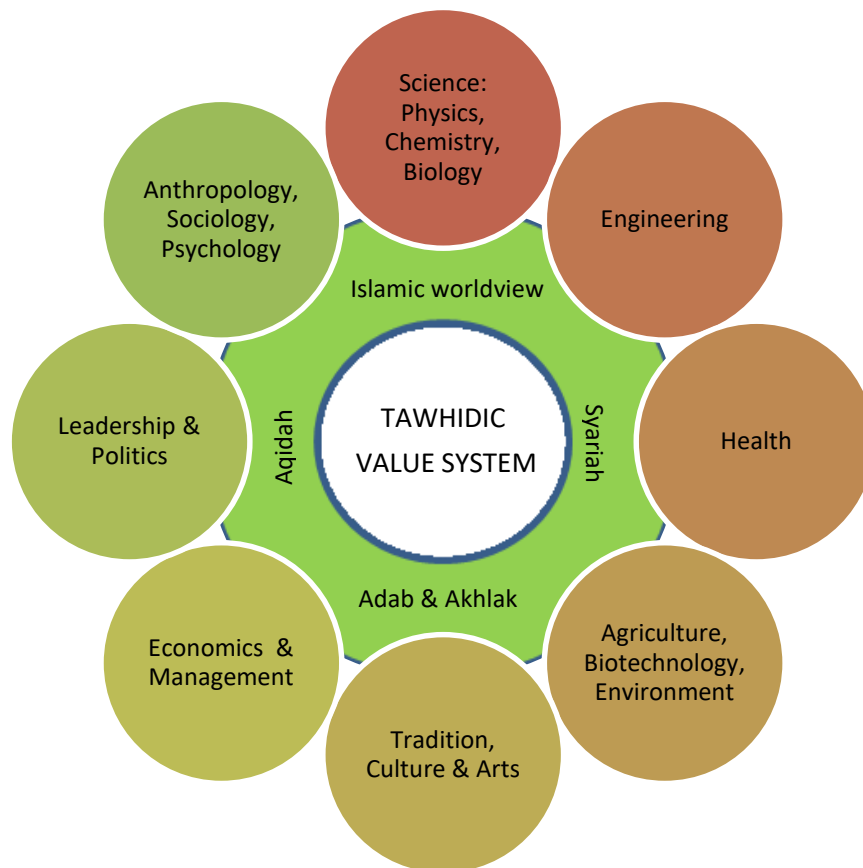


Figure 3: Ecosystem of knowledge in Islamic developed based on entities of God, man and nature

The Islamic value system needs to be re-established in today's post-modernism society. An Islamic value-based economic system forbids usury; manipulating currency and raising the price of arbitrary need must be eradicated. Fair and honest business systems need to be developed, so that people are not deceived by the greedy wealth distribution system that exists because the resources are limited while self-wills have no limit.

To develop civil society based on Islamic value systems, contemporary *fiqh* should be developed in all discipline of knowledge including economics and management, politics, social, science and technology, environmental and health. Contemporary *fiqh* cannot be developed if Islamic scholars still use the old Islamic approach in the post-modern era. They need to be prepared and try to integrate knowledge in the various disciplines needed today above the praiseworthy divine values.

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Influence of Anime on Social Problem: An Initial Research upon Youths in Selangor

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Abstract

The social ills among youths today is deemed as a poison among our community because of its capability to present negative impact upon the youth, family, school and the government. The impact caused by social ills would bring severe devastation to the country as youths today are deemed as the government's asset to create a better nation. Statistics from PDRM shows that social problem cases in 2013 have risen to 7,816, compared to 3,700 cases in 2012. The rate of serious offenses caused by youths between the ages of 12 to 17 also showed increment of 47 percent. An increment of 137 percent was also recorded in cases involving youths who have finished schooling in the same year. The main contributor to social ills in Malaysia is caused by mass media, and one of it is identified as anime, which is an animation cartoon that hails from Japan. Anime has been shown in Malaysian television since the early 80's and is now accessible thru internet, giving viewers the freedom to watch it at any time. The availability of anime series could be viewed as an entertainment medium for youths but not all anime genres or themes are deemed suitable for underage teens. Anime which are laced with contents of violence, sex, and hallucinations is capable to seep into the minds of teenage viewers which could further contribute to social problems. This writing serves as an initial survey to identify how far anime could impact the behavioural attitude of youths and its relation to social ills. This research uses quantitate approach through questionnaires which the researcher drew involving 85 people samples. This research was done in Selangor. The result of this research shows that there is no significant relation between the attitude of youths and moral decay which contributes to social ills, but there are weaker signs from respondents who are overly-exposed.

Keywords: Anime; youth; social problem

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1. Introduction

Anime is an animated version of Japan adapted from an increasingly popular Japanese comic called manga is gaining popularity among animated enthusiast in Malaysia. Array of superhero characters, actions and story lines that are embedded within an anime is hugely popular in Japan. Some quarters use anime as a medium to learn Japanese, and this is a fact that cannot be denied, but the fact remains that anime is also a contributor to social ills (Novianti 2007).

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The moral decay and social ills that is caused by ever-widening and borderless influence of mass media is spoiling our society today. The negative impact caused by this decay could be witnessed through the news in television and newspapers. Sadly, this moral decay involves the youth of today who are hoped upon to be the leaders and useful citizens in the future.

The life of a youth today is exposed to countless amount of foreign informative and cultural contents, often at its raw and presents the best recipe to influence the minds and attitudes of youths. The negative behavioural attitude such as promiscuity, illegal racing, drug abuse, baby dumping, illegal gambling, bullying, gang activities and many more negative activities is at a worrying level, although the statistics shows that levels of these problems among youths has declined 15% on 2010. This statistic shows that 4,474 children as young as seven years old being detained for various criminal offences.

Another statistic from Bukit Aman reads out that 135,121 cases of various offences being committed by children, students, and teenagers as (Berita Harian 2011). These statistics are worrying and frightening. This worry was also echoed by Director of Education, Datuk Abdul Ghafar Mahmud during the launching of national level Crime Prevention Club 2011 (Utusan Malaysia 2011). The statistic issues by Bukit Aman also showed increase of 11 percent for cases involving juveniles within one year. 7,816 cases were recorded in 2013 as compared to 3,700 in 2012, an increase of 4,116 cases. To further aggravate our worries, the numbers of serious offenses involving school-leavers have increased 137 percent, standing at 2,011 cases in 2013 compared to only 849 cases the previous year. Serious offences which involve offenders aged 12 to 17 also showed tremendous increase of 47 percent and offences such as murder and rape is also included in this statistic (Harian Metro 2015).

One of the latest statistic tabled by Datuk Seri Ahmad Zahid Hamidi in Parliament is that 751 rape cases involving juveniles was recorded in 2014, 674 cases in 2015 and 691 cases in 2016. Meanwhile violent cases recorded 2,907 in 2014, 2,529 cases in 2015 and 2,526 cases in 2016. Cases which involves motorcycle theft were also tabled, recording 3,011 cases in 2014 which involves teenagers aged between seven to ten years old. These cases declined to 2,634 in 2015 and showed slight increment in 2016, recording 2,655 cases. Cases involving properties recorded 6,386 cases in 2014, declined to 5,605 cases in 2015 and 5,456 cases in 2016 (Malaysiakini 2017).

There is a persistent question on why social ills are happening, and what are the reasons that is causing social ills to become more serious. Many academic researches has been carried out to ascertain the reasons behind this problem. In general, social ills can be regarded as a condition or life style that is deemed to be contradicting with the cultures and religious norms of a society. According to Hamzah (1983), social ills are regarded to be human behavior that has veered away from normal human lifestyle that is publicly accepted from the religious, social or cultural point of view.

Social ills are mainly caused by the inability to hold on to moral values and do not only involve the young and teenage adolescents, but also adults. As social ills linked to teenage and youngsters, it is often associated with the negative values contained in mass media such as magazines and televisions (Ab. Halim Tamuri & Zarin Ismail 2005). If this is the case, does the evolution of anime also a contributing factor in the growth of social ills among today's youngsters? In early 2008, a 10-year old boy, Revino Siahaya from Samarang, Indonesia, passed away after attempting to copy the acts of his anime hero, Naruto. In Russia, a 14-year old teenager jumped down from his apartment unit apparently after his idolized anime hero Itachi Uchiha lost in the episode he was watching (Hernita 2014). But based on the research by Sameen (2014), anime can increase social interacting skills and spur interest on art and language among teenagers, but his research also didn't deny the fact that excessive exposure to anime can cause teenagers to be addicted to anime, causing a blockage on other activities and also cause behavioural and attitude problems.

Research by Eng (2001) finds that teenagers who watch anime were able to increase social skills among them. Finding by Gaylican (2013) also concurs with this as he finds changes in interactive skills which can change a shy person into a bold person. Numerous research findings, whether negative or positive needs to be supported by in-depth research data's according to subject and research locations. Thus, this research is performed to ascertain whether anime is a cause to the problem or is just a perception that is caused by prejudice attitude.

This research aims to fulfil the objectives as stated below:

- a. Identifying the factors that entice teenagers to watch anime.
- b. Identifying the level of anime exposure and its relation to teenagers' behavior.
- c. Identifying the correlation between teenagers who watch anime and its relation to the deviation of moral decay which leads to social ills.

2. Literature Review

2.1 Anime and teenagers

Anime is derived from a Japanese word that means animation which also means comic or Manga in Japanese. According to Lent (2001) manga is a comic that originated from Japan, or invented by Japanese in Japanese language, and adapts the style that was developed in Japan in the 19th century. In Japan, the general population reads manga that are available in various genres such as adventure, love, sports, drama, history, comedy, science fiction, fantasy, mystery, investigative, horror, sex, business and so on (Gravett 2004).

Since the 1950's, manga has been one of the main production that dominated Japanese industry. It has expanded and gained worldwide recognition and interest. According to Danica Davidson (2012), the European and Middle East market has recorded profit of up to 250 million dollars, and the American market recorded a profit of 120 million dollars until 2012. That is how popular manga is worldwide. Anime was born through the popularity of Japanese manga. According to Miriam-Webster dictionary, Anime is an animation that originated from Japan and was derived from popular Manga stories which was developed in the form of animation. Manga and Anime are Japanese creative works that can never be separated. The only difference is that Manga is in printed form, while Anime is produced in animation form to be viewed on television.

Today anime is hugely popular among children and teenagers and has worldwide following, including from our country. The airing of anime series brings with it foreign cultures, especially Japanese culture, which seeps in into the minds of teenagers. The seeping of foreign culture which is against the local cultural and religious norms could pose a danger to the minds of teenagers that are overly-exposed to it (Roosfa 2012). The core of anime lies in the strength of its characters such as Naruto, Goku, Doraemon, Sin Chan and many more, and the charm of aesthetic presentation of its graphics add the pulling factor of anime.

The worrying factor is that anime can be watched at any time and place thanks to the limitless internet technology which also dishes out countless options for teenagers to choose from. The storyline and Anime characters' contents are not censored. This scenario is feared to have negative elements which could influence the thinking and character of teenagers and which will encourage them to commit negative acts that will spur the increase of social ills. If not contained, the free-flow and limitless contents can disrupt the minds and behavioural pattern of teenagers (Umi Khattab & Gin Chee Tong 2008) in a research titled why are Asians so exposed and easily attracted to Japanese Animation? This situation is tied to local television contents where children's and teenagers slot are filled with Japanese Animation series. The worrying factor is that the contents of Anime are not suitable with the local thinking and cultural values, thus could pose a serious problem towards children's mind development.

The debate about the setbacks of anime was once a very hotly debated issue in Indonesia where it was discussed in magazines and internet portals. Seto Mulyadi in his magazine Gamma (2001) a child psychologist from Indonesia opined that characters as Crayon Shin Chan is not suitable for children and teenagers because it is laced with inappropriate words and vulgarity. This thought is supported by Suherman (2002) who said many seminars and articles that was written has concluded that Annie Shin Chan has a negative impact on children and teenagers because it has pornographic elements which can cause harm to children's behavioural patterns. Another commentator, Widyastuti (2009) also says the same about the character of Shin Chan's philosophy that could spoil the minds of children. Chambers (2012) also concurs, saying that anime brings negative elements such as brutality which will further deteriorate the minds of children. Research by Sallehuddin and Omar (2011) also concludes that most children and teenagers are attracted to anime because of its attractive graphics, humour, and brutality elements that are embedded within its storyline. Anime which contains excessive brutality can make teenagers more aggressive.

Despite all this negative findings, there are also other researches that find positive impacts that are nurtured through anime exposure. Among them is a research by Jesus (2014) which states that teenagers who watch anime can develop sound astatic views upon arts when they grow older. This opinion is also supported by Gaylican (2013) that those who watch anime are more attracted to arts. Eng (2001) says that anime enables children to develop their social interactive skills among them and increase their interest to Japanese culture and language. The research findings of Sameen (2014) show that anime not only enables teenagers to appreciate art but also could indirectly increase their creativity. Sameen adds that anime enabled teenagers to differentiate between right and wrong, and can be responsible for their actions, honest, kind hearted and respectable towards others. But despite all the good characteristics that are listed, over exposure to anime can lead to addiction which will cause teenagers to lose concentration on their studies, and deteriorate character and attitudes of teenagers. Apart from that, over-exposure to anime could also cause teenagers to replicate the anime characters which they idolize. A 21-year-old youth from Kelantan, Amirul Rizwan Musa or more popularly known as Miyyo Rzone has gone through extensive face make-over procedures to look like the anime character in Final Fantasy (2017). That's the extent of anime influences on teenagers, as it is embedded with array of elements, both positive and negative.

Teenager is defined as a transitional period from children to adults. According to United Nations, teenagers are classified as those between the age of 15 to 24 years (Unesco.org). Azizi Yahaya & Muhamad Jumat Aliju (2010) classifies teenagers as those between 11 to 21 years old, is a transitional period between childhood to adulthood which involves biological, psychological, social and economic changes and also involves changes in maturity, which is from being immature to being matured.

According to Eggen and Kauchak (1997), psychology experts conclude that teenage years is the most critical times in human development because it is filled with pressures and challenges. During those adolescent years, teenagers are willing to try things which at times could cause social and anti-social conflicts. According to Roosfa (2004), teenagers are classified as youngsters who are beginning adulthood, reached puberty, old enough to get married, develop feeling of lust and love, and are no longer deemed as children anymore. In other words, teenagers are adults which separates childhood and adulthood. Thus, psychological experts opined that teenagers should be given freedom in seeking life experiences that will be suitable with their self-developments (Woolfork 1998).

3. Methodology

This research uses the quantitative method by using questionnaires with the scale of 5 Likert which was developed by the researcher with the reliability and validity value of 0.904 Cronbach Alpha. This questionnaire was formed to gauge the influence anime has teenagers' attitude and its relation to moral decay among the teenagers in Selangor.

This research gauges the positive and negative values contained in anime. 79 items were used for this. Apart from this, questionnaire on moral decay that was developed by Syazniza (2014) was used to see the relation between anime and moral decay among teenagers. 76 items were used to observe the involvement of teenagers in social problems which is divided to 4 aspects which is religion, life, intellect and possessions.

Data that has been collected will be analyzed using the SPSS software and will be valued as the premier data of this research.

3.1 Creation of research instruments

This instruments were developed by the researcher based on interviews with teenagers who consists of school teachers and students apart from the researchers own observation on characteristics of five (5) anime namely Detective Conan, Doraemon, Naruto, Crayon Shin Chan and One Piece which garnered the highest watching rate. The result was 79 items related to attitude.

3.2 Scoring

The Likert scale was chosen because of its reliability in data collection which could be determined easily and accurately, reducing the likelihood of errors in data procession (Murphy & Davidshofer 1998). For this research, the Likert scale which applies choices of five agreeable answers was used. Refer to Table 1 below:

Table 1: Likert agreement level system

Level of agreement	Score
Never	1
Hardly	2
At Times	3
Often	4
Always	5

3.3 Respondent

This research was done among Islamic teenagers from Sekolah Menengah Bandar Baru Salak Tinggi in Sepang. Only respondents who are within the age of 13 to 16 were chosen, meaning students who were studying in Form 1 and Form 4, both male and female, and who are exposed to watching anime. 85 respondents were involved in this survey. An initial filtration was done where teenagers who are not exposed to anime are not included in this survey.

4. Results and Discussion

4.1 Demography

Below are the research results of respondent's demographic background:

Table 2: Respondent's demography

Item	Results (Frequency/Percentage)
Gender	Male (49 / 57.6%) Female (36 / 42.4%)
Age	13 years old (29 / 34.1%) 16 years old (56 / 65.9%)
Race	Malay (84 / 98.8%) Chinese (1 / 1.2%)
Form	One (29 / 34.1%) Four (56 / 65.9%)
Father's Occupation	Government (34 / 40.0%) Private (32 / 37.6%) Self-Employed (19 / 22.4%)
Mother's Occupation	Government (29 / 34.1%) Private (14 / 16.5%) Self-Employed (42 / 49.4%)
Household Income	RM1000 and below (11 / 12.9%) RM1000 – RM3000 (37 / 43.5%) RM3000 – RM5000 (26 / 30.6%) RM5000 and above (11 / 12.9%)

4.2 Item trustworthiness

Table 3: Reliability test

	Cronbach's Alpha	Number of Items
Attitude of teenagers	0.895	79
Moral decay	0.865	26
Total Cronbach's Alpha = 0.904 (105 item)		

Table 4: Min value and standard deviation

	Min	SD	Level
Attitude of teenagers	2.88	0.295	Normal
Moral decay	1.41	0.301	Low

(Level note: Low = 1.00 – 2.33, Medium = 2.34 – 3.66, High = 3.67 – 5.00)

4.3 Determining teenagers interest in anime

Table 5: Factors that causes teenagers to like anime

Factor	Numbers	Percentage
Great animation characters that has super-natural abilities, funny, cute and so on.	57	67.1
Graphic visuals that are beautiful and attractive	21	24.7
Interesting and less-boring storyline	7	8.2
Total	85	100

The research shows that based on the 3 category that interests' teenagers about anime, the character factor has the highest influence compared to visual and storyline factors. 67.1 percent of respondents say that the character influences them the most in anime. This is because the anime character is fashioned very dynamically by its creators and thus has the ability to attract the interest of teenagers, and this dynamism is also added with super-natural powers, humor, and cute. The graphics of anime is respondents second choice. This finding is in sync with Roslina (2014) which states that the teenagers favorable anime character has traits of being bold, hardworking, humorous, appreciate relationships and has special abilities.

4.4 Identifying level of anime exposure and its relation to teenagers' attitude

Table 6: Level of anime exposure

Level	Numbers	Percentage
1 - 3 hours	48	56.5
3 - 5 hours	31	36.5
5 hours and above	6	7.1

Table 7: Relation between level of anime exposure and teenagers' attitude

	Teenagers attitude
Anime exposure	-.122

The table above indicates of no significant relations between level of anime exposure and teenagers' attitude.

4.5 Teenagers attitude score differences based on level of anime exposure

The results of One-way Variants Analysis to test the difference in score on teenagers who are exposed to anime based on level of anime exposure are displayed in Table 8 below:

Table 8: One Way ANOVA

	JKD	DK	MKD	F	Sig.
Between groups	.116	2	.058	.666	.517
Within groups	7.170	82	.087		
Total	7.286	84			

Instruction: JKD = Total squared, DK = Level of freedom, MKD = min squared

Note: * significant at 0.05

The result on One-Way Variants Analysis shows that there is no significant difference in the attitudes of teenagers who are exposed to anime, $F(2,82)=0.666$, $p>0.05$ according to level of anime exposure.

4.6 Relation between level of anime exposure and attitudes of teenagers who are exposed to anime

The table 9 below displays the results of Chi-Square tests between level of anime exposure and attitudes of teenagers who are exposed to anime.

Table 9: Chi-Square test

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.307 ^a	4	.860
Likelihood Ratio	1.942	4	.747
Linear-by-Linear Association	.120	1	.729
N of Valid Cases	85		

			Teenagers attitude			Total
			Low	Medium	High	
Level of anime exposure	1-3 hours	Count	2	45	1	48
		%	50.0%	56.2%	100.0%	56.5%
	3-5 hours	Count	2	29	0	31
		%	50.0%	36.2%	0.0%	36.5%
	5 hours and more	Count	0	6	0	6
		%	0.0%	7.5%	0.0%	7.1%
Total		Count	4	80	1	85
		%	100.0%	100.0%	100.0%	100.0%

4.7 Identifying correlation between the attitudes of teenagers who watch anime and its relation to moral decay which leads to social ills

Table 10: Relation between teenagers behavior and moral decay

		Moral decay
Teenagers attitude		.269*

* $p<0.05$

Based on the table 10 above, there is a weak relationship between the attitudes of teenagers who watch anime and moral decay which leads to social ills. Coefficients correlation value of .269 is regarded as too weak to conclude that the attitudes of teenagers can influence their moral decay which in end would not lead to any social ills. These early findings further rejected previous studies such as Suherman (2002), Widyastuti (2009), Umi Khattab and Gin Chee Tong (2008) claiming that the anime could spoil the thinking, behavior and values of adolescents. However, due to the factors of the demographic difference of the respondents involved as a whole. The findings also did not represent the overall findings as it was only a pilot finding

with a limited number of respondents. A more comprehensive study involving larger respondents needs to be carried out to see the relationship between the anime's influence on teenage attitudes and morality.

5. Conclusion

The findings stated here is an initial dinging to observe the relationship between exposure to anime and its effects on behavior of teenagers. From the findings above, it can be concluded that low level of anime exposure would not affect the attitude of teenagers. This is probably because the category of anime watched is still within the kodomo and shounen category (Detective Conan, Doraemon, Naruto, Crayon Shin Chan and One Piece) which does not have excessive negative values.

The attitude of teenagers with medium level of anime exposure has weak relations towards moral decay which leads to social ills in today's society. Thus, more research should be done to observe the influence of anime on attitudes, personality and social changes among teenagers. True to the role of teenagers as the human capital of this country for years to come, this research is regarded as a pathway to give attention to anime influence which is ever-widening in this country every single day.

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Development of Personality Module for Youths in National Youth Skills Institutes (NYSI) in Malaysia

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Abstract

Muslim personality plays a predominant role in grooming Muslim undergraduates to become competent, innovative and competitive. This necessitates a well-planned program which is supported with an effective module which comprises learning activities that cater to the specific needs of the learners. In Malaysia, the National Youth Skills Institute (NYSI) in collaboration with researchers from the National University of Malaysia (UKM) have designed a learning module with specific objectives to cultivate integrity, dynamic personality and high moral values among Muslim youth called Muslim Personality Module© (Modul Persona Muslim©). The module is designed based on ADDIE instructional model which consists of five phases: analysis, design, development, implementation and evaluation. To date, the module has obtained its copyright and is currently in use at 20 NYSIs nationwide reaching to approximately 2000 youth. It has also received positive feedback from instructors and participants. The implementation of the Muslim Personality Module© at the NYSI has resulted in knowledge enrichment, as well as consolidation of Muslim behavioral traits and attitude among youth. This module contributes to the assimilation of the western and eastern educational theoretical and conceptual framework in nurturing youth.

Keywords: Youth; Muslim Personality Module; personality; ADDIE; learning

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1. Introduction

The National Youth Skills Institute (NYSI) is a government institution in Malaysia that specializes in preparing youth for a better future. It is equipped with infrastructure, human resource and expertise that are necessary in grooming the personality, attitude of behaviour of youth to enhance their knowledge and skills in professional areas. Besides, morality and religiosity are predominant values that are emphasized in the education system.

Indeed, it has become a national concern to ensure that youth develop religious awareness and personality alongside their pursuit for education and technical skills. Youth void of spiritual values may succumb to moral decadence and emotional imbalance. As reiterated by Mansur (2005), lack of religious knowledge and guidance in the family are two of the most predominant reasons for moral decadence among youth.

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Among the most critical challenges faced by the nation nowadays is social ills among youth. This is a lamentable predicament as youths are future leaders who shall lead the country to greater heights. To illustrate, social delinquency as well as crime which include murder, robbery and rape increased from 22,133 cases in 2005 to 35,158 cases in 2007. Further, burglary, snatch theft and break-ins escalated from 157,459 cases in 2005 to 209,559 cases in 2007 (The Royal Malaysia Police 2009).

Realizing the importance of religion and family institution as the fundamentals for moral excellence, professionalism and integrity among youth, Department of Skills Development, Ministry of Youth and Sports, Malaysia has developed *Citra Ibadah* Programme which emphasizes on four developmental areas namely *Cintai Solat* (prayers), *Cintai al-Quran* (Understanding Al-Quran), *Persona Muslim* (Muslim Personality) and *Cintai Keluarga* (Love your Family) to strengthen religious appreciation among the younger generation.

This study aims to develop a learning module to be used at the National Youth Skills Institute in Malaysia to equip youth with exemplary attitude and behaviour aligned with religious and national expectations.

2. Literature Review

2.1 National Youth Skills Institution (NYSI) in Malaysia

The NYSI in Malaysia is a government institution that is equipped with infrastructure, human resource and expertise to groom youth to become more skilful and successful. As mentioned by the director of NYSI for Terengganu state (2014), since its inception NYSI all over Malaysia have been successful in developing youth with strong character as well as good discipline and integrity in work culture. It is important to note that most youth who register for NYSI may not qualify to enter any of the universities in Malaysia. Nevertheless, they still have passion for learning and are usually inclined for vocational and technical education.

These youths are confronted with the common challenges facing our younger generation. Some of the youth have been involved in social problems which concerns morality, personality and religiosity. Despite their education and training, they seem very fragile and are easily influenced by negative behaviours. Hence, the NYSI has taken drastic measures to enhance youth's understanding and appreciation of morality, personality and religiosity which includes the implementation of Muslim Personality Module© to develop more holistic and well-rounded personality among youth.

2.2 Personal development according to Islamic teachings

A general impression among youth is that religious practice is confining and limits their freedom. However, this is a misconception of guidelines for Muslim personality and good behaviour which should be practised in everyday life. Nor Hartini Saari from Center for Research in Economy and Society, Institute for Islamic Understanding (IKIM) mentioned in her article addressing social problems among the younger generation. She said, "Islamic teachings are not meant to limit man's freedom; instead, the religion intends to nurture good behaviour and noble personality for the betterment of humankind (Utusan Online 2014).

An eminent figure among the Muslim scholars, Imam Hasan Al-Banna said that, "A Muslim should strive to attain a strong body, good character, cultured thought. He should be able to earn a living, have pure belief, and correct worship. He should be able to control his desires, be careful about his time, organized in his affairs, and beneficial to those around him".

Altogether, he advocated ten principles of Muslim characteristics that feature Muslim personality which contribute to a holistic system in life. They comprise the duties of every Muslim as an individual. The ten principles advocated by Hasan Al-Banna are enlisted below:

- a. Believe in Allah (*Aqidah yang benar*)
- b. Good deeds (*Ibadah yang soheh*)
- c. Noble behaviour (*Akhlak yang mulia*)

- d. Possess intelligence, knowledge, and expertise (*Bijaksana serta memiliki ilmu dan kepakaran yang tinggi*)
- e. Possess strong and healthy body (*Memiliki tubuh badah yang besar dan sihat*)
- f. Manage time and wealth efficiently (*Bijak mengurus masa dan harta*)
- g. Organize life matters efficiently (*Menyusun urusan hidupnya dengan baik*)
- h. Contribute significantly to others (*Memberi jasa yang besar kepada orang lain*)
- i. Controlling lust (*Mendidik hawa nafsu*)
- j. Sacrifice in Allah's way (*Berjihad ke jalan Allah*)

Without doubt, if Muslim youth abide by these ten characteristics of Muslim personality, it will generate a well-rounded personal development which can benefit the individual youth, community, and the country at large.

2.3 Learning theories

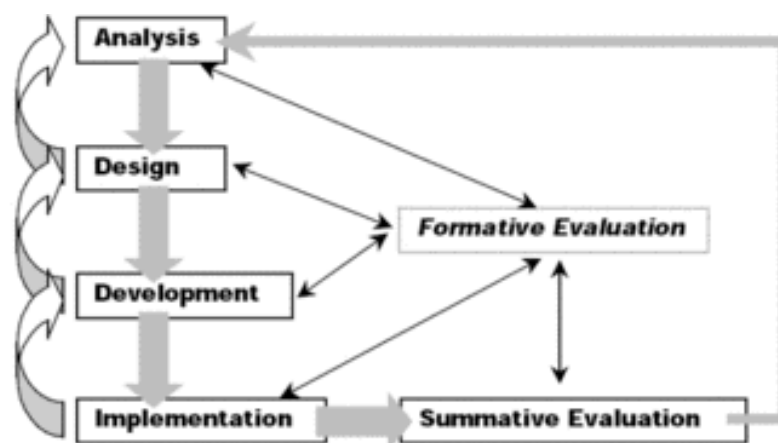
Learning theories provide framework and guiding principles for designing learning experience. A prominent learning theory that can bring impact to youth at IKBN is indeed the constructivist learning theory by Piaget which prioritizes on understanding and expanding knowledge through experience and reflecting on the experience (Blake & Pope 2008). According to the theory, our prior experience as well as cognitive, emotional, and environmental influences can affect our acquisition of world view and retention of knowledge and skills. Considering the age group of youth at IKBN, they don't prefer 'chalk and talk' approach in learning; instead, youth would appreciate their instructors to involve them in activities that require their active participation. This way, youth benefit from experiential learning which connects them with reality.

To illustrate, the Muslim Personality Module© brings youth outside the classroom to show their concern for the community. In the chapter on "contribute significantly to other", the instructor gives input on the benefits of helping others, shows videos and media coverage on the life among the poor and needy. This is followed by active discussion and reflection on the chapter. Concurrent with the constructivist theory, the instructor brings youth to visit old folks home, the orphanage or flood victims to expose them to real life challenges and experience. They also plan for the project themselves i.e. collecting donation in cash and in kind for the needy, activities with the old folks like gardening and storytelling. It is important to note that the module allows youth to carry out a community service project out of their own conscience and realization.

Constructivism is a theory that requires learners to construct their own understanding and knowledge of the world through experience and reflection. According to Piaget, "when we encounter something new, we have to reconcile it with our previous ideas and experience, maybe changing what we believe, or maybe discarding the new information as irrelevant". In the context of youth at NYSI, teaching and learning process encourages youth to ask questions, explore, and assess what they know to become active creators of their own knowledge. It is hoped that they will absorb the values of Muslim personality through the experiential learning. For example, youth will be more respectful to their parents and the elderly, also understand the difficult life among the poor. In the end, youth at NYSI shall live according to the teaching of Islam and improve their lives for the betterment of mankind.

2.4 ADDIE Instructional Model

The formation of the framework for development and evaluation of Muslim Personality Module© is based on instructional design measures that are modified from the ADDIE Model (Figure 1).



Source: <https://www.trainingindustry.com/wiki/entries/addie-model.aspx>

Figure 1: ADDIE Instructional Model

There are five stages involved in the framework of the ADDIE model: analysis, design, development, implementation and evaluation. The first stage is called the *Analysis* stage which serves as a foundation for all the phases involved in ADDIE model. Needs analysis and task analysis are examples of research techniques involved in this phase. During this phase, it is important for researchers to define the problem, identify the problem source and determine possible solutions. Instructional goals and a list of tasks to be instructed are among the outputs of this phase which provide input for the *Design* phase.

The Design phase comprises outputs from the Analyse phase to be used in strategy planning to develop the instruction. It is essential to outline ways to attain the instructional goals stated in the Analyse phase and expand the instructional foundation. Before proceeding to the next phase of the ADDIE model, researchers should write a description of the target population, conduct a learning analysis, state the objectives and test items, choose a delivery system, and structure the instruction. These outputs provide inputs for the next phase.

The Development phase in the ADDIE model generates the lesson plans and materials, teaching and learning instructions, media that will enhance the instruction, and other related supporting documentation. Hardware and software outputs may include simulation equipment, computer-based instruction, educational videos, and loose notes.

The fourth phase of ADDIE instructional model is the Implementation phase which refers to the actual delivery of the instruction. Teaching and learning can take place in the classroom, computer lab, or specific locations like the orphanage, old folks home and remote villages which provide real-life learning experience to youth. To ensure effectiveness of delivery, instructors must promote students' understanding of material and learning objectives, and ensure smooth transfer of knowledge from the instructional setting to the job.

The last phase is the Evaluation which focuses on measuring the effectiveness and efficiency of the instruction throughout the entire instructional design process. This involves two types of Evaluation: Formative and Summative. Formative Evaluation aims to improve the instruction before the final version is implemented. Summative Evaluation assesses the overall effectiveness of the instruction. It is conducted after the final version of instruction is implemented. Data from the Summative Evaluation allows the instructors to decide whether to proceed with the instruction or vice versa.

3. Objective

The study was conducted to accomplish the following objectives:

- a. To investigate the needs and expectations of youth at NYSI to develop a suitable learning module.
- b. To develop the components of the content of the learning module in developing Muslim personality traits for youth at NYSI.

4. Methodology

The formation of the framework for development and evaluation of Muslim Personality Module© is based on instruction design measures that are modified from the ADDIE Model (Figure 1).

This Muslim Personality Module© adopts the rigour of the ADDIE instructional model by following the steps described in Figure 2 below:

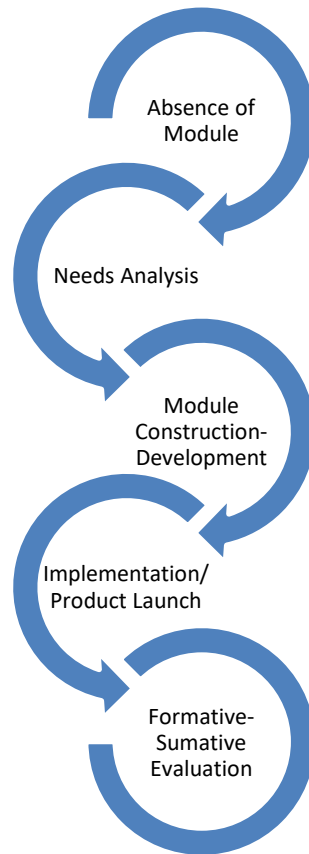


Figure 2: Process flow for Muslim Personality Module©

This study was initiated due to absence of systematic module for personality development among youths at NYSI. The institute required a research-based learning module to capture the needs and expectation of youth at NYSI and the stakeholders. Thus, needs analysis was conducted based on the CIPP Model using self-report inventory and focus group interview. It involved learners from 9 NYSI centres nationwide who have undertaken the subject of personality development using the previous NYSI syllabus. A total of 924 students responded to the self-report inventory and 20 were selected for 4 focus group interviews. Also, 10 NYSI instructors were invited for a focus group discussion.

Unlike the previous syllabus on personality development at NYSI, the Muslim Personality Module© was developed with specific learning objectives and introduces three components: Idea Generation (*Jana Minda*) to trigger change; Content Specification (*Juadah Nurani*) to provide learning input; and Dynamic Practices (*Dinamika Amal*) to develop Muslim personality. Module construction involved storyboard writing to ensure attractive content; graphic design for stimulating presentation, and prototype development. The module was then validated by 12 NYSI staff and instructors. Based on the comments and suggestions, the module was improved and developed with actual content, actual contextual and experiential learning, and authentic materials.

5. Results and Discussion

In order to develop the Muslim Personality Module©, four objectives have been outlined. The following sections show the results and discussion of the findings:

Research objective 1: To investigate the needs and expectations of youth at NYSI in order to develop a suitable learning module.

Based on the findings, it was discovered that NYSI did not have a systematic module on Muslim personality development. Thus, a self-report inventory was designed to determine aspects of personality that may require improvement and enhancement. The inventory evaluates three domains of Muslim personality namely knowledge, attitude and practise.

a. Reliability coefficients of knowledge, attitude and practise domains

The inventory consists of a total of 46 items on knowledge, 39 items on attitude, and 47 items on practise, regarding Muslim personality. The reliability of the instrument was tested by using the most commonly used test which is Cronbach's alpha. This Cronbach Alpha was used to determine the internal consistency of the scores derived from the instrument. The procedure was performed on each variable to examine the internal consistency. The value of coefficient alpha can range from 0 to 1. The nearer the value of coefficient alpha to 1, the better the reliability. Hair et al. (1998) suggests that a reliability level between .6 and .7 represent the lower limit of acceptability for exploratory research. The Cronbach alpha value for all the domains in this study are as follows.

Table 1: Reliability coefficients of knowledge, attitude and practise domains

Module	Domain	Items	Cronbach Alpha
Muslim personality	Knowledge	46	.898
	Attitude	39	.858
	Practise	47	.810

Reliability coefficients are reported to be acceptable alphas ranging between .81 to .89. Thus, it was concluded that the items were reliable to be used in the self-report inventory.

b. Levels of knowledge, attitude and practise

Knowledge, attitude and practise are three important elements to mould an individual's personality (Chaiklin 2015). Researches have shown that there is a significant relationship between knowledge and attitude, as well as attitude and practise. The following table describes the level of knowledge, attitude and practise of Muslim personality among the respondents.

Table 2: Levels of Knowledge, Attitude and Practise of Muslim Personality

Domain	Level			Mean	Standard deviation
	Low	Moderate	High		
Knowledge	0.4	19.6	80	4.4585	0.31238
Attitude	0.8	28.8	70.4	4.3251	0.32323
Practice	13.2	69.3	17.4	3.6759	0.33007

N=500

The table above illustrates the levels of the three domains of Muslim personality. A total of 46 items have been asked to measure basic knowledge as a Muslim (see Appendix 1). Based on the findings, most of the respondents (80%, n=400) have high level of knowledge with a high mean of 4.46. This implies that the level

of knowledge among youth at NYSI is commendable. They know that the Prophet Muhammad SAW is a loving person; that it is sinful to disobey parents; believe that Muslims should cover their bodies accordingly, and appearance that is not following Islamic rules i.e. men dressed like female and vice versa.

In addition, a total of 39 items were used to measure attitude toward Muslim personality and most of the items received positive response. The findings show that 70.4% (n=352) of the youth possess high level of attitude toward Muslim personality which indicates positive attitude toward Muslim identity as prescribed by the teachings of Islam. The youth in this study are impressed with the Prophet's personality and behaviour (mean=4.8497, sd=.38477); they are proud of the way Muslims dress up in public according to the teachings of Islam (mean=4.8140, sd=.52149); the youth are afraid of hellfire if they disobey their parents (mean=4.7735, sd=.52529) and they feel angry with Muslims who like to draw tattoos on the body (mean=4.6693, sd=.78954).

A total of 47 items were used to measure practise of Muslim personality among youth at NYSI. In contrast to good knowledge and attitude regarding Muslim personality among youth at NYSI, only 17.4% (n=87) reported high level of practise of Muslim personality and a majority of the respondents (69.3%, n=346) only practised them moderately. Most of the youth dress smartly and comfortably, paying attention to cleanliness (mean=4.5852, sd=.65112); feel calm and tranquil when speaking the truth (mean=4.3888, sd=.85562) and love the elderly and children (mean=4.3687, sd=.76593). Furthermore, most of them are impressed with the majestic creation of Allah (mean=4.3320, sd=.85927) and follow the personality and behaviour of Prophet Muhammad SAW as a role model (mean=4.1743, sd=.85709).

Nevertheless, human tend to perform bad behaviour whether they realize it or not. In this study, youth admitted that they have the tendency to complain when assigned with a task (mean=3.0161, sd=.98874); to curse when angry (mean=2.9679, sd=1.11892). They also find it hard to control their anger (mean=2.8136, sd=1.07141) and seldom perform good Muslim practices like solat tahajjud (night prayer) (mean=2.8096, sd=1.04796), and read al-Quran (mean=3.1904, sd=.87228).

In other words, high level of knowledge and positive attitude does not seem to have an impact on the youth's behaviour. Thus, the needs analysis suggests an emphasis on practise to increase the level of Muslim personality practise among youth at NYSI. The new module shall include activity-based and experiential learning approach to further enhance learners' understanding and appreciation of Muslim personality. The lessons shall instil awareness among learners that knowledge must be accompanied with consistent practise to obtain blessings from God.

Research Objective 2: To develop the components of the content of the learning module in developing Muslim personality traits for youth at NYSI.

After identifying the ten principles in moulding Muslim personality based on the teachings of Islam as proposed by Hasan Al-Banna, three components are introduced into the learning module in order to put the ten principles into practice. Thus, the Muslim Personality Module© was developed with three components: Idea Generation (*Jana Minda*) to trigger change; Content Specification (*Juadah Nurani*) to provide learning input; and Dynamic Practices to allow youth to experience real-life simulations and reality checks (*Dinamika Amal*).

With the three components in mind, lesson plans and lesson materials were generated to convey and deliver the ten principles to the youth. It is important that these materials appeal to their needs and interests in order for them to appreciate the learning input. Besides, this stage prescribes the steps involved in implementing the learning module that assist instructors as well as learners to relate to the materials. Lesson materials were developed paperless documentation in support of green learning environment which include power-point presentation, videos, interactive learning input.

The following section describes the three components in the Muslim Personality Module©:

a. Idea Generation (*Jana Minda*)

This component serves as a set induction to attract learners' attention to the topic. This page is to illustrate the set induction conducted on the topic 'believing in Allah (God the Almighty)'. The steps are as follows:

1. Students begin the class with *Al-Fatihah* and doa (prayers) recital.
2. The instructor provides students with a piece of paper each. They are told to write the definition of the concept *aqidah yang benar* (believe in Allah) and well-being of the mind.
3. Students are encouraged to compare their answers with their classmates.
4. The instructor gives the correct definition of the terms and students cross-check their answers.

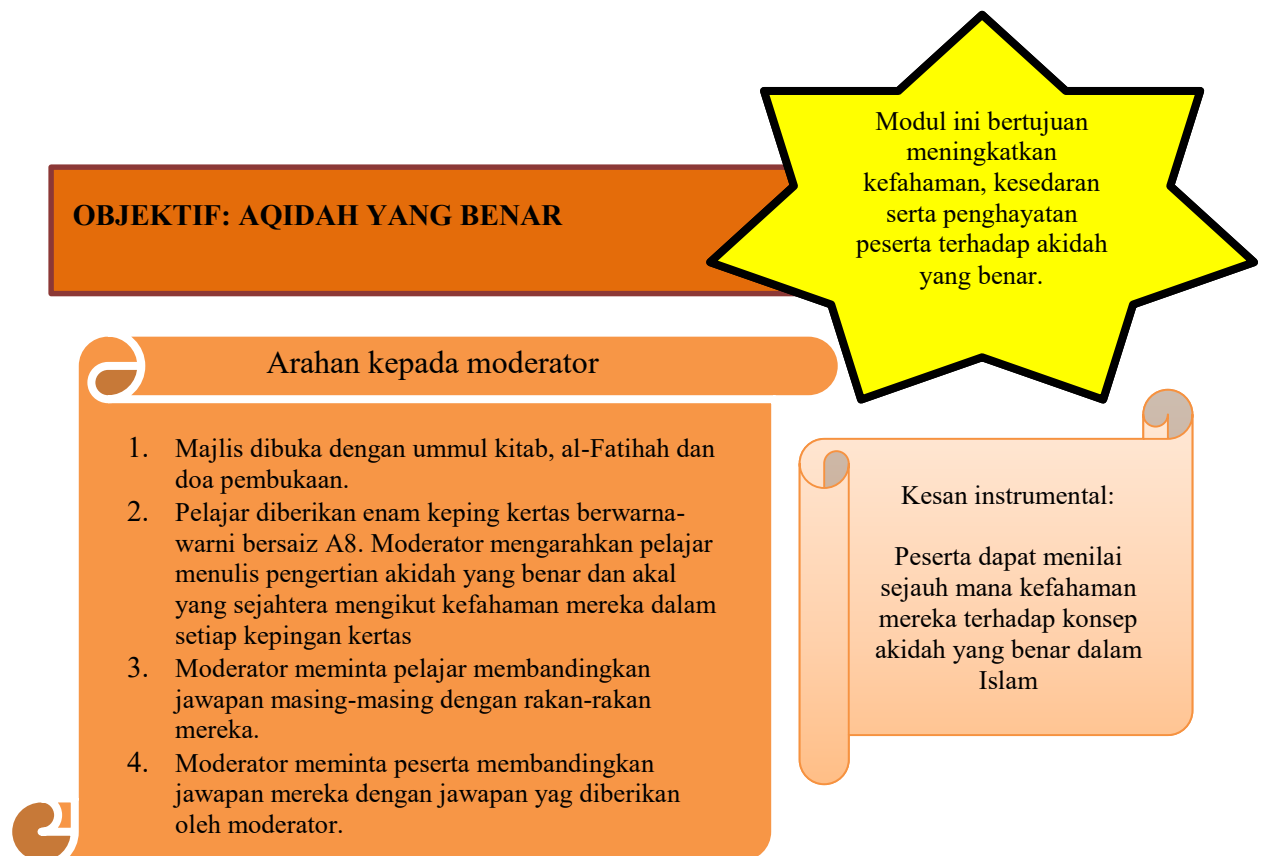


Figure 3: Example of Idea Generation on the topic 'Believing in Allah'

Figure 3 demonstrates the complete guide for instructors to perform learning activities for the Idea Generation (*Jana Minda*) component for the Muslim Personality Module©. It includes the objective of the lesson, followed by step-by-step guide for the instructors to conduct the activity as well as a reminder on the time required to perform the Idea Generation component. Last but not least, the learning impact is highlighted as an instrumental outcome.

b. Content Specification (*Juadah Nurani*)

This component provides input to enhance youth's knowledge and understanding on the specific topic. It gives specific instructions to instructors as described below:

1. Instructor gives input on believing in Allah.
2. To make the learning process more engaging, the instructor asks several questions to make the students think and reflect on the topic. Examples of the questions include definition, basic beliefs according to the teachings of Islam, and applications of the concept.
3. The instructor prepares gifts like chocolates, stationeries, fruits, etc. for youths that manage to respond to the questions correctly.

Figure 4 illustrates a page on Content Specification (*Juadah Nurani*) for the Muslim Personality Module©. It includes the objective of the lesson, followed by step-by-step guide for the instructors to conduct the activity. More importantly, the instruction page also specifies the time required to perform the Idea Generation component. To add, it highlights on the moral values that relates to the topic.

Arahan kepada moderator

1. Moderator menyampaikan input akidah yang benar dan akal yang sejahtera.
2. Moderator boleh menyelitkan beberapa soalan (lampiran 4) sewaktu input diberikan supaya pelajar lebih fokus seperti dibawah;
 - a. Apakah yang dimaksudkan dengan akidah?
 - b. Apakah asas akidah Islam?
 - c. Definisi akal yang berpengetahuan.
 - d. Apakah yang dimaksudkan dengan beriman dengan qada' dan qadar?
 - e. Nyatakan langkah yang boleh diambil untuk mengukuhkan akidah.
 - f. Mengapa kita perlu mempelajari ilmu feqah?
 - g. Sejauhmanakah kita perlu mendalami ilmu sains?
3. Moderator menyediakan cenderahati kecil seperti coklat, alat tulis dan buah-buahan kepada pelajar yang dapat menjawab soalan dengan tepat.

Nilai-nilai Murni:

1. Akidah yang benar asas kesejahteraan dan kemuliaan manusia di sisi Allah.
2. Akidah yang rosak membawa manusia ke pintu neraka dan keburukan yang berkekalan.
3. Akidah yang benar memerlukan ilmu yang benar.
4. Akidah yang benar perlu diikuti dengan sikap dan amalan yang benar.
5. Akidah yang benar membentuk aura pesona Muslim yang mempersona

Figure 4: Example of Content Specification on the topic 'Believing in Allah'

c. Dynamic Practises (*Dinamika Amal*)

In line with the implementation stage of ADDIE's model, the Muslim Personality Module© introduces a component called Dynamic Practices (*Dinamika Amal*). It refers to the actual effective and efficient delivery of the instruction using several techniques like flipped learning, blended learning, and problem-based learning. Most importantly, the learning module emphasizes on youth engagement in experiential learning and service learning in order to optimize on learning opportunities.

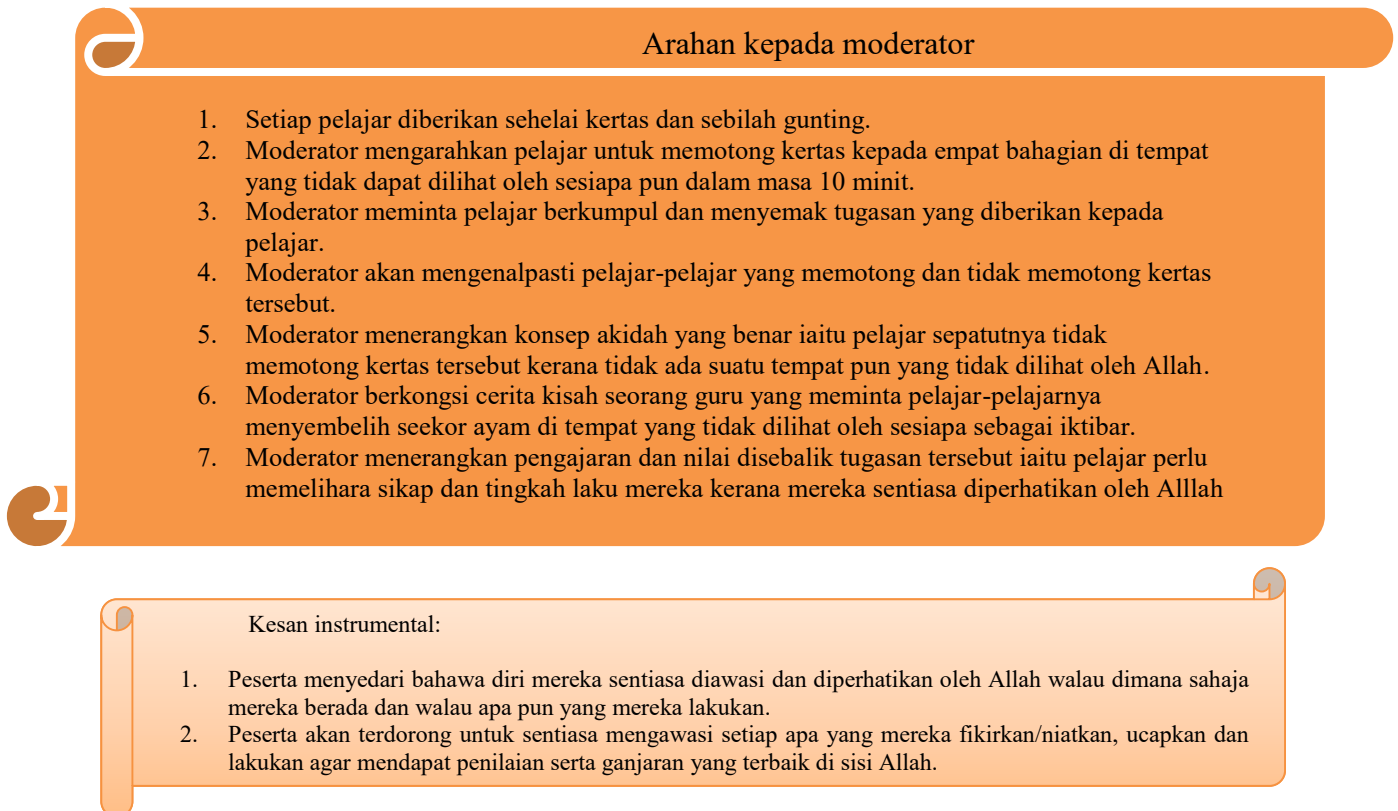


Figure 5: Example of Dynamic Practices on the topic 'Believing in Allah'

Figure 5 presents the front page of the third component of Muslim Personality Module© called Dynamic Practices (*Dinamika Amal*). It lays out a step-by-step guide to instructors in order to conduct the lesson. Further, the instruction page also mentions the time required to perform the Dynamic Practices component and provides the instrumental impact of learning that can be accomplished upon completion of the activities.

The following step-by-step guide for Dynamic Practices allows the instructors carry out the activity in a more organized way. The following list describes the instruction:

1. The instructor gave the youth a piece of paper with a pair scissors.
2. The youth had to identify a spot where nobody would be able to see him or her cutting the paper. They were given 10 minutes to perform the activity.
3. The youth returned to their seats and reported to the instructor.
4. The instructor then divided the youth into two groups: youth that managed to cut the paper without anybody seeing them in action and youth that did not cut the paper at all.
5. The instructor congratulated youths who did not cut the paper for their understanding of the concept 'believing in Allah'.
6. The instructor explained to the youth that Allah is great and He has the power within Him to hear, see and know everything that prevails even if it is leaf falling to the ground.

6. Conclusion

Personality development of youth requires a systematic approach and well-planned program which consists of learning activities that aim to cultivate integrity, dynamic personality and high moral values among Muslim youth. In the context of NYSI, it is important that youth are groomed according to religious teachings and values to curb from involvement in social delinquencies that may disintegrate their future. Thus, the collaboration between NYSI and UKM is timely to provide an alternative way in handling this issue.

Persona Muslim Module© is based on experiential learning approach which was developed according to the steps in ADDIE's instructional model. It entails a systematic methodology catering to the needs and expectations of youth particularly the trainees at National Youth Skills Institute of Malaysia (NYSI). The implementation of the module shows high level of acceptance of the three components of Persona Muslim Module ©: Idea Generation (*Jana Minda*) to trigger change; Content Specification (*Juadah Nurani*) to provide learning input; and Dynamic Practices (*Dinamika Amal*) to develop Muslim personality.

The niche of the Muslim Personality Module© relies in the integration of two worlds, the western education theory of constructivism and the eastern educational principle of Hasan Al-Banna. This establishes a contemporary and practical approach to mould strong personality to withstand all odds and maintain morality in this world without frontiers.

Acknowledgement(s)

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The Economic Role of Waqf-Based Crowdfunding in Alleviating Household Financial Vulnerability

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Abstract

The current studies in Malaysia regarding *waqf* focus on its role in poverty alleviation. However, much of the low-income households do not fall below the absolute poverty line but they are still vulnerable to the financial shocks. The role of *waqf* in reducing financial vulnerability among Malays is less explored. Moreover, the failure of the current *waqf* system in assisting the needy household has given rise to the debate of innovation in terms of crowdfunding. Hence, this study aims to identify the factors that make low-income Malay households vulnerable to financial shocks and how *waqf* based crowdfunding can mitigate it. For this purpose, both quantitative and qualitative approaches are used. In order to identify the factors that make the Malaysian household vulnerable to financial shocks, Autoregressive Distributed Lag Model is used as an estimation technique. The results show that household debt, income, prices of goods, interest rate, and unemployment rate are the factors that make Malaysian household vulnerable to financial shocks. However, its effect on the low-income groups is more severe. On the other hand, the role of *waqf* based crowdfunding is explored through qualitative method. An in-depth analysis of published and unpublished documents of new *waqf* based crowdfunding platform is performed. The results show that this platform has the potential not only to assist the poor but also the low-income financially vulnerable Malay households. The results can provide the basis for the policy makers in focusing the specific factors of financial vulnerability before designing pro-poor policies. It also provides a guideline for future researchers to explore the role of *waqf* in move innovative way so that maximum economic benefits can be achieved.

Keywords: Financial vulnerabilities; low-income Malays; waqf, crowdfunding; microcredit

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1. Introduction

Financial assets are an important source of income in case of financial shocks i.e. sudden loss of job et cetera. Due to no financial assets, there is the probability that bottom 40 percent or the low-income group will suffer more in the case of financial shocks. On the other hand, with the low purchasing power, low-income Malays and other ethnic groups will have to borrow in order to cover their monthly consumption. This situation can be seen from the findings of Global Findex 2014 where the borrowing of the low-income group increased from 2.9 percent in 2011 to 15.23 percent in 2014.

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According to the recent Bank Negara Malaysia report, the borrowings of the low-income group only make 11.3 percent of the total household debt but they are the most vulnerable to financial shocks. Due to less difference between the debt serving and monthly income (monthly income slightly higher than debt servicing) this group will face difficulties in servicing their debt in case of any financial shocks (BNM 2016a). The report has only identified two factors that may lead to financial vulnerability of the low-income group. However, at the macro level, household debt, income, prices of goods, debt repayment ratio and interest rate produce a significant effect on household financial vulnerability (Abdul Ghani 2010). Similarly, Rinaldi and Sanchis-arellano (2006) identified unemployment as an extra determinant of financial vulnerability. There are chances that the same factors translate the situation of lower income groups financial vulnerabilities because of the irregular incomes due to contract based or daily wage based job, and the current rise in the prices of goods which leads them to borrow loans.

However, due to the high rate of impaired loans among low-income groups, Bank Negara has tightened its policies regarding provision of any loan to them. The personal loans taken by these households are usually for the purpose of covering their medical expenses for schoolings (Salih 2014). If the doors of banks are closed on low-income group then they are left with fewer options i.e. microfinance institutions, family and friends or informal lenders as a last resort. The nature of loans provided by microfinance institutions are usually for business or entrepreneurship. They seldom provide personal loans which may leave the low-income household in a situation that he/she may opt to ask family and friends. If not fulfilled then as a last resort, the informal lenders may be approached.

In past, *waqf* has provided a platform for the poor and needy to flourish economically while reducing the burden on government budgets. In Malaysia, *awqaf* institutions come under the jurisdiction of each state's religious council. However, each State Islamic Religious Council use different administrative structure. The first two types assign their duties related to *waqf*, zakat and baitulmal to separate division whereas the third type is based on the corporatization of the *waqf* and baitulmal related activities (Siraj 2012). For instance, SIRC Selangor has delegated its *waqf* related activities to Selangor Waqf Corporation for better management (Sanusi & Shafiai 2015). However, even with the corporatization, the collections have greater fluctuations instead of constant increase. Secondly, the benefits of cash *waqf* are only limited to few of the beneficiaries and activities.

There is a great potential of cash *waqf* in providing financial assistance to the low-income group in decreasing financial vulnerability. However, technological innovations are important in streamlining the *waqf* collection and distribution. The innovation can come in the form of crowdfunding, a platform which provides access to the donors and the beneficiaries across the world. There are different types of crowdfunding platform that varies according to its purpose. For instance, peer to peer lending crowdfunding platforms, donation based platforms et cetera. The introduction of *waqf* based crowdfunding can not only provide a platform for both funders of the project and the project initiators but also more transparency where the funders or the donors can know where their donation is going.

Hence, this study focus on identifying the factors that makes the low income groups vulnerable to financial shocks and the role of *waqf* based crowdfunding in mitigating those factors.

2. Literature Review

2.1 Low income household's debt

After the Asian Financial Crisis in 1997-98, the banks shifted their focus from corporate sector to the household sector (Abdul Ghani 2010). Hence, the banking system has reached to the most of the population of Malaysia through financial inclusion policies of BNM. According to World Bank Financial Inclusion Database, about 81 percent of the Malaysian population ageing above 15 years have accounts in the banks. This has provided them with the opportunity to get easy financing through banks. It can be seen from the Global Findex Database, that financial inclusion rate has improved from 50 percent in 2011 to 75.5 percent in 2014 among the Bottom 40 percent of the income group (B40). At the same time, the borrowing of this low-income group also increased 2.9 percent in 2011 to 15.23 percent in 2014. Similarly, in 2011 3.43 percent of them possessed credit cards which increased to 10.53 percent in 2014.

The recent Bank Negara's Financial Stability and Payment Systems Report claims that the borrowings of low-income group (bottom 40 percent) makes only 11.3 percent of the total household debt, however, they are the most financially vulnerable group (BNM 2016a). Breaking down the loans by purpose shows that large portion of low-income group debt comprises of residential properties debt followed by car financing and personal loans respectively. Furthermore, due to thin financial buffers, the monthly income and debt servicing are almost equal that leads to low or no savings, this low-income group may face difficulty in servicing their debt in event of payment shock or financial shocks. This can be observed from the Debt Management program arranged by Credit Counselling and Debt Management Agency where the majority of those who defaulted on their loans are from B40 income group (Khazanah Research Institute 2016).

For further insight into the borrowing conditions of lower income is provide through Financial Margin Approach (BNM 2016a). The Financial Margin is derived by deducting monthly debt obligations of the household and expenditure on the basic necessities from personal disposable income. The household with negative Financial Margins is to face difficulties in paying back the loan in case of financial shocks. A Debt-at-Risk (DAR) metric is used by Bank Negara Malaysia to capture the potential source of risk, defined as the sum of the risk exposure to borrowers with negative financial margins. The report maintains that 15.4% of the total borrowers covered for the analysis have negative financial margins. The highest among them are found to be in the bottom 40 percent income group (21 percent of borrowers within the income group), with an estimated amount of DAR of about 3 percent.

Nevertheless, with the Debt Servicing Ratio (DSR) exceeding 60 percent, the low-income group borrowers have high negative financial margins for gross impaired loans (above the industry average of 1.6 percent) and gross delinquent loans (industry average of 1.5 percent). However, the negative financial margin among this group is observed even at lower DSR. The borrowers with DSRs exceeding 60 percent accounts for about 18 percent of the total borrowers across all income groups. Of this number, 60 percent are found to be in the bottom 40 percent category.

It is maintained that the household may end up in a debt trap where he/she has to borrow every month to pay back previous loan and cover up for the consumption. If this case is applied to the low-income group, who have high negative financial margins, chances of financial vulnerability increases which will lead to increase in gross impaired loans. However, apart from household income fluctuations and debt, there is more macro factor that increases the household financial vulnerability. For instance, increase in the prices of goods, interest rate or unemployment are other factors that may increase household income consumption and debt and ultimately inflate the financial vulnerability. However, the research on identifying the macroeconomic determinants that lead to financial vulnerability is scant. Hence, in the next section, an attempt is made to discuss those studies that have provided a methodological approach to identifying the determinants of financial vulnerability.

2.2 Macroeconomic determinants of financial vulnerability

Due to non-availability of sufficient income and rise in the prices of goods the household in Malaysia mostly borrow from two sources i.e. friends and family and banks. These loans can make the households vulnerable to financial shocks (Abdul Ghani 2010; BNM 2016a). However, there is not only rising household debt that makes the households vulnerable to financial shocks but also prices of goods, income, interest rate and unemployment also affects the savings of households which ultimately leads to financial vulnerability (Rinaldi & Sanchis-arellano 2006). In Malaysian context, the study found that household debt, income, prices of goods, interest rate and debt repayment ratio effects the financial capabilities of household (Abdul Ghani 2010).

However, there is no agreed index for a financial vulnerability that can be used for the empirical analysis. This is why less research has been conducted on the determinants of household financial vulnerability. For instance, Anderloni et al. (2012) used survey data to come up with the determinants of financial vulnerability. In contrast, Fuenzalida and Ruiz-Tagle (2010) used unemployment as a proxy for a financial vulnerability in Chile due to labour income as the main source of their livelihood. On the other hand, Dey, Djoudad and Terajima (2008) suggested debt-service ratio (DSR) as a proxy for household financial vulnerability. In addition, non-performing loans are used as a proxy for financial vulnerability (Abdul Ghani 2010; Rinaldi & Sanchis-arellano 2006). Non-performing loans (NPL) is a better proxy for financial vulnerability as it reflects the potential of the household to pay back principal loan or instalment in the 90 days. Secondly, due to increase in the banking loans, NPLs can provide a better reflection of household financial vulnerability.

As far as the household financial vulnerability is concerned, Rinaldi and Sanchis-arellano (2006) used panel data from seven euro countries and using panel group FMOLS and cointegration estimation they identified disposable income, monetary conditions and unemployment are the main determinants of non-performing loans. The basic model is given as:

$$npl_{i,t} = f(debt_{i,t}, income_{i,t}, real\ len_{i,t}, unempl_{i,t}, infl_{i,t}, hp_{i,t}, own_{i,t})$$

Where npl denotes log of the non-performing loans for country i at time t , $debt$ denotes log of the ratio of household debt to income, $income$ denotes log of the ratio of financial assets to household income, $real\ len$ represent real lending rate, $unempl$ denotes unemployment rate, $infl$ represents inflation, hp represents house price index, own denotes owners' dwellings.

In order to estimate the model, Fully Modified Ordinary Least Square method is used and the model is estimated with the given equation:

$$\Delta npl_{it} = \sum_{j=0}^{p-1} \gamma_{ij} \Delta z_{i,t-j} + \alpha_i (npl_{i,t-j} - \beta_i' z_{i,t-j}) + \mu_i + \varepsilon_{it}$$

Where time $t = 1, \dots, T$ and $i = 1, \dots, N$, npl is the ratio of non-performing loans, $z_{i,t-j}$ is the vector of explanatory variables (independent variables). β_i is the long run parameter and α_i is the equilibrium adjustment parameter. Moreover, μ_i are the fixed effects whereas ε_{it} is the error term. The results of the study showed that debt, income, inflation, real lending rate and unemployment rate stand significant.

Similarly, Abdul Ghani (2008) used OLS estimation for identifying the macroeconomic factors of household financial vulnerability. The study used the non-performing loan as a proxy for financial vulnerability, similar to (Rinaldi & Sanchis-arellano 2006). The model of the study is given as:

$$\log NPL_t = \beta_0 + \beta_1 (Debt)_t + \beta_2 \log(interest\ rate)_t + \beta_3 (drr)_t + \beta_4 \log(infl)_t + \beta_5 \log(income)_t + \varepsilon_t$$

Where NPL is the log of the ratio of non-performing loans to income at time t , $debt$ is the household debt, drr is the debt repayment ratio, the $interest\ rate$ is the average lending rate, $infl$ is the inflation rate and finally, $income$ represents household income for which GDP is used as a proxy.

The results of the study showed that all five explanatory variables except average lending rate significantly explain household financial vulnerability. Moreover, the effect of household indebtedness is stronger on household financial vulnerability as compare to other explanatory variables in the model. However, the study lacks in providing all the diagnostic as pre-requisite for performing OLS. This makes the results of the study spurious.

Recently, the study of Rinaldi and Sanchis-arellano (2006) is re-tested in Tunisian context, where Abid et al. (2015) used panel data from the period of 2003-2012 and covered a sample of 16 of the Tunisian banks. The results show that real lending rate, household debt and household income significantly explains the household financial vulnerability (NPL). Further, the effect of real lending rate is stronger as compared to the other two variables in the model.

2.3 The economic benefits of *waqf*

The economic dimension of *waqf* must not be neglected as it has contributed to a reduction in the government expenditure in the past. As it is discussed earlier that tax is one of the major revenue generators for the government and plays a vital role of a donor to government spending. *Waqf* at the times of Ottoman caliphate played a vital role in decreasing the government expenditure on essential services such as health, education, and municipal etc. with no cost whatsoever to the government. Such a massive reduction in government expenditure would help in decreasing government budget deficit and hence assist in lowering the need for government borrowing which would ultimately lead to the lowering of interest rate (Çizakça 1998).

In the conventional economy, the problem of undersupply of public goods is so often observed. Public goods are those which are consumed by an individual without reducing or eliminating its availability for the other individual (Bates 1997). The examples of public goods can be national radio and television services, defence services, public parks etc.

The real benefits of *waqf* were observed during Ottoman Caliphate due to its economic benefits to the society. *Waqf* was one of the major pillars of the public policy during Ottoman reign. The cities in their jurisdiction were the role model of development with the provision of the most basic and important public services provided to the general public (Çizakça 1998). The *awqaf* were made for the purpose of both religious and public benefits. For instance, the renovation, maintenance and salaries of the clerical staff of the mosques and other religious centres were paid from the revenue of those *awqaf*. In the field of education, these *awqaf* institutions were the major fund providers for the establishment of institutions for learning. Similarly, social safety nets to the public were provided from the revenues of the *awqaf* institutions (Peri 1992).

The benefits were not only extended to Muslims but also non-Muslims. As a result, soup kitchens, hospitals, shelters and other social welfare institutions served not only Muslims but also from other religions. For instance, when a Jewish who travelled from Egypt to Istanbul, he and his companions have spent a number of nights at a *waqf* endowed in which welcomed the traveller of every faith (Kuran 2001).

Another contribution of *waqf* system was towards minimising unemployment. In Turkey, *waqf* system has contributed significantly in providing employment other than those employed directly by the state. Recent studies on the potential of *waqf* have revealed that the system can significantly contribute to poverty alleviation by providing them opportunities to generate their income from favourable economic activities (Ali 2014; Hassan 2010; Haneef et al. 2013). However, the studies lack in providing a concrete model for the role of *waqf* in alleviating the financial vulnerabilities among the low income groups who may not be the poor but financial vulnerable.

2.4 Understanding the concept of crowdfunding

The concept of crowdfunding is derived from crowdsourcing and open sourcing. Crowding sourcing is defined as the process of outsourcing different tasks to a vast and often anonymous number of individuals, mostly through the medium of the internet and drawing on their resources, assets, and knowledge or expertise (Hemer 2011). For instance, an individual with a unique concept wants to develop a smartphone. In the case of crowdsourcing, he or she may outsource the development, marketing or distribution of the product through crowdsourcing platform to a large number of people. On the other hand, in open source setting, the production and development of the product is shared among the different people holding expertise and later sharing the outsourced material among them (O'Mahony 2003). This concept is usually used in software development.

The differences between open sourcing and crowdsourcing are that in the former whole project is outsourced whereas, in latter, a specific task is outsourced by an open call to a large number of anonymous people (Howe 2008). Secondly, in the case of open sourcing, the final product is available to everyone who participated in the development while in crowdsourcing the product becomes the property of the company or individual who initiated it. According to Leimeister et al. (2009), the motivation of the contributors in crowdsourcing is getting direct compensation for their efforts, learning from the project, self-promotion among the community and social benefits. The direct compensation is one of the important elements in the crowdsourcing however, the other factors such as enjoying the challenge of problem-solving or killing the time are also important motivating factors (Lakhani et al. 2007). However, a study negates the claim that compensation is the primary factor of motivation among the crowdsourcing funders where there is no

correlation found between the size of money and the success in problem-solving (Lakhani & Jeppesen 2007). On the other hand, in the case of open sourcing, there are three basic motivating factors for participating in the project. First, the contributors can enjoy the end product on which they worked, second, they enjoyed working on the project and third, they need high recognition among their peers (Raymond 2001).

The concept of crowdfunding is inspired by the same philosophy but the purpose is different. In crowdfunding, the main objective is to raise capital rather than taking benefits of other expertise. According to Kleemann et al. (2008):

“Crowdfunding involves an open call, primarily through the Internet, for the provision of financial resources either in the form of donations (without rewards) or in exchange for somekind of compensation and/or voting rights in order to support initiatives for specific purposes”.

It is well known that the medium that would be used for crowdfunding is the internet. Hence the services are provided through a web-based interface. These websites are called as ‘CF Platforms’ where the website owners act as a facilitator between both project initiators and the crowdfunders (fund provider). Most of the platforms do not do more than providing a platform to present a project and the financial software through which financial pledges are collected and administered. There are only a few of those ‘CF platforms’ that provide more than that such as give advice, organise public relations, make arrangements with micro-payment providers, etc.

In a typical crowdfunding platform (see Figure 1), the project initiator introduces a project on the CF platform. Based on the interest of the people or crowd in the project, they will contribute financially to the project. The project’s capital is maintained by the CF platform hence; the contribution will go the project account instead of going to the project initiator. In case, the project doesn’t achieve its set financial target, the money is returned to the funders by the CF platform.

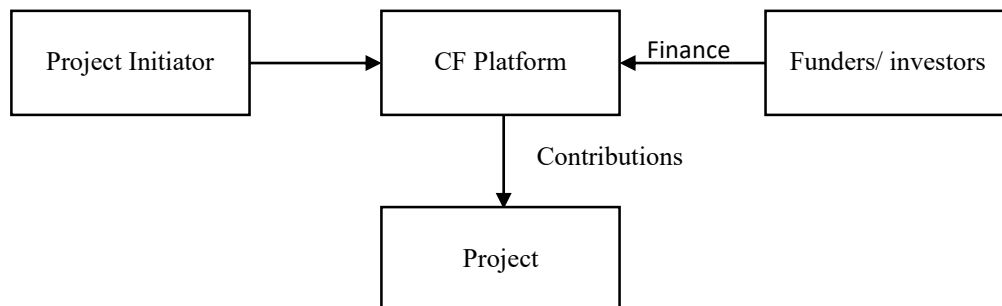


Figure 1: A typical crowdfunding platform

2.5 Implementing the concept of peer-to-peer and donation-based in islamic based crowdfunding

The peer-to-peer crowdfunding model of Kiva is reflecting the concept of *qard ul hassan* in Islam. Under this concept, the loan is given to the borrower without expectation of receiving an extra amount on the principal. On the other hand, the donation-based crowdfunding is using the same concept of *sadaqah* where an individual has given his money to the needy and poor with the expectation of receiving it back. Hence, the issue of *sadaqah* is that it may make the receiver dependent on private giving. In the case of Malaysia where the financially vulnerable class needs an opportunity of income generating activities. The low-income class is the most vulnerable to financial crisis. Hence, providing them with the micro-credits with charging minimal profit rates can help them to become entrepreneurs.

The concept of cash *waqf* crowdfunding has the potential of combining the concept of *qard ul hassan* and *sadaqah* in one model. The concept of cash *waqf* is different than *sadaqah* in a sense that the former can produce recurring benefits while the latter is deprived of this capability. In implementing the cash *waqf* model, the donor is called as *waqif* as he endows his cash for a specific campaign. The crowdfunding platform plays the role of *wakeel* or agent between the *mutawalli* (an NGO, microfinance institution or *awqaf* institution) and the beneficiary or borrower.

2.6 Waqf crowdfunding in practice

The crowdfunding industry is growing with rapid pace, especially the lending or peer to peer and donation-based crowdfunding sector. As of 2015, the crowdfunding industry has grown from \$2.7 billion in 2012 to \$34.4 billion in 2015. However, it is only lending-based crowdfunding that grown to \$25.1 billion alone while the second top is donation based crowdfunding sector with \$2.85. Importantly, the crowding industry in Asia is booming where 210 percent growth is seen since 2012, the highest than other regions. Africa is the second highest in terms of growth where 101 percent growth has been observed since 2012.

The popularity of interest-free P2P and Donation-based crowdfunding platforms showed the potential of cash *waqf* based crowdfunding in assisting the needy and the poor. The low-income groups can be provided with the loan facility as well as income generating activities in a better way than the above-mentioned platforms. By seeing the growth in the crowdfunding industry in Asia and Africa, their strong potential for *waqf* based crowdfunding because the majority of Muslim countries are in these two regions.

In this regard, Abid and Shafiai (2017) highlighted the issue of government transfer and stressed on promoting income generating activities among low-income Malays. The study emphasised the operational issues with the traditional *waqf* and proposed *waqf* based crowdfunding platform. Their proposed model suggests that the state-based and private *awqaf* institutions may play the role of project initiators whereas the Banks, Corporations, SMEs and Individuals would be the funders to the project.

In practice, the concept of cash *waqf* based crowdfunding is implemented by WaqfWorld.org. The platform is launched in 2016 with the aim to support the campaigns that are sustainable and have an impressive social impact. This will open the opportunities for the needy all over the world to take advantage. The second objective of Waqfworld.org is to develop the *waqf* lands, that are in strategic places but due to non-availability of capital they are idle. However, the priority is given to the humanitarian aid i.e. providing income generating opportunities to the poor and needy.

3. Methodology

From the literature, six macroeconomic variables are identified where the nonperforming loan is used as a proxy for financial vulnerability among the households. The other variables are Debt to GDP ratio, GDP (as proxy for household income), Consumer Price Index, Average Lending Rate, and unemployment. The following model is developed for further investigation.

$$NPL = \beta_0 + \beta_1 LDGDP + \beta_2 GDP + \beta_3 CPI + \beta_4 ALR + \beta_5 UNEMP + \varepsilon \quad (1)$$

Where *NPL* is log of non-performing loans which is used as proxy for financial vulnerability among the households, *DGDP* is the log of household debt to GDP ratio, *GDP* is the log of gross domestic product which is used as proxy for income, *CPI* is the log of consumer price index, *ALR* is the average lending rate, *UNEMP* is the unemployment rate and ε is the error term.

3.1 Data collection methods

3.1.1 Primary data sources

For the purpose of analysis, annual data regarding household debt to GDP is taken from several household financial vulnerability reports (BNM 2014, 2011, 2010). Quarterly data of GDP, CPI and unemployment rate is taken from International Financial Statistics IMF whereas monthly data of non-performing loans and the average lending rate is taken from the monthly statistical bulletin of BNM (BNM 2016b). The data in which is available in monthly and yearly format is converted to quarterly using *evIEWS*.

3.1.2 Secondary data sources

In order to get the deep understanding regarding financial vulnerability among Malay households, a number of secondary sources are referred. For instance, data about borrowings of B40 is taken from World Bank's Global Findex database. Similarly, to understand the patterns of saving and expenditure, Household

Expenditure Survey 2014 is referred. Other supplementary sources, such as journal articles, NGOs reports, books, and newspaper articles are also explored to find supporting data.

3.2 The theoretical model

In order to perform ARDL regression, unit root test was performed, all variables are stationary at first difference. It provided grounds for developing the model for identifying the determinants of financial vulnerability in long-run. The equation is given as:

$$\begin{aligned} (\ln(Y_t)) = & \beta_0 + \sigma_1 \ln(Y_{t-1}) + \sigma_2 \ln(K_{t-1}) + \sigma_3 \ln(L_{t-1}) \\ & + \sigma_4 \ln(M_{t-1}) + \sigma_5 (N_{t-1}) + \sigma_6 (F_{t-1}) \\ & + \sum_{i=1}^p \beta_1 \Delta(\ln(Y_{t-i})) + \sum_{i=1}^p \beta_2 \Delta(\ln(K_{t-i})) + \sum_{i=1}^p \beta_3 \Delta(\ln(L_{t-i})) \\ & + \sum_{i=1}^p \beta_4 \Delta(\ln(M_{t-i})) + \sum_{i=1}^p \beta_5 \Delta(N_{t-i}) + \sum_{i=1}^p \beta_6 \Delta(F_{t-i}) + \varepsilon_t \end{aligned} \quad (2)$$

Where Δ represents the first difference operator and p is the optimal lag length. Moreover, β represents the short-term dynamics of the model whereas σ denotes the long run relationship of the model. Due to less observation in the data, the lag is set at four using AIC criteria. The lag criteria are consistent with the study of Khan, Abdullah & Samsudin (2016) where the number of observation was 64. Once, the ARDL test is performed, the equation of null hypothesis is estimated through Error Correction Model (ECM). The equation is given as:

$$\begin{aligned} \Delta(\ln(Y_t)) = & \sum_{i=1}^p \beta_1 \Delta(\ln(Y_{t-i})) + \sum_{i=1}^p \beta_2 \Delta(\ln(K_{t-i})) + \sum_{i=1}^p \beta_3 \Delta(\ln(L_{t-i})) \\ & + \sum_{i=1}^p \beta_4 \Delta(\ln(M_{t-i})) \\ & + \sum_{i=1}^p \beta_5 \Delta(N_{t-i}) + \sum_{i=1}^p \beta_6 \Delta(F_{t-i}) + \lambda ECT_{t-1} + \varepsilon_t \end{aligned} \quad (3)$$

Where β_1 to β_6 are the short-run dynamic coefficients of the model's convergence to equilibrium and λ is the speed of adjustment. It must carry a significant negative sign with the value between 0 and 1.

4. Results and Discussion

In the time series analysis, in order to run the causality test, it must be made sure that the variables are stationary. Taking the variables from equation 1, unit root test using ADF technique suggested by (Dickey & Fuller 1981) is performed. It is important to perform unit root test as the ARDL bounds test is based on the assumption that all the variables in the model must be either $I(0)$ (at level) or $I(1)$ (first difference). The results of the test are given in Table 1.

Table 1: ADF Unit Root Test

Variables	SIC Lag	t-statistics	Augmented Dickey and Fuller test	
			Critical values at 5%	P-value
<i>LNPL**</i>	0	-4.96	-2.926	0.0002
<i>LDGDP**</i>	0	-3.77	-2.926	0.0060
<i>LGDP**</i>	0	-5.38	-2.926	0.0004
<i>LCPI**</i>	0	-6.17	-2.926	0.0000
<i>ALR**</i>	0	-3.20	-2.926	0.0261
<i>UNEMP**</i>	0	-3.57	-2.925	0.0061

**model with intercept

As ADF unit root test showed the variables are stationary at first difference and levels, hence, based on equation 1 and 2, the ARDL model for this study is given below:

$$\begin{aligned} \Delta LNPL = & \beta_0 + \sigma_1 LNPL_{t-1} + \sigma_2 LDGDP_{t-1} + \sigma_3 LGDP_{t-1} + \sigma_4 LCPI_{t-1} + \sigma_5 ALR_{t-1} + \\ & \sigma_6 UNEMP_{t-1} + \sum_{i=1}^p \beta_1 \Delta LNPL_{t-i} + \sum_{i=1}^p \beta_2 \Delta LDGDP_{t-i} + \\ & \sum_{i=1}^l \beta_3 \Delta GDP_{t-i} + \sum_{i=1}^p \beta_4 \Delta LCPI_{t-i} + \sum_{i=1}^p \beta_5 \Delta ALR_{t-i} + \sum_{i=1}^p \beta_6 \Delta UNEMP_{t-i} + \varepsilon_t \end{aligned} \quad (4)$$

The estimation of model one is performed through ARDL (3, 4, 4, 4, 3) lags selected through AIC. The results from the bound test as can be seen in Table 2 shows F-statistics value larger than the upper bound which confirms the existence of cointegration among the variables.

Table 2: Bounds Test

Critical Values at 5% significance level	F-Statistics
Lower bound 2.62	37.02
Upper bound 3.79	

The results based on the long run model as shown in Table 3 confirms that the rise in household debt, the price of goods, interest rate and the unemployment rate, makes household vulnerable to financial shocks and affects the capability to repay the loans. However, with the decrease in household income (GDP used as a proxy) the chances of household financial vulnerability increases as it affects the savings. The results are very much similar to the study conducted by (Rinaldi and Sanchis-arellano 2006) however, the study was based on panel data and they estimated the model through FMOLS co-integration.

Table 3: Estimated Long-run Coefficients using ARDL Approach

Variables	Coefficients	Significance
<i>C</i>	3.25	0.00001
<i>LDGDP</i>	0.08	0.00001
<i>LGDP</i>	-0.39	0.00001
<i>LCPI</i>	0.24	0.01650
<i>ALR</i>	0.11	0.00001
<i>UNEMPLOY</i>	0.08	0.00001

Income has a strong effect on the household financial vulnerability as 1 percent decrease in income will increase the probability of household financial vulnerability by 0.39 percent. The impact of income on financial vulnerability is very similar to the findings of (Abdul Ghani 2010) according to which 1 percent increase in income NPL decreased by 0.38 percent. However, the estimation was done through OLS regression. On the other hand, with 1 percent increase in the prices of the commodity will increase will increase the chances of household financial vulnerability by 0.24 percent. Similarly, with 1 percent increase in the cost of borrowing, there are 0.11 percent chances that the household would fail to repay loans. In addition, with 1 percent increase in the household debt and unemployment rate, there are 0.08 percent chances the household will become vulnerable to financial shocks.

The equation for this study with which confirms the rejection of null hypothesis (no co-integration) is estimated through equation 5 which is derived from equation 3.

$$\sum LNPL_t = \sum_{i=1}^p \beta_1 \Delta LNPL_{t-i} + \sum_{i=1}^p \beta_2 \Delta LDGDP_{t-i} + \sum_{i=1}^p \beta_3 \Delta LGDP_{t-i} + \sum_{i=1}^p \beta_4 \Delta LCPI_{t-i} \quad (5)$$

$$+ \sum_{i=1}^p \beta_5 \Delta ALR_{t-i} + \sum_{i=1}^p \beta_6 \Delta UNEMP_{t-i} + \lambda ECT_{t-1} + \varepsilon_t$$

Starting with long-run, the coefficient in Table 4 on one lag error-correction term is significant at 1% level with the negative sign, which approves the results of the bound test for the existence of cointegration. The coefficient value of -0.53 which implies the speed of adjustment to the equilibrium after deviation is high. For instance, 53 percent disequilibria from the previous quarter will converge back to the long-run equilibrium in the current quarter.

Table 4: ECM Speed of Adjustment

Variable	Coefficient
$ECT (-1)$	-0.53^{***}

*** Variable significant at 1%

The model passes all the diagnostic tests against serial correlation and heteroskedasticity. Serial correlation is estimated through Breusch-Godfrey LM test (see Table 5). The p -value of above 5% confirms the acceptance of null hypothesis of no serial correlation. Heteroskedasticity test and Breusch-Pagan-Godfrey test provided p -value of above 5% which approves the null hypothesis of no heteroskedasticity.

Table 5: Serial Correlation and Heteroskedasticity Test

Diagnostic Tests	Obs*R-sqaure	Significance
Breusch-Godfrey Serial Correlation LM test	2.45	0.29
Breusch-Pagan-Godfrey Heteroskedasticity test	16.94	0.93

Considering the results, income and prices of goods are two main determinants that have a strong effect on the non-performing loans which represents the financial vulnerability of the household. It means that with the decrease in income and increase in prices of goods, the households are more exposed to the risk of financial vulnerability. In the current situation, the low growth in GDP (a proxy for income) and an increase in CPI (prices of goods) is observed in Malaysia which can lead the households to borrow for covering the consumption expenses. In the situation where household (especially the low-income household) have no savings, there is a strong probability of not only becoming vulnerable to financial shocks but also default on loans. The second strongest effect on the financial vulnerability is produced by the interest rate. However, data used for this study shows that the interest rate in Malaysia is decreasing. The least significant effect on the financial vulnerability as compared to other determinants in the model is produced by unemployment and debt but the fact cannot be avoided that with no savings and high household debt if the household gets deprived of this employment, the probability of bankruptcy gets stronger.

4.1 The effect on low income group Malays

These factors can affect the low-income households Malays more than others. The low-income household's livelihood is linked with farming and contract based job. The contract-based jobs are usually based on the projects and once the project is completed, a household can be jobless. The tenure of unemployment depends on the availability of next project. Hence, the uncertainty in the employment is higher in these odd jobs. On the other hand, a decrease in the growth of agriculture sector is observed since 2012 which also led to the increase in the unemployment rate.

Due to low economic growth, implementation of new taxes and uplifting of subsidies will make this group more vulnerable because of possessing of no financial assets that can help them in the case of financial shocks. In this case, the option for survival is taking a personal loan from financial institutions. These personal loans are usually based on variable interest rates which can financially hurt them more if the interest rate is increased. In fact, due to unplanned borrowing, this group can go into default. It is observed from the Global Findex report that low-income household borrowings are increased from 2.9 percent in 2011 to 15.23 percent in 2104. In the meanwhile, the default rate of low-income groups is also increased and they make the major part of the overall household defaulters.

As being risky borrowers, Bank Negara has tightened its policy against low-income groups in order to reduce the nonperforming loans arising from the household sector. In such circumstances, many of the farmers and contract based employees will suffer due to their uncertain income. This uncertainty will lead to negative impact on their credit rating and with low rating households are unable to borrow from banks. In fact, the empirical findings have concluded that uncertainty in income, the rise in household debt, an increase in prices of goods, interest rate and unemployment leads to financial vulnerability. All these factors stand true for the low-income Malays, therefore making the banking sector defensive in their borrowing strategy against this risky income group.

4.2 The Implementation of waqf-based crowdfunding to reduce financial vulnerability

The conventional *waqf* mechanism is unable to cover the financial vulnerability aspect of the household and only limited to poverty alleviation. Hence, the initiative is taken by Waqf World Growth Foundation by introducing *waqf* based crowdfunding platform. The advantage of a crowdfunding platform is that it can reach to a maximum number of donors throughout the world by allowing them to choose the cause of their choice and fund it. Secondly, it has the capability of covering a large number of social causes that can reduce financial vulnerability. For instance, introducing campaigns about providing scholarships to the needy students, medical facilities, microcredit, providing shelter to the orphans and so on. The same concept is implemented for *waqf* based crowdfunding as well where project initiators can initiate a cause which is called as campaign or project. The donor or *waqif* can then endow cash for the campaign for their choice.

The *waqf* based crowdfunding can provide an alternative solution to reduce the financial vulnerability among the low-income Malay household. As the factors that make the low-income Malays vulnerable to financial shocks are identified, this platform can assist in reducing financial vulnerability. For instance, providing interest-free micro-credit loans will mitigate the problem of income uncertainty as this loan can help in income generating activities. This is an extra income that they can generate from side business apart from their main job (i.e. farming and contract based jobs). This type of loan can affect other factors of financial vulnerability positively. For example, if the extra income covers their food and housing utilities which make a major chunk of their income, the reliance of loans in future will decrease. Moreover, due to interest-free nature of the loan, there is not variable interest charged, which will resolve the issue of increase in debt because of the rise in interest rate. The unemployment issue will be solved in case there is no jobs available in short run, they can cover their expenses from the side businesses.

The platform is not limited to microcredit only but causes such as providing scholarship and free health facilities from the *waqf* money can resolve the issue of loans taken for health and schooling. Similar project or campaigns are introduced by peer to peer and donation-based crowdfunding platforms, however, the perpetual nature of *waqf* gives an edge to the *waqf*-based platform. In peer to peer crowdfunding loans are channelled to the campaigns by the funders. The nature of the loans can be either interest-free or interest based. In the donation-based crowdfunding platforms, the charity amount is spent on the campaign directly.

In the case of *waqf* based crowdfunding, the amount that is received for a specific campaign will be invested in profit-oriented activities and the returns from the investment will be disbursed to that cause. In this case, the capital will be intact and generates perpetual returns.

These objectives from the waqfworld crowdfunding platform can only be achieved if the operational framework is strong enough to answer the issues that may arise during the operation. The concept of waqf-based crowdfunding is more technical because of fulfilling the Shariah rules related to the *waqf*. The rule of perpetuity, irrevocability and inalienability must be followed as per rules of Islamic jurisprudence. Hence, for this purpose an operational framework is suggested to strengthen the activities of wafworld.org in alleviating financial vulnerability among the low income Malays.

In the proposed framework, the current structure is maintained where two type project initiators are involved. However, it is the proposed operational framework of the Microfinance institutions, the inclusion of Shariah screening, and the due diligence that make the overall operational framework of the Waqf World crowdfunding different. Figure 2 in the appendix illustrates that once the MFI clears the due diligence process, it can initiate a campaign on the platform. As proposed earlier that, MFI will initiate a campaign category rather than single campaign, the same concept can be seen in proposed framework of *waqf* world crowdfunding.

However, before the campaign category is uploaded on the platform, it must be cleared by the Shariah advisors. The Shariah advisors must also screen the campaigns that are added to the category time to time. Once the campaign category is uploaded on the platform it will be visible to the public who will endow their cash for the campaign category. However, for WWGF the *waqif* can endow cash to specific campaign under major causes or sustainability cash *waqf*.

The cash endowments to the MFI's campaign group will be channelled to all the project or few projects under the category, depending upon a number of funds raised. On the other hand, the *waqif* can endow cash to a specific campaign of WWGF, where that fund will be invested and the returns will be channelled to the campaign specified by the *waqif*. It is the responsibility of Shariah advisors to make sure the investments are made in the Shariah-compliant activities and the returns go to the *waqif's* specified campaign.

The campaigns that are funded by the MFI from the endowed cash must be disbursed as microcredit in accordance with Islamic financing contracts. It is the responsibility of the Shariah advisors to make sure that the MFI has channeled the microcredit in accordance with Shariah principals. Once, the beneficiary of the campaign starts repayments it will be divided into two accounts, one deals with the principal and the other with profits. The principal will go back to the campaign category while from the profits first the operational costs of MFI will be covered and the net profit will be channelled to WWGF campaigns as *sadaqah*. However, this amount will go the sustainability *waqf* category to cover the operational costs of WWGF.

5. Conclusion

There are five macroeconomic factors that are identified that affect Malaysian household financial vulnerability significantly. The two important factors are income and prices of goods. To explain further, with the decrease in household income, the chances of financial vulnerability increases. Similarly, with the increase in the prices of goods, household financial vulnerability increases. Moreover, with the increase of household debt, interest rate and unemployment, the household financial vulnerability rise significantly. However, these factors affect the low-income household more than those at the middle at top income levels. This is because low-income Malays are employed in agriculture sector or having contract based jobs. From the analysis, it is observed that the unemployment in the agriculture sector is increased. Similarly, the contract based jobs are not permanent and bound to the contract tenure. Hence, the income is not fixed but may be lost due to non-availability of the job. It is also important to note that the income in these sectors is also low as compared to other sectors of the economy. The current increase in the goods prices can easily increase their consumption expenses. These factors lead them to borrow loans for consumption and emergency purposes. It is observed that most of the personal loans are based on variable interest rate and it can affect the overall loan payments if the interest rate increases. Due to this increase, the low income can suffer more as their income is low and the rescheduling the loan can affect their overall income and

capability to pay the loans. It is observed from the findings that those who defaulted on loans are mostly low-income groups. Hence, the Bank Negara Malaysia has asked the banks to tighten their policy in providing loans to the low-income groups.

In order to avoid personal loans and provide microloans to low-income Malay households for income generating activities will not only flourish the economy but will also help to reduce financial vulnerability. However, the MFIs are not able to provide loans to the large segment of the low-income groups because of limitation of the capital. Hence, the role of *waqf* crowdfunding gets important because it provides free capital (cash endowments from the public) which can be given to the low-income groups on easy terms. Currently, *waqfworld.org* is the only platform that provides *waqf*-based crowdfunding facility. Hence, an operational framework for this platform is proposed that can help in alleviating financial vulnerability among low income Malays.

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Appendix

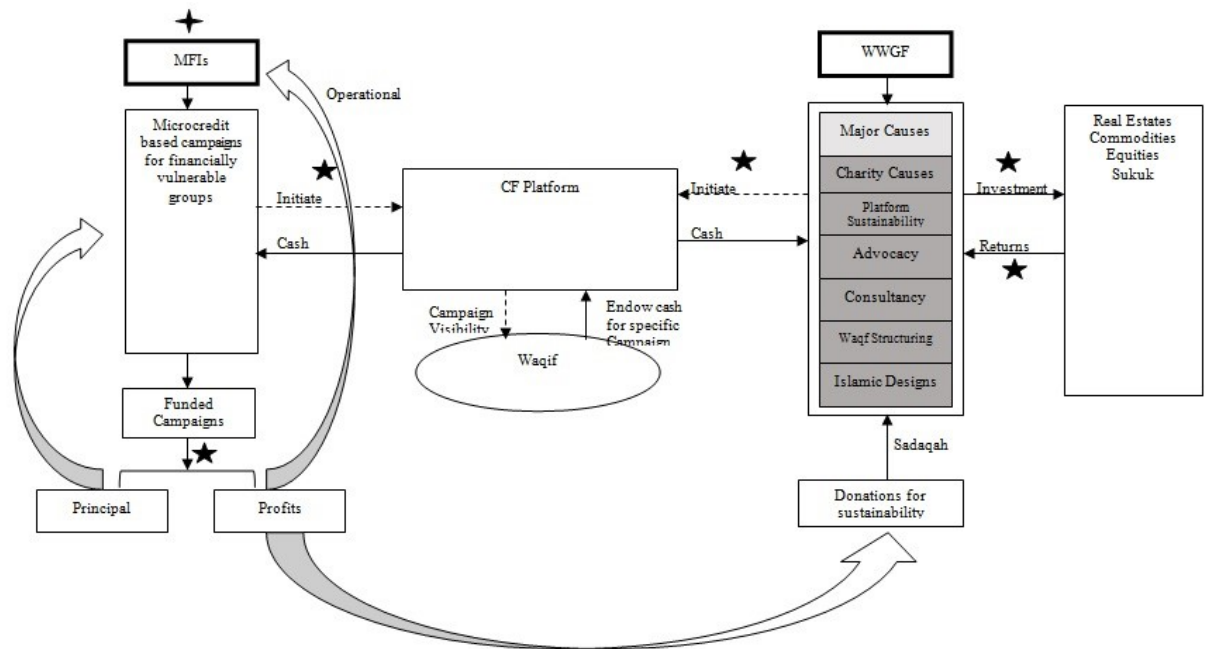


Figure: The proposed Operational Framework for WaqfWorld Crowdfunding

Note: ★ = Shairah Screening; + = Due Diligence



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Nurturing Islamic Values in Family via Self Discipline

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Abstract

The research aim to explore the Muslim mother's approaches in nurturing Islamic values in family via the child self-discipline. A series of semi structured interview, document analysis and observation were implement to answer the research question using Grounded Theory approach in qualitative research method. Result found eight main emerging themes: Religious Knowledge, Self-Awareness, Clear Limitation, Flexible Approach, Table Manner, Positive Advice, Storytelling and Reasoning. Family is the best place to nurture Islamic values since early age. Here, the Muslim mothers used their creativity and dedication to nurture Islamic values via the child self-discipline. It is a blend of religious virtues, rules and regulation, and cognitive empowerment in a creative way.

Keywords: Islamic values; child discipline; educational psychology; family development

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1. Introduction

Islamic values are a set of values from the Quran and hadith. The teaching of Islamic values is fundamental for the younger generations in the family. One of the best ways in nurturing the values is via self-discipline. Thus, one simple question arise: "How the Muslim mothers nurture Islamic values towards their children via self-discipline? Thus, this paper will discuss about this issue using a grounded theory approach in qualitative research design.

2. Literature Review

Discipline is guiding and managing of the child behaviour (Gonzalez-Mena 2006). Discipline comes from the word disciple, which means learning by teaching (Brooks 2010). The purpose of discipline is to build self-discipline. Self-discipline is one's acceptance and responsible to certain rules as his/her life guidance (Brooks 2010). Brooks (2010) suggested that parents to use natural and logical consequence, focus on prevention or proactive approach, find the triggers of the negative behaviour, offer positive feedback and encouragement and reinforce positive behaviour by giving rewards to build self-discipline.

In al-Ghazali's Model of Parenting Skills (Jamiah & Sidek 2016), child discipline is the main element of strengthening children relationships with their parents. Discipline is an act where parent could

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mentor, supervise the children behaviour and incorporate positive values through religious teaching, enjoining good while at the same time enlighten the children to realize the importance of avoiding sinful act.

3. Finding and Discussion

Ibu Mithālī nurture Islamic values via self-disciplined to their children through religious knowledge, self-awareness, giving certain limit, supervise eating manner, giving advice, narrating exemplary stories and reasoning. Many people believe discipline is punishment (Gonzalez-Mena 2006) and *Ibu Mithālī* showed that, there are many ways to discipline the children. This is in line with Islamic ways of disciplining the children which include several steps, beginning from giving advice and separation, to non-severe punishment (Abdullah 2010).

3.1 Religious Knowledge

Ibu Mithālī sent their children to religious school. There, they learnt the religious education and the ethics in engaging on a relationship with others.

They would learn, because they study in religious school, and surely the skills would be learnt at school, no need to worry, since childhood, whenever people came and visit, they would shake hand to show respect, previously the children were taught not to approach the parents and requesting this and that (when the parents were receiving visitor).

(Madam Awiah, the 10th *Ibu Mithālī*)

3.2 Self-Awareness

Self-awareness will develop the sense of responsibility and enhances the child's maturity. Madam Esah always reminded her children that they came from a poor family and she encouraged them to always live their life in moderation.

Dad and mom always said...we came from poor background, therefore self-awareness is very important...my father always said, we must measure thing within our capacity.

(Mrs. Rosilah, Teacher, Madam Esah's daughter)

Mr. Khairul and his siblings never asked for something that is beyond their family could afford. This is because they were aware of the family hardship.

We would never force (to buy anything) because we understood our situation where money was difficult to obtain.

(Mr. Khairul. Government Officer, Madam Alang Kamariah's son)

Madam Alang Kamariah disciplined her children by preparing them with strong foundation in Islamic education. Apart from that, she reminded them on the limitation that the parents could afford to pay for their needs, especially in terms of money. These two elements had given strong sense of awareness to her children in controlling their desire and further encouraged them to be independent.

It is not difficult in disciplining them, maybe because they had the good foundation in religion and were informed informally of their parent's limitation.

(Madam Alang Kamariah, the 8th *Ibu Mithālī*).

3.3 Provide Limitation

Ibu Mithālī employed limitation in disciplining the children. When the children approached teenage years, they needed clear limit as a guideline in their daily life. The limits signified the love and sympathy towards

their children were in accordance with the teaching of religion. As a Muslim, the parents should prioritize the Islamic teaching rather than their love and sympathy towards their children (Abdullah, 2010). Thus, the restrictions on certain activities were in good intention to protect the children from negative behaviour and this was also blessing in disguise for the children. The good intention too meant that Ibu Mithālī were merely protecting their children so that their true potential would not be at stake. The noble act is in agreement with the prerequisite of the faith, which requires a Muslim to love the prophets more than their children and their wealth (Narrated by Bukhari and Muslim), and love their children for the sake of Allāh only (Narrated by Bukhari). Based on this too, Ibu Mithālī trained their children since childhood to obey Allāh by providing limitation and certain rules to enable them to be a true Muslim, at least until it turned into a ritual and habit when the children have grown up and matured.

Madam Esah for example, prepared a special room for her daughters. The room was separated from the sons so that incest could be prevented.

There was one room for the daughters, and the son would be outside (the room), meanwhile from educational aspect, there was no different, but she said there must be a certain limit even among siblings.

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

In curbing unnecessary behaviour outside residence, Madam Esah always advised her children to apply the knowledge in school and take care of each other.

She always said...the knowledge that Mak imparted, use it to take care of yourself.

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

She then continued:

Behave yourself meant in the context of the relationship between men and women...there was no detail...the only she advised she gave was to take care of ourselves... men and women must always beware...she said, Mak have given you education...it is the use of the knowledge that you have (to your advantage).

Madam Wan Mas allowed her children to involve in any activities at the universities. However, with all the freedom, she also warned them to keep the good name of the family. She gave them a stern reminder through the very philosophy that said: *"Do what you want to do, as long as it does not embarrass your parents."* The philosophy later became their guidance wherever they go. It shields them from immoral behaviour or any act that would potentially degrade their family name. They were always careful in their attitude to ensure the good name of the family.

The philosophy which was most remembered...do what you (want to) do, as long do not bring shame to the father and mother...So Aunty tried everything in the university...everybody knew...but I never go beyond (the limit).

(Mrs. Nik Mastura, Former Educational Officer, Madam Wan Mas's daughter).

...there was fine line that restrict us like: "Do not exert the family shame", "Do not leave the prayer" and "Respect the old people". This sacred reminder would not be forgotten by their children.

(Nik Safiah & Rokiah, 2004).

Madam Awiah was also very particular when it concerns the relationship between man and women without marital status.

I am aware of this, I would talk to him (the children), Only if they have been engaged, and as long you remain engaged, I would not allow the fiancé to come to my house, without family accompanying her, but for wedding invitation, then I make an exception. Other than that, with the intention to bring her to my house in order to be in a date, then it is a no.

(Madam Awiah, the 10th Ibu Mithālī).

3.4 Flexible Approach

Ibu Mithālī also employed flexible approach in nurturing the children. They would be stern in certain occasion while at different situation they would give more freedom. For example, Madam Esah would not tolerate school absenteeism. She would make sure the children attended school even though they were lazy. This indicated *Ibu Mithālī* used consistence practice of discipline towards the children. According to Tong and friends (2009), inconsistency discipline had negative correlation with children's vocabulary development. This approach also enables the children to understand their limit of behaviour.

They would give excuses not to attend school...they even said to me headache and all...then I would reply...today is a school day (so no excuse).

(Madam Esah, the 9th Ibu Mithālī).

Mrs. Rosilah too understood the situation facing her mother. She believed that sometimes, her mother needs to be firm in order to manage the big family and work at the same time. Nevertheless, her mother was not as firm as her father.

My mom raised 17 children, with the help from my father...My mom had no time to pamper the children...she was firm, but not so much like father.

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

Similarly, Madam Wan Mas was also firm in certain occasion. She reprimanded the children whenever they make mistakes. But she would also display a liberal attitude and open minded in accepting the children weaknesses and lack of experiences.

My father and my mother were open-minded but very strict at the same time, if we made any mistake, of course there would be a punishment.

(Mrs. Nik Mastura, Former Educational Officer, Madam Wan Mas's daughter).

She also added:

This meant that for every mistake there will be a punishment, but if there were no ill circumstances, then she is ok.

Mrs. Nik Mastura later is influenced with this characteristic. She is well known for her firm character in the previous school. However, she is also a kind person and always smiles to others.

It is the same thing at the school. I am very strict...you can go and ask any school that I have worked at, the pupil would say, I'm very firm, and they would prefer to see the Principal rather than me even though I am the Senior Assistant to the Principal.

(Mrs. Nik Mastura, Former Educational Officer, Madam Wan Mas's daughter).

3.5 Table Manner

The time spent during each meal becomes one of the best avenues for *Ibu Mithālī* to further discipline their children. It is aligned with Rasūlullāh SAW method in educating children. Rasūlullāh once told Umar bin Abi Salamah to remember Allāh, eat with right hand and take the nearest food when Umar wanted to take

some food from a bowl. At that time, Umar was still small and Rasūlullāh took care of him (*narrated by Muslim*).

Madam Esah trained her children to respect parents before and during the meals. Whenever they go for work, the children would set aside the meals for their parents.

We would set aside the meals for our parents before consuming it...Mom always said that we must respect older people...This means that we must never give leftover food... respect the elder... set it aside earlier...especially for parents when they return at noon. We would eat first, so it is inappropriate to give them the food that we had eaten.

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

Madam Kalsum's children waited for their father before start eating. Their parents were their first priority.

We would wait for father to be in the house, and waited for him at the dining table, and then only (we) eat...it is not good (to eat first), parents must be prioritized.

(Ustaz Ashraf, Lecturer, Madam Kalsum's son).

Whenever they had guest at home, Madam Wan Mas's children would give priority to the guest. They were trained to respect the guest. They were not allowed to eat with the guest and this was to ensure that the guest would feel comfortable and received enough food.

We could not eat together, we must respect the guest, and if there's a guest, we had to eat in the kitchen...it was good too, just imagine what would happen if the food is not enough...

(Mrs. Nik Mastura, Former Educational Officer, Madam Wan Mas's daughter).

Ibu Mithālī instructed the children to recite *doa* or at least read *Bismillāh* prior to taking their meals.

This is more like it, (we must) recite the *doa* to bless the food.

(Madam Esah, the 9th *Ibu Mithālī*).

Read *Bismillāh*.

(Dr. Aminah, Medical Doctor, Late Madam Maimon's daughter).

At least, read *Bismillāh* before eating.

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

When having meals...eat politely, read *Bismillāh*.

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

During meals, Mrs. Nik Mastura and her siblings would be quiet.

During the meals, we must not talk.

(Mrs. Nik Mastura, Former Educational Officer, Madam wan Mas's daughter).

Mrs. Rosilah and her sibling also practiced the same thing. She said that:

In the early year, we did not speak while having meals.

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

Dr. Ahmad and his sibling were also taught to eat quietly. They were prohibited to discuss about undesired things while in front of the food.

Don't talk especially disgusting things and etc.

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

Madam Nik Mastura and her siblings also eat quietly. They were also forbidden to drink while eating.

During meals, clamorous is forbidden...and we were not allowed to consume water while eating.

(Mrs. Nik Mastura, Former Educational Officer, Madam Wan Mas's daughter).

Dr. Ahmad and his siblings would also ensure they finish all food on the plate to avoid wastage.

Make sure the thing in the plate is finished, so there would be no wastage.

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

They were taught to sit properly and not to be choosy while eating. They had to sit properly and stop eating when full.

We were instructed to sit and must not stand up while eating...We could not be too choosy either...we have to avoid gluttonous, and if we are full, then stop...don't be greedy...

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

Madam Awiah ensured her children recited a supplication, practiced good eating manner and shared the meals.

Recite supplication. Eat properly. Don't take all the meals. Sharing is the most important thing here.

(Madam Awiah, the 10th Ibu Mithālī).

3.6 Positive Advice

Ibu Mithālī always advised the children in all aspect of life and this was done to guide their attitude and behaviour.

Ibu Mithālī gave quick feedback when the children commit any mistakes or quarrel within each other. Feedback is one of the methods to prevent or stop negative behaviour (Gonzalez-Mena 2006). The best feedback was on the spot reprimand, which was quickly informed about the mother's feeling towards the children whenever they were involved in negative behaviour. Then, the children are encouraged to talk with one another. According to Gonzalez-Mena (2006), it would also help the children to solve their problem.

She always gave advice...

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

I just nagged (if the children quarrel).

(Madam Esah, the 9th Ibu Mithālī).

My mother did not scold us and that she was not cool either... of course she would nag if we annoyed her and that would make her angry. We have just to be careful should we want to avoid her nagging.

(Mrs. Nik Mastura, Former Educational Officer, Madam Wan Mas's daughter).

She tended to give good advice.

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

(She taught us) with the act of persuasion, giving advice, and skilful in describing a situation, in positive manner and rational.

(Madam Alang Kamariah, the 7th *Ibu Mithālī*).

If we involve in quarrel...She advised us because it was something she opposed (us fighting)... Her exact words were, God hated people who

fight with each other...

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

Ibu Mithālī were also utilizing pro-active approach in disciplining their children. One of which is teaching pro-social behaviour (Gonzalez-Mena 2006), by giving advice on how to behave in public. Her approached enable the children to learn appropriate behaviour.

She would say, mind your behaviour, sit properly...if people do not give you food, don't take it...

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

Madam Esah believed that the school too play significant role in educating her children for moral virtues. As a mother, she continued to impart knowledge by giving them advice and guidance on virtues and good practices. She also reminded her children to study hard, avoid wrongful behaviour and respect the teachers at school. This statement indicated her confidence to the educational institution.

They have learnt all (moral virtues), they learnt it in school. Don't take other people belonging. (For example) if they found any money in their pocket, (they are responsible to) ask who give it to them. Find the people and search until (we) found.

(Madam Esah, the 9th *Ibu Mithālī*).

We stayed in the hostel...and we must learn diligently...we were not allowed to do bad thing...(and most importantly we must not) object the teacher's word.

(Mrs. Rosilah, Teacher, Madam Esah's daughter).

Ibu Mithālī instilled family values to their children in many ways. Imparting family values are essential task for the parent as guidance for their children in handling life and as a basis to evaluate their own behaviour (Hieneman 2006). Madam Ayot always reminded her children to control their desire. She wanted them to live in moderation that it reflected through their means, peaceful and humble.

She always warned us, do not follow the desire. Whatever we do such as expenses must look at our capacity and avoid waste. Avoid jealousy. Don't be boastful and show off.

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

Sometimes Madam Ayot gave advice through storytelling, news and poem.

Through advice, story, news, poem and etc. She would always relate examples on good virtues.

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

Madam Maimon was very creative in giving advice to her children. She would sometimes remind them with on the afterlife in order to give awareness.

Psychologically, she would nag, if your siblings are successful, and you're not, what will happen to you when I'm dead.

(Dr. Aminah, Medical Doctor, Late Madam Maimon's daughter).

Sometimes she gives advice directly and sometimes, indirectly.

Sometimes she would be very honest; if she could not use allusions...she would be direct with us, so we too would be honest with her.

(Dr. Aminah, Medical Doctor, Late Madam Maimon's daughter).

She loved to tell the children on certain real life situations for them to take it as a lesson.

What happened to other people must be taken as a lesson for us. She liked to give example and relate it with real life situation around us.

(Dr. Aminah, Medical Doctor, Late Madam Maimon's daughter).

Whenever she opposed or displeased of the way the children behave, she would directly make her discontent known. This was done either indirectly by teasing and jokes about it or through direct scolding. Nevertheless, the approached very much depending on situation.

From behavioural aspect, sometimes she would give advice...and sometimes she would tease us, make fun of us, while other times she would be very angry, it all depend on the situation.

(Madam Azizah, Former Headmaster, Late Madam Maimon's daughter).

She also used body language.

She would appear not to be angry at me, but we could tell from her face...We just knew it...We could see it from her facial expression...

(Mrs. Azizah, Former Headmaster, Late Madam Maimon's daughter).

3.7 Storytelling

Madam Maimon and Madam Ayot used storytelling to educate their children. Madam Maimon would always narrate the story of the Prophets and His companions to her children. The children enjoyed the story and learnt a lot from it. Storytelling is also one of the methods to teach the children on pro-social behaviour (Gonzalez-Mena 2006).

She always told us about the Prophet, His companion...

(Dr. Aminah, Medical Doctor, Late Madam Maimon's daughter).

Sometimes she showed examples in a real life to relate with the story of the Prophet's companion...

(Mrs. Azizah, Former Headmaster, Late Madam Maimon's daughter).

Madam Ayot used traditional Malay folklore such as Pak Kadok, Pak Pandir and Siti Zubaidah to teach virtues.

With all of the advices, stories, news, poem and etc...She would always relate it with good virtues. She told traditional folklore such as Pak Kadok, Pak Pandir, Si Tanggang, Siti Zubaidah and other story. Old folk stories. She stressed on what happen with the people with negative virtues such as tyranny, lazy and boastful.

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

Sometimes, Madam Ayot told the children the hardship of her past to instil grateful attitude.

Make sure they empty the plate, so it will not be a waste. She always talked about the difficulties to even get the rice during Japanese occupation.

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

3.8 Reasoning

Madam Ayot and Madam Wan Mas would explain the reason behind their action after reprimanding their children. Therefore, the children would understand the bad behaviour and would not rebel. With reasoning, parents taught their children using appropriate verbal skills to solve the problem. This will prevent them from aggressive and violence behaviour when they reach the teenagers and adulthood stages (Gonzalez-Mena, 2006). Reasoning is also needed to avoid power struggle and ill feeling (Hieneman et al. 2006). A clear reason would also enable the children to understand their own behaviour and improve for the future.

If she disagrees with our action, she would tell us and gave her opinion or her reason.

(Dr. Ahmad, Dentist, Late Madam Ayot's son).

We would listen to her nag and anger...and we would always remember it. After all she would inform us the reason behind it...

(Mrs. Nik Mastura, Former Educational Officer, Madam Wan Mas's daughter).

4. Conclusion

The Muslim mothers creatively and consistently nurtured Islamic values to their children since early age via self-discipline. However, moulding self-discipline among children is not an easy task. It takes at least a decade to develop each attributes of self-discipline. Self-discipline enables the children to internalize the virtues of Islamic values and apply its wisdom in handling their daily life.

Today, life is more challenging especially for the new generation. They constantly exposed to evil deeds and negative behaviour via internet, new media and peer influence. They were easily trapped to diverse values and school of thought from all over the world via the process of globalization. Here, self-discipline is pertinent to ensure they are always on the right tract and live their lives based on Islamic values.

Research found eight approaches of the Muslim mothers in nurturing Islamic values among their children via self-disciplined. First, they focus on intellectual element or the faculty of mind. They make sure the children understand Islamic values by giving them proper education in religious school or religious class. They make sure the children attend at least a basic of religious class during their primary school even though the children should stay in the school for a longer period. They also are willing to pay a lot of money for child education.

Besides proper education, the Muslim mothers encourage their children to take a lesson from a story telling. The Muslim mothers were also inspiring their children to think for their own sake of goodness by giving them a reason for each action, self-awareness and positive advice. In other words, they do not just enforce all Islamic values to their children. They give the children a freedom to think and find the wisdom for each value.



Figure 1: Muslim mothers approaches in nurturing Islamic values to their children via self-discipline.

Second, the Muslim mothers gives clear limit and rules to their children by giving them a clear limitation and a strict table manner. Both approaches enable the children to understand the limits and train them to follow the Islamic values.

Finally, the Muslim mothers apply flexible approach in disciplining their children. That is mean, they try to understand their children very well and use the most suitable approach, which is appropriate with their children's personality and situation.

In summary, the Muslim mothers nurture Islamic values to their children via self-discipline since their early age. The effectiveness of these approaches approved from the children's practice of Islamic values in their life. As a result, they become a successful and balance adult in the society. This approach is still relevant to the new generation (Z generation and Alpha generation). The difference is might only about the mother's creativity in using the approaches in nurturing the beauty of Islamic virtues to their children.

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Parents' Perception on the Relevance and Effectiveness of Caning Penalty on Students Who Violate School Discipline

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Abstract

The original concept or method of education is by creating understanding, knowledge, and internal awareness. The punishment for an offense or wrongdoing is more effective, better, and lasts longer. The use of caning as a form of punishment against students who violate school discipline is said to be more effective due to the pain that would be experienced by the offenders. Various perceptions have emerged in the society, especially among the parents, with regard to the issue of caning. The teachers' action in implementing caning on students who violate school discipline has received the attention of all parties, especially the parents. Some agree that caning should be implemented immediately, while others feel that it is not the best way to deal with disciplinary problems among students. Hence, this study aims to analyse the perception of parents on the use of caning in schools, and to examine their perception on the effectiveness of caning on students who violate school discipline. The design of this study is a quantitative study in the form of a survey. The purposive sampling method has been used in selecting the sample of the study. A total of 100 Muslim parents residing in Kuala Lumpur have been chosen as the respondents of this study. The data were collected via the questionnaire, and were analyzed using the descriptive statistical method such as frequency, percentage, mean, and standard deviation. The implication of this study is to illustrate to the teachers, specifically the discipline teachers, on the importance of knowing the students' discipline management skills, as well as the need to maintain contact with the parents in order to establish an effective two-way relation in dealing with their children's disciplinary problems.

Keywords: caning penalty; students' disciplinary problems

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1. Introduction

In the family institution and during the schooling years, the education process is very important. The use of caning in both the family and the school institutions should be maintained as it is one of the key elements for parents and teachers in disciplining their children. However, in the process of implementing the caning penalty, parents or teachers need to be wise in determining the situation and in accordance with certain procedures. Caning should not be used while in a state of anger since it is feared that undesirable things might happen. The use of caning is as a response to the actions and offense committed by an individual. However, the issue of caning penalty on children has received grave attention from various parties. As a matter of fact, the purpose of caning, be it in the family institution or at school, is to develop a perfect

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personality which will in turn discipline the children. Islam does not prohibit the use of caning in disciplining the children. At the same time, Islam also places certain conditions on the use of the cane (caning) on children. Imposing punishment or rewarding the children using the proper technique is essential in demonstrating to them which of their actions are good or bad, or favorable and unfavorable. Some guidelines have been set in Islam in imposing caning penalty on children so that the aim of educating them could be achieved. Caning is not done to hurt the children, but rather to teach them a lesson and to discipline them. If caning can no longer serve the purpose of educating the children, then other approaches which are thought to be more effective should be used. This is where the parents' wisdom in educating their children lies. Based on the above discussion, it can be concluded that it is the duty of an educator to be wise in imposing appropriate penalties or fines, in accordance with a child's level of intelligence, and in accordance also with his knowledge and behavior. Similarly, educators must not use torture or other types of punishments, unless as their last resort.

2. Problem Statement

Disciplinary problems are now gaining the attention of numerous parties. Therefore, studies on finding the causes for the occurrence of the problem need to be done carefully. This is because, caning penalty on students might trigger a variety of reactions especially among the parents, including open objections as well as court actions (Khairina 2003). As expected, this issue has received the reaction among members of the society, including the parents, teachers, academicians, as well as political figures. Some agree that caning should be implemented immediately, while others feel that it is not the best way to deal with disciplinary problems among students.

Various parties such as the parents, schools, academicians, and national leaders have voiced out their opinions and suggestions which have led to several changes in the implementation procedures or execution procedure of caning penalty in Malaysian schools. Caning is allowed on students who commit serious offences as embodied in the School Discipline Act (1957/59). However, the Ministry of Education Malaysia (1992) instructed all school headmasters and principals to give priority to heart-to-heart discussions with the offenders (students), although caning was still allowed. Once again, changes took place when the Ministry of Education Malaysia (1994) issued a directive to stop public caning. Caning, on the other hand, must be conducted in an enclosed space in the headmaster's or the principal's room, and must be witnessed only by the teachers involved (Sajap et al. 2004).

The Ministry of Education Malaysia (1999) has outlined 35 major offenses committed by students who violate school regulations are to be given the caning punishment. Caning is performed on students who commit serious offenses as outlined by the Ministry of Education. Among the offenses categorized as serious offense are storing, carrying or engaging in drug activities, bullying, stealing, being rude to the teachers, gambling, and so on. To date, although caning is still performed, the disciplinary problems of the students are still at an alarming level.

An increase in the reporting of the deterioration of the students' discipline has become the concern of many parties. According to Azizah (2002), the issue of disciplinary problems among students continue to be the attention of educators, counsellors, parents, teachers, and leaders in the country as it has become a major problem in schools. In conjunction with that, Rahimah and Mohammad Yusof (2000) stated that disciplinary problems have attracted public attention, and have become the subject of current political debate.

The data from the Ministry of Education Malaysia, as well as the statistics from the Royal Malaysian Police show that the number of misconduct involving school-going teenagers are increasing. It is even more alarming that those data show that students are not only involved in disrespectful behavior, violating school rules such as arriving late at school, skipping school or classes, being noisy, and even to the extent of their misconduct extending to criminal acts such as gangsterism, sexual harassment, rape and others. Statistics from the police force has recorded a total of 1,836 criminal cases, with 3,383 students detained in 2007, and this number increased to 2,218 cases in 2008, with 3,725 students detained (Nurul Adlina & Hafizah Iszaharid 2009). According to Anuar (2009), a study on gangsterism in daily secondary schools conducted by the Educational Planning and Research Division Ministry of Education Malaysia, has identified 459 out of 1560 schools that were exposed to the culture of gangsterism. Therefore, it is clear that the percentage of teenagers involved in crime is high. This situation is very worrying and it is feared that it will escalate to a

more serious situation.

As a result of an increase in disciplinary problems each year, the Ministry of Education through its Circular on Rules and Punishment 2002, has implemented several rules and the appropriate punishments aimed at curbing students' misconduct from becoming widespread. Among the permitted punishments are caning, school suspension, school expulsion, warning letters, fines, detention, and other types of punishment appropriate for the offense committed.

In 2003, the issue of caning once again became the topic of great discussion when during that year, the national media reported a lot of cases of students' misconduct, including the offenses involving group fights and murder cases. Due to the pressure from various parties, including the ministers, the Ministry of Education Malaysia (2003) once again had seriously examined the re-empowerment of all school teachers in conducting caning penalty on students, in an effort to curb disciplinary problems which had become increasingly worrisome (Sajap et al. 2004).

The purpose of discipline is not merely in imposing punishment on the students, but in helping them to be more responsible for themselves and the society. Abdullah Nasih Ulwan (2000) stated that caning is performed so that children could learn about the laws of worship from their early childhood so that these children will grow up to be accustomed to and disciplined in worshipping and obeying Allah the Almighty.

Based on the issues and views mentioned above, it is obvious that caning punishment is the last alternative in disciplining children. Disciplinary problems in schools often become the topic of discussion. Teachers' actions in taking action against students who commit disciplinary offenses are often disputed by parents. Thus, this study was carried out to identify the parents' perception towards caning penalty on students who break or violate school discipline.

3. Research Questions

1. What is the perception of parents on the relevance of the implementation of caning in schools?
2. How do parents perceive the effectiveness of caning on students who violate or break school discipline?

4. Research Objectives

1. To analyze the parents' perception on the relevance of caning implementation in schools.
2. To examine the parents' perception on the effectiveness of caning on students who violate school discipline.

5. Research Methodology

This study uses the quantitative methodology approach in answering the discussed objectives. The research methodology used is survey research, and uses the questionnaire instrument distributed to 100 respondents made up of Muslim parents residing in Kuala Lumpur. This study also uses purposive sampling. The data analysis process was performed using the Statistical Package for Social Sciences (SPSS) Version 22.0 software. The data were analyzed based on the descriptive statistical analysis namely frequency, percentage, and mean.

6. Findings and Discussion

The discussion of the description is made stage by stage based on the table of items contained in Section C and D of the questionnaire distributed to the respondents. This study has listed down 10 items related to the parents' perception on the relevance of the implementation of caning in schools.

The item "I feel that caning should be imposed on school students after reminders and warnings have been issued" shows the highest mean of 4.71 and standard deviation of 0.608. A total of 77 respondents (77%) have strongly agreed, 19 of them (19%) agreed, 2 (2%) disagreed, while another 2 respondents (2%) have chosen to be neutral by answering not sure. This is in line with the study done by Suhakam in Khalim

Zainal (2007), involving 55,754 form 2 and form 5 students enrolled in the same sex schools, religious schools and technical schools. The findings show that 52% of the respondents agreed that caning punishment is often performed in their schools, and occurs more frequently in rural schools compared to urban schools. In technical schools, 80% of the students agree that caning is often carried out on the students.

Apart from that, most previous studies such as Larzalere et al. (1998) and Robert & Power (1990) have proven that although the use of the persuasion technique and giving advice are good in correcting the antisocial attitude of aggressive and naughty children, yet these actions are normally followed by spanking punishments that are thought to be more effective compared to the use of a single method only. Here, it is concluded that it is true that people would give advice first for first-time and minor offenses. When students ignore the advice given, teachers will then give warnings that fines will be imposed if the offense is repeated.

The study also showed that (79.5%) teachers and (71.8%) school administrators agreed that students who commit serious offenses should be caned. The general public have also urged that the power of executing the caning penalties should be given to all teachers. The Ministry of Education Malaysia has outlined the complete guide or regulation on caning penalties in schools, namely the new guideline on Education Regulations: Students' Discipline 1998 (Zainuddin & Jani 2008). Teachers involved in implementing this punishment have to follow the specified procedures. Thus, caning penalties that are carried out in schools would be the last alternative after the students have gone through the process of being advised, given counselling, and given warnings.

Next, the second highest item "I feel that caning penalties in schools is a form of education, rather than abuse", with a mean of 4.63 and standard deviation of 0.614. A total of 68 (68%) respondents have strongly agreed, 29 (29%) agreed, 2 (2%) respondents disagreed, while 1 (1%) respondent has chosen to be neutral by answering not sure. This finding supports the definition given by Khalim Zainal (2007) that caning as a form of punishment meant by Islam, as well as by the Ministry of Education Malaysia, is a form of punishment in order to educate and not to torture. Unfortunately, due to the lack of understanding, this punishment is often executed based on emotion. This situation gives rise to effects such as bruising and severe injuries on unnecessary parts of the body.

The third highest item is "I agree that caning is implemented in schools, as long as it does not cause any physical injuries", where the mean is 4.60 and standard deviation is 0.636. A total of 66 respondents (66%) have strongly agreed, 30 (30%) of them agreed, 2 (2%) of the respondents disagreed, while the remaining 2 (2%) respondents have opted to be neutral by answering not sure. This is in line with the study (Zainuddin & Jani 2008), where 73.4% of the parents agreed that caning can be performed, as long as it does not cause any injuries. Indirectly, this finding supports the definition given by Friedman and Schonberg in Mohd Rashid (2006), that caning does not cause injuries if the aim is to discipline the students and it is indeed very appropriate. Besides that, this punishment is also performed according to the permitted procedures and methods so that it will teach a lesson to other students who commit the same offense. This situation is also in line with the study conducted by Mohd Rashid (2006) who noted that caning was chosen as a form of punishment during the reign of Queen Victoria in England due to the nature of its simplicity, where its elasticity and durability do not cause serious injuries.

Meanwhile, the item "I feel that caning in schools is only allowed for male students" shows the lowest mean of 2.34 and standard deviation of 1.241. A total of 42 (42%) respondents have disagreed, 28 (28%) respondents strongly disagreed, 22 (22%) of them agreed, 5 (5%) strongly agreed, while the other 3 respondents (3%) have opted to be neutral by answering not sure. This finding however, does not coincide with the regulations of the Ministry of Education Malaysia in the Education Ordinance 1957, where caning penalties on female students are prohibited.

Next, this study has listed down 15 items related to parents' perception on the effectiveness of the implementation of caning penalty in schools. The item "caning penalty in schools will be more effective when performed in a calm state and not while in anger or being emotional" shows the highest mean of 4.53 and standard deviation of 0.926. A total of 71 (71%) respondents have strongly agreed, 20 (20%) of them agreed, another 3 respondents (3%) have strongly disagreed, while the remaining 3 (3%) of the respondents have chosen to be neutral by answering not sure.

According to several studies, it is found that the action of constant beating (caning) of a child by an adult will cause the child to continue to exhibit troubled behavior for a long period of time, regardless of the child's race or even socio-economic status despite efforts being made to provide emotional support and cognitive stimuli after the child is caned (Kazdin 1987; Straus et al. 1997). Next, an adult who often spansks his child will cause himself to experience depression, and will act more violently (Straus 1994). This is the factor which causes some teachers to overreact by executing the caning penalty in a state of anger, and to follow their own emotions and thus causing injuries to the students. This situation is the contrary of the original goal in caning, which is to solve disciplinary problems. Hence, each teacher that has been given the responsibility to carry out caning penalty must do so in a state of calmness and must not be emotional.

Next, the second highest item is "caning penalty in schools will be more effective if done on the palm of the hand", with a mean of 3.81 and standard deviation of 1.022. A total of 36 respondents (36%) have agreed, 29 (29%) have strongly agreed, 9 respondents (9%) disagreed, 2 respondents (2%) have strongly disagreed, while another 24 (24%) of them were neutral by answering not sure. This finding coincides with the regulations outlined by the Ministry of Education Malaysia in the Education Ordinance 1957 and the Educational Regulations (Discipline) 1959, where caning penalty of a male student by a teacher or school staff is restricted to the beating on the palm of the hand or on the buttocks that is covered, using a light cane. The beating is to be performed only by the headmaster or school principal with the apparent power given to him in specified circumstances.

The third highest item is "caning punishment in schools would be more effective if it is carried out in front of other students during assembly so that the other students would learn a lesson from it", where the mean is 3.66 and the standard deviation is 1.273. A total of 40 respondents (40%) agreed, another 28 (28%) have strongly agreed, 15 (15%) disagreed, the other 8 (8%) respondents have strongly disagreed, while the remaining 9 respondents (9%) have taken the step in being neutral by answering not sure.

This finding does not corroborate with the study conducted by Zainuddin & Jani (2008), who found that a total of 69% of the respondents did not agree that caning is performed in an open space. This is because, it is said that the caning penalty is able to humiliate and degrade the morality of the offender, especially if it is done in front of the public such as during school assembly or even in the classroom. This is however, in contrast to the study done by Mohd Rashid (2006), which stated that we need to look at the actual meaning of being shameful in order to validate the actual impression experienced by the offender, as well as the views of his friends who has witnessed him being caned. However, up to now, there is no scientific evidence that shows that caning can degrade and humiliate and embarrass a student, so much so that we are forced to abolish this punishment.

Meanwhile, the item "I believe that caning will cause the students to abandon negative elements", shows the lowest mean of 1.74 and standard deviation of 0.747. A total of 44 respondents (44%) have disagreed, another 42 (42%) have strongly disagreed, 2 (2%) of them agreed, while the other 12 (12%) respondents have decided to become neutral by answering not sure. This finding is on the contrary to Larzelere's (2000), who found that none of the studies so far has been able to link spanking with naughtiness or aggressive behavior in children.

Apart from that, Strassberg et al. (1994) carried out a research on children who have never been beaten by their parents. Their study found that 96% of these children were prone to committing disciplinary offenses. Therefore, it is not necessary that non-aggressive and non-provocative individuals will not bully or abuse their peers. It is found that there is no significance for these two groups in the case of being violent and doing negative things. Their findings also did not confirm the relationship between caning punishment and the children's violent and rebellious attitude which cause them to do negative things.

The results of this study find that the use of caning as a disciplinary method for the students is still practical since the purpose of caning is to educate and not to abuse. To educate and to abuse are two different things. Caning that is performed in accordance to the rules will not cause injuries, whereby as depicted by the schools in Malaysia, the students will have to undergo a few processes such as being given advice, go for counselling, have discussions with the parents, being given warnings, and then only followed by caning. Islam itself allows for children to be caned, with the purpose of shaping their good and noble behavior. Teachers need to understand the methods in caning, as well as its rules so that the goal in implementing

caning is based on the concept of education and not abuse. This matter has to be monitored by the authorities so that caning penalty becomes a continuous and effective discipline management method.

7. Research Implications

The findings of this study have several implications, namely:

7.1 The need for knowing the student discipline management skills

Behavior needs to be understood deeply, or in a more holistic way. Behavior, in reality, moves towards a certain goal. Students show their attitude according to the situation or circumstances they experience. It is likely that students with negative attitude would assume that their behavior, in their opinion, does not violate any school rules, or that they do not understand the need for a particular rule being performed. In this situation, the role of a teacher is very important, that is in correcting negative behavior in attaining balance in the school environment.

Students actually make decisions for their own satisfaction, or think of their own wants and needs. Therefore, teachers play an important role in ensuring that every student's choice is the best for them. Among them is when a teacher notices a student behaving negatively, the teacher then tries to correct it so that it will turn into a positive behavior.

Caning is one of the alternatives used as a form of discipline in the Malaysian education system. A complete guideline on this type of punishment has been produced by the Ministry of Education Malaysia. This punishment is performed only for specific offenses, and in specific situations or circumstances only. Teachers do not have the absolute authority to beat or spank the students at will for no reason.

If caning penalty that is implemented in schools is conducted in a fair and equitable manner, it can then be turned into one of the effective tools for addressing disciplinary problems in schools. Hence, the abuse of the authority granted and the use of cruelty in executing the caning penalty should be avoided and scorned. This is because there are a number of teachers who do not understand or, in other words, have not been exposed to the existence of an ordinance or regulation regarding the caning penalty. Thus, in addressing any disciplinary case at school, we need to have a source of reference in order to facilitate the teachers in taking action. Thus, it can therefore be concluded that teachers need to be exposed to the skills in managing students' discipline so that they will be able to deal with this problem justly, and not to use the authority that they have as educators at their own will. The principal needs to ensure that the teachers adhere to the established procedures in executing any disciplinary action against the students. Courses related to the procedure on disciplinary implementation in schools must be conducted in strengthening the teachers' understanding of school discipline management skills.

7.2 The need to maintain relationship with the parents

Parents expect teachers to be able to educate their children to become useful individuals. In this era of globalization, too many cases involving school-going teenagers (adolescents) have been recorded. This situation is very worrying for all parties, especially to the teachers and parents. Hence, a good relationship between the school and the parents is very much needed so that an effective two-way communication would be established. This situation will lead to the settlement of any problems between the school and the parents in a collective or integrated way. The school administration and the parents will have to discuss and exchange ideas so that the school discipline problems could be handled well. Hence, the perception of the parents is also essential in determining any approach to be applied on the students so that they will not misunderstand. Through this diverse parents' perceptions, the school is able to come up with the best approach, by taking into account the elements that have received serious or great attention from the parents. The parents, on the other hand, need to understand that the task of educating the students that lies on the shoulders of each teacher is a heavy responsibility and duty to be performed. It is thus clear that, without the support of all parties, the goal in producing human capital that is valuable and useful to the nation, race, and religion will not be achieved easily.

8. Suggestions for Further Studies

a. Selection of Study Sample

The study on caning penalty in schools from various aspects must be performed from time to time. In this study, the scope of the study has been focused on Muslim parents residing in Kuala Lumpur only. The findings of this study could not be generalized to all parents in Malaysia since the study involves only 100 respondents. The findings of this study can be strengthened with several further researches, especially studies involving the composition of a larger sample selection, and is not focused on Muslim parents only. The results of the study may have implications on the execution of the caning penalty in schools in addressing or handling students' disciplinary problems.

b. Research Methodology

In terms of methodology, this study uses only descriptive statistics as it is sufficient for the scope of the study. The use of the descriptive statistics technique involves the percentage, frequency, mean, and standard deviation, and are presented in the form of tables. The use of descriptive statistics is commonplace, and its usage is rather widespread in the field of Islamic studies generally, or in missionary studies specifically.

It is thus recommended that for future studies, besides using descriptive statistics, a study using inference statistics need to be emphasized, especially in assessing the correlation between caning penalty and its effectiveness on students' discipline. This is to prove scientifically that caning penalty is able to address students' disciplinary problems.

9. Conclusion

The description and discussion above show that various perceptions have emerged among parents towards the implementation of the caning penalty on students who violate the school discipline. On the whole, they agree that this punishment is executed only as the last alternative, and does not physically harm the students. Parents generally support this action and consider this as one form of education and not an abuse. In this case, all parties need to work together so that the use of the caning penalty is not misused, and could further address students' disciplinary problems and produce students who are more disciplined and competitive.

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The Development of an Influential Personality Based on Rasulullah SAW: The Analysis from the Context of Entrepreneurship

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Abstract

Entrepreneurship is one of the career branches that enables sustenance, where in the process, an entrepreneur has to be involved in business, and that this career necessitates high level of commitment. The history of the involvement of Rasulullah SAW in business began when he managed his uncle's business (Abu Talib), then he continued to manage his wife, Khadijah's business. Both these circumstances are inextricably linked with the Prophet's personality known to many as someone who was highly morale and trustworthy (al-Amin). This study seeks to find out the extent that a personality is able to influence the success behind one's business, and vice versa. An emphasis is given towards the characters that exist in Rasulullah SAW from the perspective of his moral before he became a businessman. This study also looks into the extent of the confidence of the society at the time, as influenced by Rasulullah SAW and how people were drawn to liaise with the Prophet. That said, this current study also scrutinizes how the Prophet's influence was chosen by Khadijah, as her business strategy. The outcome of the study finds that influential personality is vital in leading business, especially at the global level, because a business progress has a link with trustworthiness, honesty, discipline, tolerance, brevity, persistence, hard work, moderation, confidence, good communication and the wisdom in managing business finance.

Keywords: The concept of entrepreneurship; influential personality; Prophet's personality

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1. Introduction

The concept of Islamic entrepreneurship continues to be an important issue in Islamic research today. The role of the training institution and national finance often spurs the growth of new entrepreneurs in every global industry, but the reality is that the entrepreneurship field has yet to be at a satisfactory level. It has given focus towards researchers to put forth several factors of entrepreneur success through a comparative analysis of the Prophet's characteristics of entrepreneurship and the characteristics of a successful entrepreneur and the personality of an entrepreneur.

Thus, an entrepreneur needs to know the basic meaning of the word 'entrepreneur' before choosing a career as an entrepreneur, in English the word 'entrepreneur' originates from the French word 'entreprendre' which means trying or bearing. Meanwhile, according to the Bahasa Malaysia's Kamus Dewan, the term 'usahawan' actually comes from the word 'effort', which is the capacity including the effort, activity, action and others to carry out or complete a given task or job.

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Nonetheless, the term 'usahawan' has explained that an entrepreneur has to succeed if he or she understands its true meaning.

According to Muslim Kelana (2008) as an accomplished entrepreneur, he or she needs to be charitable, as outlined in the *Shara'* towards achieving the success in this life and in the Hereafter. It is clear that every entrepreneur must perform good deeds in all his or her affairs. History has proven that 14 centuries ago, there was this person who placed business as his career solely by having faith in good deeds, so with that conviction, he was named al-Amin, due to his trustworthiness, *fathonah*, tabligh and honesty. That person was Rasulullah SAW. The society was influenced by his business that the business prospered.

Thus, it is one of the entrepreneurial features of the Prophet as the benchmark in forming the Islamic entrepreneurial model. Based on the writing of Hepi Andi Bastoni (2013) when Rasulullah SAW was still at his young age, he managed his business with honesty, stayed true to his promises and other noble values. Such good values had given the opportunities for capital owners in Mecca to embark in business partnerships through fee-based dealings or profit sharing dealings together with Muhammad b Abdullah.

The trust and confidence with Muhammad ibn Abdullah's business management through his noble attitude and behaviour, have raised the awareness among the Jahiliyyah to follow and learn his techniques so much so that the news about his strong influence reached one of the female entrepreneurs, Khadijah, who then offered a partnership based on the outcome (*mudharabah*) where she was the financier (Shahib al-mal) and Muhammad ibn Abdullah the fund manager (*Mudharib*). With his trustworthiness and influence, Khadijah had expanded her business to Yemen, Syria, Basrah, Iraq, Jordan, Bahrain and other business cities in Jazirah Arab. Thus Rasulullah's entrepreneurship values have proven on the effectiveness, whereby during his time, a lot of companions had succeeded in their businesses as well, such as Abdul Rahman ibn 'Auf, Abu Bakar As-Sidiq, Uthman bin al-'Affan. Finally, with the success, Islam is able to be expanded all over the world.

With that, Muhammad ibn Abdullah is also known as the prime mover of the Islamic economy by creating the sharing of business, and clearly he was known as someone assertive, consistent and systematic when conducting business so much so that any issues can be resolved critically, and opportunities are seized the best way possible. As we have seen in history 14 centuries ago, the knowledge of entrepreneurship has become the model for western scholars, so much so that the knowledge of entrepreneurship can be found in one of the top books by (Robert Kyosaki 2000) *Rich Dad Poor Dad*, The Power written by (Antony Robert 2004) that talk about a lot of things that can be done if an entrepreneur wants to succeed. What is more important if that the book publication and seminar have generated a lot of world millionaires.

However, realistically, the Muslim community focuses more on these western books and know western millionaires better than the Muslim counterparts. Thus, the success of the non-Muslims in the world of commerce is more encouraging than the Muslims, as their books have been reviewed more than those by Muslims. Peter Drucker (1985) and Joel Arthur backer (2003) opine that to be a successful entrepreneur one has to have the ability to transform the economic sector to the productive, consistent and systematic one, and even manage to create added values and opportunities in the market competition today.

Thus, an analysis to see the relationship between the entrepreneurial characteristics of Rasulullah SAW and the characteristics of a successful entrepreneur can be compared to the personality of an entrepreneur as outlines by psychologists.

The comparative analysis above demonstrates the personality of entrepreneurship and the entrepreneurial characteristics of Rasulullah SAW that is clearer and easier to understand and followed, compared to the characteristics of entrepreneurial personality studied by the Western researchers. However, the work done by McClelland 1985 towards the culture of Malawi and Ecuador marks its discovery in identifying the characteristics of a successful entrepreneur.

2. Why Rasulullah is an Influential Personality?

From the observation of this study, through the comparative analysis of the characteristics of entrepreneurship it proves that Rasulullah's entrepreneurship stresses more on the formation of the personality that serves as the foundation in an entrepreneur, whereby as an entrepreneur, he or she needs to equip themselves by improving himself or herself first before starting their business. According to

psychologists, identity can help distinguish an entrepreneur and non-entrepreneur, and identity leans more towards the characteristics of an entrepreneur.

Table 1: The Summary of the Comparative Analysis Characteristics of Entrepreneurship and Entrepreneurial Personality Features

No	Characteristics of Entrepreneurship of Rasulullah SAW	Characteristics of a successful entrepreneurial personality (David McClelland 1985 Dan Mcber & Co	Features of Entrepreneurial Personality	Research Analysis of Entrepreneurs in Malaysia
1	Never hurts other businessmen		Way of thinking	Positive thinking (Ahmad Zaki 2011)
2	Honest in calculation	1-Confiding in others	Perception	Determining the boundaries between what is good and what is bad (Buerah Tunggak 2011)
3	Always smiling when performing transactions	2-Persistent 3-Energetic	Attitude	Attitude has 3 inter-related components namely, perception, value and behaviour (Nor Aishah Buang 2013)
4	Honest and trustworthy	4-Finding information 5-Having influential strategies 6- Missionary and visionary	value	Values favoured by the society (Nor Aishah Buang 2013)
5	Courteous when doing business	7-Systematic planning	phobia	Culture is part of Islam, not Islam being part of culture (Buerah Tunggak 2011)
6	Doing business creatively	8-Orientation towards determination 9-See and seize the opportunity 10-high work quality	stamina	High level of capacity and ability (Shuhairimi Abdullah 2010)
7	Not chasing after material assets	11-KCommitment to work	motivation	Not giving up (Ahmad Zaki 2011)
8	Verbal fluency		Capacity	An entrepreneur needs to increase their verbal language and skills from time to time (Syed Zamberi 2009)
9	Wise in making decisions	12-Creative in solving problems 13- Self confidence 14- Assertiveness 15- Initiative	Way of thinking	Nothing is impossible (Ahmad Zaki 2011)

However, in western psychology studies, an accomplished entrepreneur has the initiatives, is very good at business planning and so on, but in Rasulullah has proven on his entrepreneurship characteristics, two of which are being honest and trustworthy, where it was narrated;

A man told Rasulullah SAW that he was deceived in a business transaction. So Rasulullah stated “When you do a transaction, then you say that deceits are not to occur.

(al-Bukhari)

Clearly here Rasulullah SAW forbade sellers to be dishonest in their businesses, one of the values that won the respect and trust of financiers in the Arab world at the time.

However, the personality outlined by McClelland also emphasised the attitude, perception, values and motivation and the relationship with Rasulullah’s entrepreneurial features, where he also stressed on personality. According to Nor Aishah Buang (2011) a good attitude is a component that shapes one’s perception, values and behaviour.

2.1 Never has he offended other merchants

The prophet Rasulullah SAW has never offended others who trades with him, further more they were pleased and content with his humility and humble attitude which touched the hearts of many. These rise from his consistency of warm attitude and positive thinking. As Allah SWT said:

O Believers, do not devour one another's property by unlawful ways; (instead of this) do business with mutual consents.

(al-Nisa’ 4: 29)

It was narrated that Rasulullah SAW said:

From Salim RA whom his father narrated that Rasulullah SAW said: a Muslim is a brother to another Muslim. He must not mistreat his brother nor must he leave him (mistreated). Those who (fulfills) the needs of his brother therefore Allah SWT will then assist (fulfill) his needs too. Those who help a Muslim in difficulties will therefore Allah SWT free him of distress in the Judgement Day. And whomever covers the sins (secret) of a Muslim, then Allah SWT will cover his wrongdoings in the Resurrection Day.

(Muslim)

2.2 Transparency and accuracy in calculation

A society’s perception is significant in running trades furthermore when negative impressions linger and affects the business trust among them. Therefore, it is important for a merchant to know the consequences in ignoring accuracy in every weightage of goods made.

Allah SWT has clearly stated:

Woe to those who give short weight, who, when they take by measure from others, take it fully, and when they measure or weigh for them, they give them less than what is due. Do they not think that they will be raised up again on a Great Day? The Day when all mankind shall stand before the Lord of the worlds. Indeed not! Surely the records of the wicked are in the Prison Register.

(al-Mutaffifin 83: 1-7)

As what has been narrated that Rasulullah SAW had said:

Allah SWT embraces a man who does good during his trades and his claims with blessings.

(Riwayat al-Bukhari)

2.3 Always with a smile in carrying business tasks

Every customer comes with different types of emotions and so does the traders themselves. While business is in motion a trader must be present with noble qualities as customers will look into their attitudes in serving them. Best services come with great responsibility and patience towards customers. Our Prophet Muhammad SAW is a perfect example of these good qualities besides a stunning appearance, his attitude comprises of endless smile, consistent greetings of Salam, humble and friendly, with highly use of polite language, an honest figure that is always open for negotiation. A perfect reflection of a businessman he is.

Allah SWT has clearly outlined the following:

Gardens wherein they will live forever. They will enter into them along with the righteous from among their forefathers, wives and descendants. The angels will come to welcome them from every side, saying, "Peace be upon you."⁴¹ You have won this blessing because of what you steadfastly endured in the world." How blessed is this abode of the Hereafter!

(al-Ra'd 13: 23-24)

Rasulullah SAW taught us through his words:

I teach you one thing that is if you do it in consistent practice you will have affections among yourselves? That is to greet (spread) Salam among yourselves.

(Riwayat Muslim)

2.4 Honest and responsible

In running a business, one must characterise honesty and responsibility that will preserve trust. Since customers will always monitor and evaluate every transaction carried out, furthermore these attitudes provide rewards in the current and afterlife. This was clearly stated:

O Believers, observe strictly the prescribed limits.

(al-Ma'idah 5: 1)

(O Muslims), Allah enjoins you to give the trusts into the care of those persons who are worthy of trust.

(al-Nisa' 4: 58)

Rasulullah SAW has mentioned before:

An honest and responsible trader are (gathered) among the prophets, siddiqin and the syuhada (in the afterlife).

(al-Tarmizi, 50)

Once Rasulullah SAW visited a shop which sells piles of dates. There he dipped his fingers into a pile and then pulled them back. The Prophet realised his wet fingers and said to the owner "What is this?" And his answer was "They were struck by rain dear Rasulullah SAW" Then Rasulullah SAW advised the man "why didn't you pile them on top so that the customers may see them? Those who lie, are not among my people.

(Muslim, 24)

2.5 Politeness doing business

Psychological awareness is important in attracting customers to deal, commonly humans are fond of friendly services that are humble and easy to negotiate besides a well trusted character, a good and pleasant appearance is considered bonus. It was well known that the politeness shown by Rasulullah SAW has made his business achieve a high profit.

As Allah SWT mentioned:

If your debtor be in straitened circumstances, give him time till his monetary condition becomes better. But if you remit the debt by way of charity, it would be better for you, if you only knew it.

(al-Baqarah 2: 280)

Rasulullah SAW stated that:

Allah SWT embraces a man who does good during his trades and his claims with blessings.

(Riwayat al-Bukhari)

2.6 Being creative in business

For a business person, knowledge enhancement and customer target achievement is necessary, therefore it is a need to carry out strategies and study the capacity of every customer in a creative way. In creating new products, research must be done according to customer's needs and knowing the pros and cons that may rise from it.

Allah SWT clearly said:

Thus Allah makes clear to you the verses (of revelation) that you might give thought.

(al-Baqarah 2: 219)

(Whose conduct is better, this man or the man) who is obedient, who passes the hours of night standing and prostrating (in worship), and who dreads the Hereafter and hopes for the mercy of his Lord? Ask them, "Can those who know and those who do not know ever be equal?"²⁸ Only men of understanding do accept the admonition.

(al-Zumar 92: 9)

Nay, cooperate with all in what is good and pious but do not cooperate in what is sinful and wicked.

(al-Ma'idah 5: 2)

Rasulullah SAW had stated:

Do not leave the milk of a camel and sheep unattended only to provide a strong flow of them afterwards. Whoever buys them has a choice of either to defend it or return it to the seller with one sha' of dates (in exchange of the milk).

(Riwayat al-Bukhari)

2.7 Not solely materialistic

Business has close relation to profit whereby it is a source of halal livelihood, but still the society will always compare between wage earner and business income. Therefore, it known by the difference of ideology and procedures, but in terms of survival they are the same.

There is a need to understand that when Rasulullah SAW stated not to seek world treasures, it is meant that Rasulullah SAW has never left his obligation to Allah SWT, in carrying his business. This attitude must remain in the heart of a businessman. Failure to do so, then Allah SWT has stated:

They know what is apparent of the worldly life, but they, of the Hereafter, are unaware.

(al-Rum 30: 7)

Whoever revoke (trades) a Muslim upon his request, then Allah will remove his sins on he day of Resurrection.

(Riwayat Ibnu Majah)

2.8 He speaks fluently

In handling a business, confidence in explaining a product or service to customers must be well understood by them, since they require a trader to be well prepared in marketing his products. Rasulullah SAW makes frequent studies in products before they are placed in markets.

As Allah SWT has said:

O believers fear Allah and say the right thing.

(al-Ahzab 44: 70)

The Prophet SAW is more fluent than Saidatina Aishah r.a: meaning: Rasulullah SAW, talks with fluent and firm words that are clear and understandable by everyone who listened. (Sits with him)

(al-Tarmizi)

2.9 Wise in making decision

A businessman must be prepared with the right and complete knowledge of the business. Whereby they must be able to give logical and wise decision on his transactions. He must know the good and bad effects of every decision made.

As Allah SWT said:

The fact is that Allah does not change a people's lot unless they themselves change their own characteristics.

(al-Ra'd 13: 11)

Rasulullah SAW also said:

Do not sell a part of yours on top of another part of others"

(Riwayat Muslim)

3. Conclusion

It has been stated in the Al Quran and hadiths frequently on the good qualities that must be developed to be a businessman. The words from Al Quran was sent through our Prophet Muhammad SAW as a reminder to the people. Our Prophet himself was a businessman with all the qualities that grew with him where it was all found in the Al Quran. Therefore, his characters are of good examples in creating a true businessman as it has been proved that the characters of Muhammad bin Abdullah have brought success and achievement in expanding his business all over the states of Arab. Furthermore, it has been carried out by many in which has succeeded. Studies have shown the differences in business characterisation between Islam and the Westerns through different criteria where certain limits must be taken into consideration including personality, then comes the management process. While the westerns emphasize on the process of character making to focusing on business management and expanding it.

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New Enquiry in the Science of *Kalam*

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Abstract

The history of *Kalam* has shown that it gave expression to all of our other sciences by allowing us to see our place in the Cosmos and our dependence on God. It showed the same train of thought and principles applied by *Mutakallimun* when trying to understand Reality, whether in explaining cause and effect or from where the Universe comes from. With the advent of modern science, *Kalam* has undergone a new challenge that of disconnected data, theories and conjectures (even in the physical sciences) creating a sort of cognitive or intellectual dissonance. Reality has become fuzzy which sometimes struck us into indecision, reservations, prolongation and uncertainties. The intellectual cacophony resulting from this becomes a sort of deconstructionism with less thread for connectionism. The science of *Kalam* is now challenged by new enquiries for the aim of rationality was to obtain some degree of certainty which supports belief and actions as well as elucidating matter fields (for these are what interact with our physical bodies). The fields of enquiry extend from those bordering metaphysics such as the existence of Multiverses and their physics and those higher order mathematics and logics (category, topoi etc.) and higher dimensional objects (topological, skyrmions) that objectify many quantum structures. This require new principles and methods in *Kalam*, so that modern physics should not be disconnected from Islamic worldview, all in the spirit of enquiry that was once paved by Fakhr al Din al-Razi and to some extent by al-Ghazali. In this paper, we outline some of these new enquiries and proposed a synthesising approach (first mooted by Prof. Osman Bakar of Universiti Malaya) such that can bring the pursuit of modern science (especially physics and mathematics) within the corpus of Islamic theology.

Keywords: *Mutakallimun*; occasionalism; *Daqiq-al Kalam*; synthesis between *Kalam* and modern science; tafsir ilmi; semiotics

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1. Introduction

Prof. Dr. Osman Bakar once told us that Islamisation of Science just like *Kalam* (in the olden days) are science for the ummah. It was focussed for the ummah not for mankind. He further exclaimed that to go beyond we need 'synthesis of knowledge'. Flashing back in history, *Kalam Jadid* or the New Dialectics intellectual movement was initiated by al-Ghazali and matured by Fakhr al Din al-Razi. As Adisetia (2012) mentioned "This historical success provides pertinent lesson for Muslim scholars and intellectuals today to formulate what can be called *Kalam* al 'Asr or Dialectics of the Age to take on the challenge and allure of modern science". The Quran exhorts believers to look into the cosmic horizon (*al-afaq*) and into their own selves (*al-anfus*) for empirical and experiential evidence revealing the truth (*al-haqq*) - see Fussilat (41:53). We will see that traditionally the *Kalam* approach took the first part (studying the Universe or macrocosmos) whereas the Sufi approach (as strongly exemplified by Ibn Arabi) look into themselves (man as *insanul kamil* and microcosmos). In *Kalam*, the idea that God's creative activity is continuous in the Universe is

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known as continuous creation. There are two main views about this.

First, God still play an active part in the dynamics and ever changing course of the Universe and in the second view, after creating the Universe and its physical laws, God take rest and led the Universe evolved on its own, into a fated future which only God knows (via His programme). In fact, some people believe that after creation of the Universe in six days (as mentioned in the Quran) God ‘take a rest or holiday’ (just observe it) after He had done all the creation! Of course Muslims take the first view, because from the Quran we know that God play an active role especially in giving ‘miracles’ to Prophets and even to Friends of God (*wali*). The fact that God is active but must ‘go against’ His own Physical Laws during the occurrence of ‘miracles’ led al-Ghazali to propose the doctrine of Occasionalism. There is a weaker version to this called ‘concurrentism’ which states that there are particular events or phenomenon that are produced both by Divine intervention as well as power of finite beings (physical laws are still followed) put together.

In this weaker version, causality is still being followed but the result is still a ‘miracle’ (one possibility is called freak event or one in a million happening). In the strong version of Occasionalism no finite being has a causal role in creation. This doctrine was first formulated by the Asharite in *Islamic Kalam* which was later echoed by the Cartesians, the philosophers who follow the ideas of Descartes and famously articulated by Malebranche. In this Asharite cosmology the physical Universe can be categorised into substance (*jawhar*) and accident (*a’rad*). The accidents can be seen as properties whereas substances are the matter (which in the case of photons can be massless).

Classical physics hold to the notion that matter and properties come together but quantum physics via the Quantum Cheshire Cat effect showed that properties can persist even when the matter (say neutrons) has disintegrated or disappeared. This is the analogue of the Cheshire cat in ‘Alice in Wonderland’ whose grin persists even when the cat is gone. We will see that in the Copenhagen Interpretation of Quantum Mechanics an even stronger version of this was held by Bohr and colleagues called positivism, whereby an object only exists when you measured it. This is in contrast to Einstein who believed that “the moon is there even though you did not look at it”.

In *Asharite Kalam*, all atoms and accidents need the power of God in order to exist and subsists over time then, it seems only Occasionalism is the ‘mechanism’ for the Universe to continually exist. There is a strange and mysterious analogy between atoms and accidents being separated and between two separated but entangled particles. A neutron has a magnetic moment but no electric dipole moment so it can be separated from its magnetic moment but not its electric dipole moment. Just like a particle with mass obtaining its mass by interacting with the Higgs boson whereas massless particles do not interact with Higgs bosons controlled by coupling constants. The infinitely important role of God (He is All Encompassing) was pointed out by al-Ghazali by emphasizing that correlations do not imply causal relations. After all, God is Time (a saying in a hadith) and so you don’t need to impose time ordering in His actions. A curious implication of this is the violation of time reversal operation, T in CPT theorem which says that CPT is conserved and since CP is violated this merely imply that T is violated too.

In the *Asharite Kalam*, human being acquire their acts (*kasb*) while God created these acts. Since we know that this is human volition (free will) and human are responsible for their own acts and choices, this led to sin and reward. In this way the acts go back to God and human are free from any judgement and this is contrary to the purpose of Heaven and Hell. Later, Ibn Humam deny that human choice falls under the scope of Divine power. After all, in Islam, mankind is the vicegerent or deputy of God, he is free to make his own choice at his own peril! In other words, human choices are relational matters not under the purview of any kind of power. Man is given a free will and God has given him the power of reasoning to guide him. Malebranche once concluded that a belief in secondary causality that is, ascribing causal power to beings other than God leads to paganism. In Islam this is also called *shirk khafi* (hidden shirk or hidden polytheism). So, occasionalism where God continuously create and destroy and recreate again led to permanency of things giving ‘occasional causes’ which allows events that can violate causal and physical laws in between. In *Mulla Sadra* ‘gradation of beings’, man being in the highest hierarchy is given the total free will and choice to act, unlike animals which are given limited choices and thus not accountable for their actions. On the other hand, man’s intention is also counted as action such that a good intention alone will be rewarded by God but bad intentions will be counted only after an action has been executed.

2. *Falsafah, Kalam and Modern Science*

Asharite and Maturidites *mutakallims* are mediating schools between the rationalism of the Muktazilites and the extreme literalism of the Hanbalites. In Iraq the mediating school was represented by Abu Hassan al Shaari (d.324H) and in Samarqand by Abu Mansur al Maturidi (d.333 H). Later scholars in the Assharite school were al Baqillani (d. 403 H), al Juwayni (d), al Ghazali (d.505 H) and al Sanusi, whereas Maturidites were given new vitality in the work of Al Bazdawi (d.493 H). In *Jalil al Kalam* (knowledge of God) to explain the attributes of God, both Sunni schools introduced several common doctrines e.g the doctrines of absolute difference (*mukhalafah*), without any quality (*bila kayfa*) and without drawing any anthropomorphization (*bila tasbih*) as protective principles against hereticism. Between the two schools there are some controversial problems regarding the nature of God's attributes and further studies showed that Ibn Arabi had beautifully resolved these problems in many of his major works (and will not be discussed further here).

Historically, Sayf al Din al Amidi (Laura 2014) was the first to extensively used falsafi arguments and concepts (traditionally laying outside the realm of *Kalam*) in discussing about the atom in his *kitab Abkar al-Afkar*. As Laura (2014) rightly put it "It is increasingly understood, contra the longstanding myth that Ibn Sina (d 428H/1037) Islamicised Neoplatonism died at the pen of al-Ghazali (d.505H/1111) that his philosophy in fact became the subject of analysis and appropriation in the following centuries". So, the new *Kalam Jadid* has rightly put a roadmap for *Kalam al-'Asr* by pursuing into the realm of modern scientific philosophy and contribute to Modern science. But first let us have a look at the main principles laid out in *Daqiq al-Kalam* (Altaie 2015) of the Asharite Mutakallimun:

- a. The creation of the world according to the *mutakallimun*, the world is not eternal but was created at some finite point in past time. This put modern theories of cyclic cosmology (including epirotic cosmology) to be out of question and basically upholds creation of the Universe ex nihilo or in Andrei Linde's word 'tunnelling out of nothing'. I have already highlighted the work of Mir Damad (Shahidan 2007) who proposed the creation of the Universe out of time i.e *wujud dahr*.
- b. Discreteness of natural structures. The *Mutakallimun* believed that all entities in the Universe are composed of finite number of fundamental components called *jawhar* (substance) that is indivisible and has no parts. This seems to be in direct correspondent with Standard Model of physics where these fundamental particles consist of 3 families of lepton-quarks. The *jawhar* was thought to be an abstract entity that acquires its physical properties and value when occupied by a character called '*ard*' (accident). Again, this agrees with the Standard Model of physics where '*ard*' is supplied by the Higgs field which gave 'mass' to all the particles interacting with it, with the mass given to the particles being proportional to the coupling constants of the interactions.

In fact, discreteness according to the *Mutakallimun* applied not only to material bodies but also to space and time (this is in total agreement with quantum theory, where we need to modify the Uncertainty Principle due to discreteness at the Planckscale) including motion and energy (being both quantised). In fact, for the past centuries the translation for al-Falaq (113: 1) is 'daybreak'. So *Rabbil Falaq* is translated as Lord of the daybreak. But with the dawn of modern science and quantum theory, al-Falaq can now be translated as 'orbits' and *Rabbil Falaq* as Lord of the orbits, why? Because you see order and forces in orbits in galaxies and stars and planetary systems. But more than that orbits of electron in atoms and shell models in nuclei, they are all quantised (both motion and energy!) and shell model determined the stability of nuclei (up to the super heavy nuclei recently confirmed by experiments). So, Lord of the orbits showed that He is active and busy and yet probabilistic too. Some points of convergence between Sufism (as extension of *Kalam* thoughts) with Quantum Mechanics had also been discussed by us previously as well as using Planckscale as natural cut-off for blackholes (Shahidan 2014, 2015).

- c. Continual re-creation of an ever changing world. Because God is the absolute creator, Ever Living and Ever-Acting but also the Mighty Destroyer, to sustain the Universe the particles (that form the Universe) have to be destroyed and re-created in every moment. This was later developed into a viable theory of Occasionalism by al-Ghazali and others (already mentioned in previous discussion). The continuous process thus gives a continuous presence of the Universe. Surprisingly, there is a

similar idea proposed by GRW (Ghirardi-Rimini-Weber) interpretation of quantum mechanics, also called the flash ontology whereby wavefunctions are collapsed due to observations, but with no mechanism for ‘re-creation’ of the wavefunction.

- d. Indeterminacy of the Universe. Since God possesses absolute free will and since He is the personal creator and sustainer of the Universe, He is at liberty to take any action He wishes. Consequently, the laws of nature has to be probabilistic (defining His habits) rather than deterministic so that physical values are to be contingent and undetermined. This ‘indeterminism’ however is only from human point of view, not God’s. This indeterminism is exactly in full agreement with Quantum theory. In fact, due to ‘secondary causes’ chaotic regimes and deterministic character can also be realised e.g as shown by Bohmian mechanics trajectory-based methods. Base on this indeterminism, *Mutakallimun* reject the existence of natural causality, a basic assumption of Occasionalism.
- e. Integrity of space and time. The *Mutakallimun* has the understanding that space has no meaning of its own without there being a body to conceive the existence of a space. This is in line with Mach Principle which is still being studied classically as well as its quantum gravity version. This is also similarly with time, which cannot be realised without the existence of motion. The connection between space and time is deeply rooted in the Arabic language itself. Therefore, neither absolute space nor absolute time in fact exists. Again, this is agreement with modern physics idea that time is emergent (e.g via quantum entanglement between bodies or particles) or that the Universe can in fact exists in higher dimensions (3 space and 1 time dimensions and the rest are folded).

So, in these five principles of *Daqiq al-Kalam* we saw the precursor to basic assumptions in the theories of modern physics, stretching from quantum theory to gravity and particle physics or high energy physics.

From philosophical viewpoint, we saw in old *Kalam* that their atomism imply reductionism meaning that we need to investigate the *jawhar* to know the basic constituents of nature (or the Universe) and reconstructing them back to understand the Universe in a unified (*tawhidic*) manner since the Creator is after all only Single. Thus reductionism has been the main philosophy employed in understanding physics, biology and chemistry. It seems now these three major fields of science have converged in the field of Nanotechnology and hard science is slowly merging with soft sciences e.g. economy, sociology and arts via the science of Complexity (giving new fields such as Econophysics etc.). This is one area of ‘synthesis’ which *Kalam* can be engaged on within the new enquiry.

3. New Enquiry in the Science of *Kalam*

We can now agree why *Kalam* is also a science, since a lot of its assumptions and ideas coincided with modern sciences. This is the synthesizing and symbiotic part to go beyond (as proposed by Prof. Osman Bakar). *Kalam* need to enquire into the areas that current philosophy of science failed to direct e.g idea of ‘naturalness’ with regards to mass hierarchies in High Energy Physics or ideas of Multiverses (first proposed by Max Tegmark) as well as quantum gravity and dark matter searches. Harry Cliff in one of his TEDX talk remarked “In reality, the Higgs field is just slightly on. It’s not zero, but it’s ten-thousand-trillion times weaker than it’s fully on value, a bit like a light switch that got stuck just before the ‘off’ position. And this value is crucial. If it were a tiny bit different, then there would be no physical structure in the universe. Why the strength of the Higgs field is so ridiculously weak defies understanding” (Orwig 2016).

Also, reductionism has already reached its limits, one of this is the idea that Large Hadron Collider can form miniblackholes by colliding particles. If so, then no more small distance physics or high energy physics can be done in an LHC because all of these particles will collapse into a miniblackhole. A similar question arise when we reach the Planckscale, of course Big Bang never starts at $r=0$, but somewhere just above the Planckscale, but how? How can *Kalam* probed into this mystery?

More recently, topology has become an important buzzword, not only because of the discovery of many novel materials that are topological (topological insulators, topological superconductors, metamaterials) but also its role in quantum theory (knot theory for example, Calabi-Yau manifolds in superstrings and membranes), structures of the Universe and more recently ‘topological entanglement’. It

looks like *Kalam* has a long way to go into probing these questions but remember, the seed of that enquiry had already been sown. The *Muktazilite al-Nazzam* had already proposed discrete jumps for microscopic motions which he called *tafra* (discrete jump) where the forerunner of quantised motion and this could mean Majorana fermions and Skyrmions that move in specific orbits (quantised energy).

God's creation-destruction of the Universe components are reflected in creation and annihilation operators in Quantum Mechanics. In fact, one can say analogically that God is also doing Quantum Mechanics of the Universe by solving the Wheeler-De Witt equation for the whole Universe in analogy with Schrodinger equation for a single particle.

Altaie (2015) believed that "God has not only created this world justly and for a purpose, but has set some built-in mechanism to safeguard that the world remains comprehensible". Perhaps this was just echoing what has been the main motto of theoretical physics research 'the unreasonable effectiveness of mathematics' in physics i.e mathematics must be the tool to understand all the laws of physics. This is also supported by one of the main *Kalam* proponent, Fakhr al Din al-Razi who emphasized the priority of reason (logic, inference) in all of his *Kalam* and *Usul al-Fiqh* works (Mohd Farid 2015).

Kalam has a role to play in *tafsir ilmi* (see Osman Bakar's new book in this topic (Osman 2017) including quranic cosmogony (Haslin & Ab. Hafiz 2014). Contextuality, the impossibility of assigning a single random variable to represent the outcomes of the same measurement procedure under different experimental conditions can be scrutinised via the tools of *Kalam*. In fact, de Barros and Oas (2015) recently proposed that this shortcoming of using quantum probabilities can be solved by introducing negative quasi-probability distributions. There are several ongoing challenges, for example recently Feintzeig (2014) proved that ontological model framework failed to represent even the most well-known interpretation of Quantum Mechanics and Pienaar (2017) showed that there is a lot more to do on causal structure studies using graphs.

The physics of life via say Quantum Biology is another area where *Kalam* can work alongside modern physics to explore at least starting with basic principles. We have also recently worked in this field using a Bohmian mechanics approach (Wan Qashishah Akmal et al. 2017). The epistemological aspect of Ibn Haytham's scientific thought was only recently explored (M. Syamir & M. Syukri 2016) which add to the credibility of using *Kalam* approach for synthesising novel scientific knowledge with that of traditional enquiry.

4. Conclusions

In al-Ghazali's view (as mentioned in the *Ihya* and *Jawhar al Quran*), see for example Treiger (2011), the highest of the theoretical science is the science of the unveiling. In modern terms, we can ask the question 'what is the purpose of studying science if it doesn't help you in knowing God?'

There are many challenges in the frontier areas of physics such as unifying General relativity of Einstein with quantum theory which allows us to understand the Universe and its evolution. Then there are challenges in the material physics especially at the nanoscale. This is also an area where chemistry and biology meet and a possible emergence of Quantum Biology. There is then a new science born from physics called Complexity which tries to understand the soft sciences using quantitative tools like internet traffic, macro and microeconomics and financial systems as well as human social and economic activities. *Kalam* has indeed to probe deep questions about sustainabilities, Man-God relations and fundamental harmony between man-nature and meaningful life cycles.

Kalam's new enquiry will need to explore the human mind and their psychologies as well as to probe deep into fundamental language (semiotics) that underlie common programmes that indeed programmed the Universe, the DNA and social biota. The Muslim men who undertook this must in the first place be given a universal education and master different areas of both modern science and Islamic knowledge, well versed in Arabic, English and his mother tongue. He need to explore (perform *hijrah*) the wilderness, the multi-institutions of higher learnings and spent some time in deep thinking and meditations using the al-Quran and hadith as his guide. In fact, as a matter of principle we can flashback and move forward as proposed by Adisetia (2011) to study al-Ghazali and Fakhr al Din al-Razi both for inspiration and systematics.

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Post Modern Society*

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Chemistry in the Holy Quran

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Abstract

The Holy Quran is proving that Muslim civilization is not only valid for all times and places, but is the best civilization known to mankind. Although the Holy Quran was revealed to the Prophet Muhammad peace be upon him more than fourteen centuries ago, it still challenges science and scientists even in the smallest details. For instance, atoms are mentioned in the Holy Quran in several verses, where God mentions the weight of atoms. Moreover, it goes beyond that, as there are some verses regarding thing smaller than an atom. It is known that one of the most important characteristics that distinguish atoms from each other is their atomic weight. Where the atoms vary according to their atomic weights, so that the elements are different from each other. In this paper, we will try to review some of those verses in the Holy Quran referring to the atom and its composition.

Keywords: chemistry; Muslim chemists; Islamic perspective; revealed knowledge; scientific miracles in Quran

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1. Introduction

Allah has supported His messengers with miracles, and the miracle of our Prophet (PBUH) is the Holy Quran, which is incapable of mankind and the oath of bringing his example. Allah said:

Say: If the whole of mankind and Jinns were to gather together to produce the like of this Qur'an, they could not produce the like thereof, even if they backed up each other with help and support

(Surah al-Isra' 17: 88)

Furthermore, they are incapable of bringing an example of one chapter; He said:

Say: Then bring a surah like unto it, and call (for help) on all ye can besides Allah, if ye are truthful

(Surah Yunus 10: 38)

Yet, it is a clear miracle that Quran arrived to us through the Prophet (PBUH) eave though the Prophet did not hold pen and did not write or read (Ali 1992). The Almighty said in surah Fussilat (41: 53):

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Soon will We show them our Signs in the (furthest) regions (of the earth), and in their own souls, until it becomes manifest to them that this is the Truth. Is it not enough that thy Lord doth witness all things?

2. Aspects of Chemistry in the Holy Quran

The Holy Quran is a book of signs, and not a book of science! Hence, it is not a book of chemistry, because it is not teaching people the sciences of nature or something like that, but one of the purposes that must be taken into account when dealing with the Holy Quran; that our minds and souls are attracted to this wide diversity, The infinite gradation in the various sciences and information of interest to man in his life and life in the Hereafter (Salim 2007).

The Quranic verses mentioned to the miracles of chemistry, where it referred to the smallest and most important thing in the chemistry; the atom, since fourteen hundred years in the verse in surah al-Zalzalah (99: 7):

Then shall anyone who has done an atom's weight of good, see it!

In the known scientific facts, in the field of chemistry, that the first thing that draws attention in this field is the atom (Holmyard 1961). However, the Holy Qur'an covered a wide range of the branches of this science, starting with the atom itself, which alone accounted for an independent branch of chemistry, and considers the atom as the smallest part of an element. Yet, that the Holy Quran has attracted attention to the fact that there is something smaller than this part; Allah said:

Nor is hidden from thy Lord (so much as) the weight of an atom on the earth or in heaven.
And not the least and not the greatest of these things but are recorded in a clear record

(Surah Yunus 10: 61)

As if He wanted to draw our attention to the structure of the atom itself; in terms of containing the electrons, protons, neutrons, etc.

3. Chemistry in the Holy Quran

The Holy Quran raised us to a degree that attracted our attention to the group of elements, mentioning some elements and compounds, including; gold, silver, iron, copper, silica, etc.

3.1 Iron

Iron, the most known chemical metal, has been mentioned in surah al-Hadid (57: 25) Allah said:

And We sent down Iron, in which is (material for) mighty war, as well as many benefits for mankind

Shows that iron has been removed from heaven and it would be used by mankind as long as they exist, and here it is time and scientists in this era are dealing with this issue. Some of them said that iron is believed to have been created in different planet or meteor in the sky, and the truth is that there are numerous Quranic verses that show the scientific miracles of the Qur'an in chemistry (Figure 1) (Abdelnasser et al. 2014).



Figure 1: Iron industry

3.2 Gold and Silver

Allah said in surah Ali 'Imran (3: 14):

Fair in the eyes of men is the love of things they covet: Women and sons; Heaped-up hoards of gold and silver.

This verse is showing that gold and silver would be used as precious metals as long as they exist (Figure 2) (Meera 2002).



Figure 2: Islamic Gold and Silver coins

3.3 Copper (Brass)

Allah said in surah al-Rahman (55: 35):

There will be sent, against you both, heat of fire and flash of brass, and ye will not escape

From this verse we can clearly understand that copper could keep temperature for longer time (Figure 3) (Mikesell 2013).

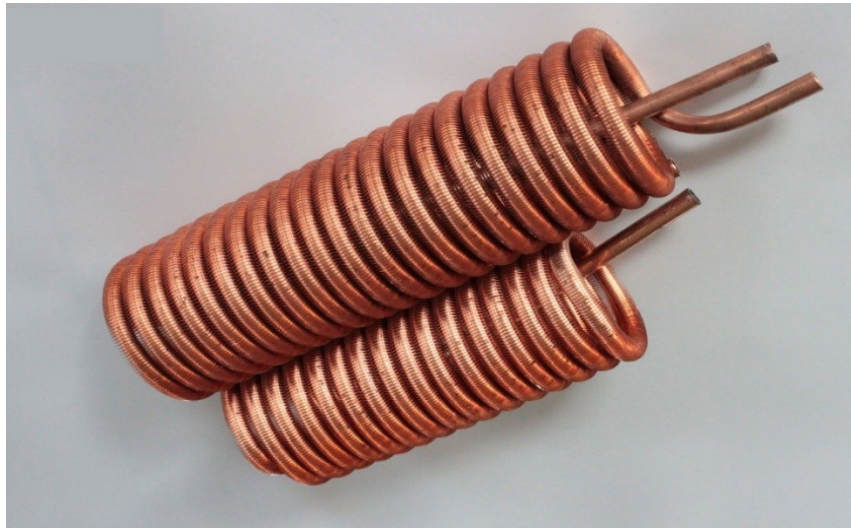


Figure 3: Copper Coil

3.4 Silica

Some references revealed that Ants might have an exoskeleton made up of silica which is the basic component of glass (Figure 4). This has been mentioned in the Holy Quran. Allah said in surah al-Naml (27: 18) using the word ‘crush’ and not ‘kill’:

One of the ants said: O ye ants, get into your habitations, lest Solomon and his hosts crush you (under foot) without knowing it (Abduldaem)



Figure 4: Ants

3.5 Salt

Salt was mentioned in the Holy Quran in surah al-Furqan (25: 53):

It is He who has let free the two bodies of flowing water: One palatable and sweet and the other salt and bitter

We can see here that the Holy Quran is telling us the taste of the sea water. Although, Prophet Muhammad (PBUH) lived in the desert, where there was no sea! In addition, the rest of the above verse (yet has He made a barrier between them, a partition that is forbidden to be passed.) is telling us a scientific truth since 1400 years back that the salty water has high density, and would not mix with un-salty water, of a low density water (Figure 5) (Cooper 1959).



Figure 5: Sea water

4. Chemistry and Scientific Miracles in the Holy Quran

4.1 Difficulty of breath in the upper atmosphere

Allah says in surah al-An'am (6:125)

Those whom He willeth to leave straying, - He maketh their breast close and constricted, as if they had to climb up to the skies

Boyle's Law is an ideal gas law where at constant temperature; the volume of an ideal gas is inversely proportional to its absolute pressure.

$$P_i V_i = P_f V_f$$

Where P_i = initial pressure

When rising from sea level, the spaces between the particles of the atmosphere will increase, so that a single mass of the atmosphere decreases and the density of the atmosphere decreases, which corresponds to changes in pressure. This explains the lack of air in the upper atmosphere and breathing problems (Bonnar 1956). This is what Allah revealed to our beloved Muhammad (PBUH) more than 14 centuries ago (Figure 6).

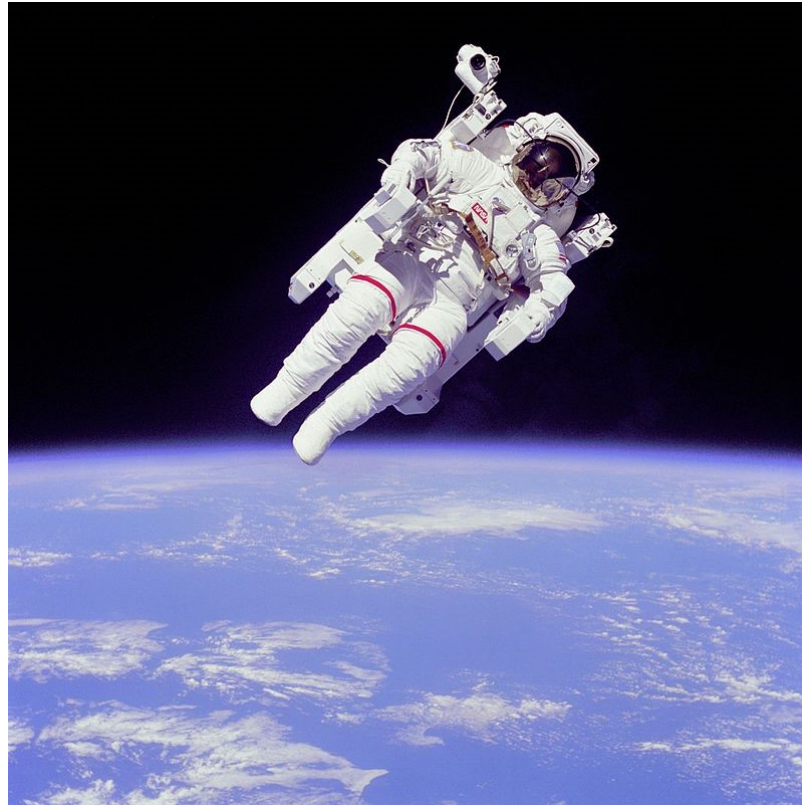


Figure 6: Less Oxygen in the upper atmosphere

5. Conclusion

In conclusion, the Holy Quran is the word of God, which was revealed to the world's mercy and healing, our beloved Muhammad (PBUH), by the issuance of the people of believers and warning by the people of the unbelievers, which is a full constitution of the Islamic state and a complete approach to regulating the life of the individual and society. Also, control the limits of desires and desires and make of humanity a clean society organized mercy and interdependence. The Qur'an provides us with kinds of science and explores our treasures of knowledge and enlivens our minds by stimulating thought, and above all this light guides us to the path and leads us to the happiness in the Heaven.

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Modelling a Non-profit Cooperative Credit Network: A Multi-agent Simulation for Building an Interest-free Financial System

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Abstract

The verses from the Holy Quran are clear on the prohibition of interest or *riba* for all parties in a financial transaction. Scholars and researchers are in an ongoing quest in searching for the best alternative of an interest-based loan. The aim of this paper is to study the feasibility of a non-profit cooperative credit network, while finding the right model that reflects the dynamics of the system more accurately. Modelling a money-lending system in a dynamic and ever-changing society is not an easy and straight forward task. Such a system which is influenced not only by the independent variables such as inflation rate, total income, and consumption rate, is also influenced by the behavior of each member in the society. Despite having each individual making simple decisions, the outcome from the system is much more complex. This system which does not reflect linearity is a complex one, which makes it difficult to model conclusively using classical mathematical approach. An agent-based simulation approach could model a complex system which is a collective form of simple decision-making agents, unaware of the global outcome from its own decisions. Researchers in engineering and computer science have been adopting agent-based simulations approach to solve engineering problems, such as optimizing PID controllers, simulating cooperative traffic systems, scheduling tasks, optimizing packet-transfers in a network, etc. Scholars in economy have started to use agent-based simulations to model economic systems including Islamic banking systems. This paper proposes a simple simulation model of a non-profit cooperative credit network (NPCCN), consisting of a single non-profit cooperative management body (co-op) with members defined as individual agents. This model is inspired by several existing interest-free lending system models, such as the JAK Members Bank system of Sweden. The model is programmed using Python programming language, using agent-based modelling methods, where the members form a cooperative network. In the simulation, we can vary the characteristics and behavior of individual agents, and in response optimize the parameters of the co-op to ensure the sustainability of the system. From the simulation model we can observe that the system is responsive to the changes in parameters of the rules that were set during the early stage of simulation. This simulation model successfully explores the potential of future studies on a non-profit cooperative credit network that has the potential of being a viable alternative to the existing debt driven economy, demonstrating financial cooperation and democratic control.

Keywords: Non-profit cooperative; multi-agent; simulation model; interest-free loan; *riba*

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1. Introduction

An interest-free financial system is synonym to an Islamic financial system, which is a topic of debate and research of people in the field for centuries. Despite a considerable amount of work and effort done in this

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field, the progress in providing a coherent theory in Islamic economy is still below expectations (al-Suwailem 2008). Al-Muharrami in 2014 suggested that Islamic banking systems could be organized along the cooperative line as it is consistent with the principles of Islamic finance (al-Muharrami et al. 2014). Building on past researches in economics, law, Islamic economics, and Islamic law, this paper explores the potential of using a multi-agent simulation approach to model a non-profit cooperative credit network (NPCCN). Multi-agent systems, also known as swarm intelligence in the field of computer science and engineering, is a method of achieving a form of artificial intelligence (Bonabeu et al. 1997). These methods when applied to the design of a complex system have been proven to be flexible and robust, adaptive to changing environments, and functioning even when individual agents fall apart (Bonabeu et al. 1997). This work models a non-profit cooperative credit network, based on existing models of cooperative credit and interest-free lending systems, such as the JAK Members Bank of Sweden. The main objective of this work is to gain understanding and insight of the dynamics of such network and in the long run explores the potential of the model using multi-agent simulation. Using this model, the behavior of the network could be monitored over time, while changing initial parameters of the non-profit co-op and varying the rules of each members of the network.

2. The Verses on *Riba* in the Quran

The Holy Quran clearly addresses the prohibition of interest or *riba* in Its verses in surah al-Baqarah (2: 275-279), Ali 'Imran (3: 130), al-Rum (30: 39) and al-Nisa' (4: 161). According to the Hans Wehr Dictionary of Modern Written Arabic, the roots of the word *riba* give the meanings of 'to increase; to grow; to grow up; to exceed'. William Lane in his Arabic-English Lexicon, defines *riba* as something that is 'increased or augmented'.

In order of revelation, the verse from surah al-Rum (30: 39) is the earliest mention of *riba* in the Quran:

And (know that) what you give in usury (that is, things that are given in order to get more in return), so that it may increase in people's property will not increase with Allah (does not bring any good), but the alms that you give for Allah's sake shall be repaid to you many times over.

Allah SWT in the earliest verse on *riba* denounced *riba* while praising the act of giving *zakat*. The next verse on *riba* in order of revelation is from surah al-Nisa' (4: 161) where Allah SWT mentions how *riba* was forbidden for the people of Israel as depicted in their book of Torah. The next mention of *riba* is in surah Ali 'Imran (3: 130) where Allah SWT gives an early sign on the prohibition of *riba*. The verses from surah al-Baqarah (2: 275-279) are the last verses revealed on *riba* which clearly concludes the prohibition of *riba* and the punishment waiting for the people who disobey:

As for those who take usury, they shall not be able to stand upright but shall rise up like one whom Satan has demented by his touch, for they claimed that: "Trade is like usury". Whereas Allah has permitted trading and forbidden usury. Therefore, he who receives this admonition (regarding the prohibition of usury) from his Lord, and then gives up (taking usury), may keep his previous gains (that he has taken before the prohibition of usury) and it is for Allah to judge him. But, those who revert to (taking usury), they shall be among the people of the Fire, and they shall abide in it forever. (275) Allah deprives (the accumulation of wealth through) usury of all blessings, whereas He blesses (the wealth that is spent out of it for giving out) charity and alms-tax with growth. And Allah does not love anyone who is stubbornly ingrate and persists in sinful ways. (276) Truly those who believe and do righteous deeds and establish regular prayer and pay the alms-tax, their reward is with their Lord, and on them shall be no fear nor shall they grieve. (277) O believers! Remain conscious of Allah and give up what is still due to you from usury (from those who are still indebted to you) if you truly believe. (278) But, if you do not do so (by disobeying the prohibition of usury), then be warned of the war that shall be declared against you by Allah and His Messenger (which has terrible consequences). And if you repent now, you may retain your principal (without interest). (Consequently,) deal not unjustly, and you shall not be dealt with unjustly.

3. Multi-agent Simulation and Its Benefits

Most multi-agent systems are inspired by social insects or animals such as the ants, bees, and birds, which can be viewed as a powerful problem-solving system with sophisticated collective intelligence (Bonabeu et al. 1997). An example from nature of a complex system is the coordination of a flock of birds foraging for food. Computer scientist, Craig Reynolds, in 1987 discovered that the collective behavior of a flock of birds in unison is a result of simple rules of interactions among individual birds (Reynolds 1987). Reynolds proved his theory by creating 'Boids', an agent-based simulation of the birds' behavior consisting of individual agents. Each bird is unaware of the global outcome of the flock forming a V-formation, rather, each agent makes its own simple decisions based on a set of rules, i.e., matching the speed of its nearest neighbor while maintaining a certain angle from its next neighbor. Such simple rules when performed collectively will help the flock to achieve a greater purpose, like finding food.

Besides modelling and solving engineering problems, such as optimizing PID controllers, simulating cooperative traffic systems, and optimizing network packet-transfers, many are adopting multi-agent systems to model complex systems in their field. An example is the increasing interest in simulating complexity in social economic systems (Schweitzer 2002).

4. Modelling a Non-profit Cooperative Credit Network (NPCCN)

The JAK Members Bank of Sweden is a cooperative interest-free savings and lending banking system which has been operating since 1970. It received a full bank license in 1997 and has 30,000 members to date. Members of the JAK Members Bank only need to pay a small fee for administration and development costs. According to the philosophy of JAK Members Bank, due to its negative impact on society, it is unethical to lend money with interest without having any labor involved (JAK 1970).

This work aims to model a non-profit cooperative credit network, study its feasibility, and gain understanding and insights of the dynamics of the network, with particular focus on the initial setup of the network. The model adopted is inspired by the JAK Members Bank system, where the system consists of a cooperative body (co-op) and members as individual agents. The co-op is responsible in managing the members' activities, with predefined sets of rules or parameters that each member needs to abide to.

This preliminary work focuses on a few important parameters, mainly to observe the feasibility of the network in reaching steady state over time. These parameters are presented in the graphical user interface (GUI) of the simulation in Figure 1. The system prompts for basic initialization parameters and rules for the members, such as the initial number of members in the co-op, the monthly pre-savings deposit, the maximum salary deduction, cycle of simulation, number of members that join the network each month, the minimum and maximum salary range of the members, the minimum and maximum amount of loan a member is allowed to take, etc.

4.1 Saving Points System

In order for the network to be sustainable, saving points are introduced to balance the amount of money loaned with the amount of money in savings. The network requires members to have savings during the repayment period and in some cases pre-savings before qualifying for a loan. A fund lock period can be introduced by the co-op to smooth the convergence of the network to a steady state. To visualize the lending, savings, and repayment using the saving points system, an example is described below.

Figure 1: The graphical user interface (GUI) of the simulation model

If member A, is taking up a loan of \$3,000, with a monthly payment of \$1,000 for over 6 months (figure chosen for simplicity in showing the repayment system, in reality, the monthly payment is much lower), his repayment and savings schedule will be as depicted in Table 1. In the 0th month, member A's saving points are -3,000 with a balance of -\$3,000 in his account because he just withdrawn a \$3,000 loan. In the 1st month, he paid his first installment of \$1,000 which covers both the loan and savings. This increases his balance to -\$2,000. His saving points, however, appears to be decreasing in value to -5,000. This is because, it is assumed that he is just making his loan payment, without putting any money into savings for other members of the network to borrow. By the 3rd month, he has fully paid his loan, but is required to put in money for another 3 months. That money goes into savings, for other members of the network to borrow. From now onwards his saving points started to increase because he is letting other members to borrow his savings money. By the 6th month, his saving points have break even, meaning he has allowed his savings to be used up as loans, the same way he is borrowing money from the network. If a fund lock period is introduced into the system, member A can only withdraw all his savings of \$3,000 after the fund lock period is over (usually for several months).

Table 1: Repayment and savings schedule for fictional member A

Month	0 th	1 st	2 nd	3 rd	4 th	5 th	6 th
Payment+Savings (\$)	0	1,000	1,000	1,000	1,000	1,000	1,000
Saving points	-3,000	-5,000	-6,000	-6,000	-5,000	-3,000	0
Balance (\$)	-3,000	-2,000	-1,000	0	1,000	2,000	3,000

From the table above, although it seems that the monthly payment is much higher than the monthly repayment amount for a conventional loan system, it is worth noting that each loan repayment in this interest-free system includes a savings instalment and the payment are structured so that when the loan is fully repaid, all necessary saving points have been earned. Consequently, once the loan has been repaid, the balance of the savings is available for the member to be withdrawn.

5. Feasibility Study of the System

By varying the simulation parameters, the dynamics of the system could be observed and studied for gaining understanding and insight of the NPCC network. Table 2 shows the baseline parameters that are set to these values, unless otherwise stated.

Table 2: Baseline parameters of the simulation

Parameter	Value
New members per month	20
Required loan (multiple of salary)	Min: 2, Max:8
Fund lock period (months)	0
Required pre-savings (% of total points required for loan)	0
Seed capital (in millions)	0

A key value that is worth observing is the average waiting time (in months) a member has to wait in order to get his turn in receiving a loan. Figure 2 shows the plot of the average waiting time versus the number of months of the baseline parameters, while varying the maximum amount of loan a member is entitled to. The plot shows that the smaller the loan, the lower the average waiting time and the faster the network converges closer to its steady state, where the average waiting time reaches its minimum. Ideally, the waiting time should be at or close to zero. The network is insensitive towards the increment in the number of members per month as shown in Figure 3. Thus, in this case of observation, it doesn't matter if 20 or 100 people join the network every month, as it will not affect the average waiting time or the time it takes for the network to converge. Figure 4 shows the effects of injecting different amount of seed capital (in millions) initially into the network. Injecting seed capital initially will only improve the network at the beginning of the system, until all the seed capital has been repaid to the lender. The simulation was set for the system to repay the seed lender over a span of 36 months. From this, it can be predicted that the system can benefit from any amount of seed lender at any point of the system, not just limited to the beginning of the creation of the co-op.

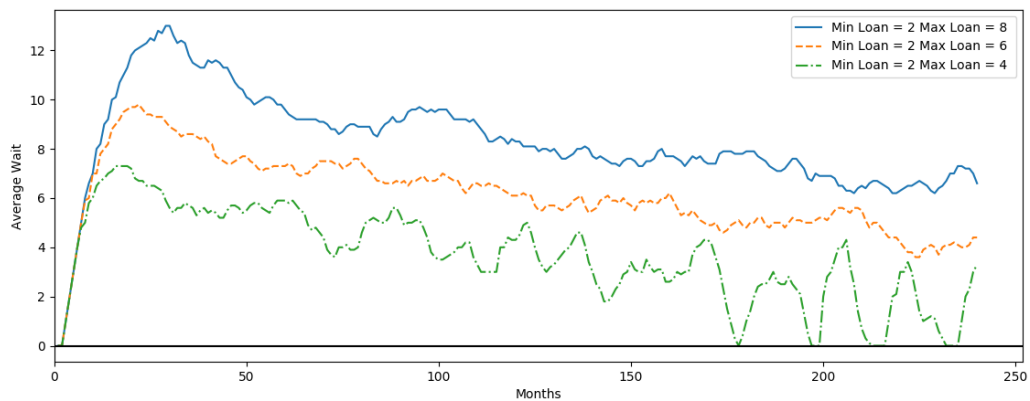


Figure 2: Average waiting time versus number of months while varying the maximum amount of loan a member is entitled to

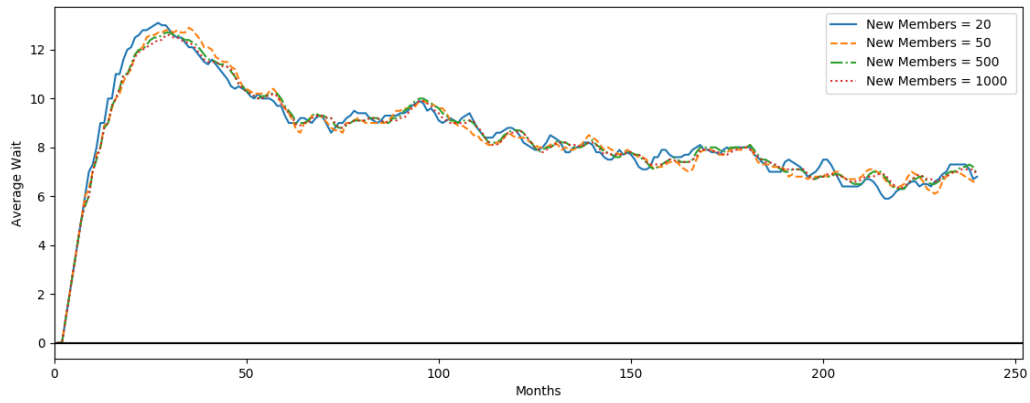


Figure 3: The effect of different new members added to the network per month

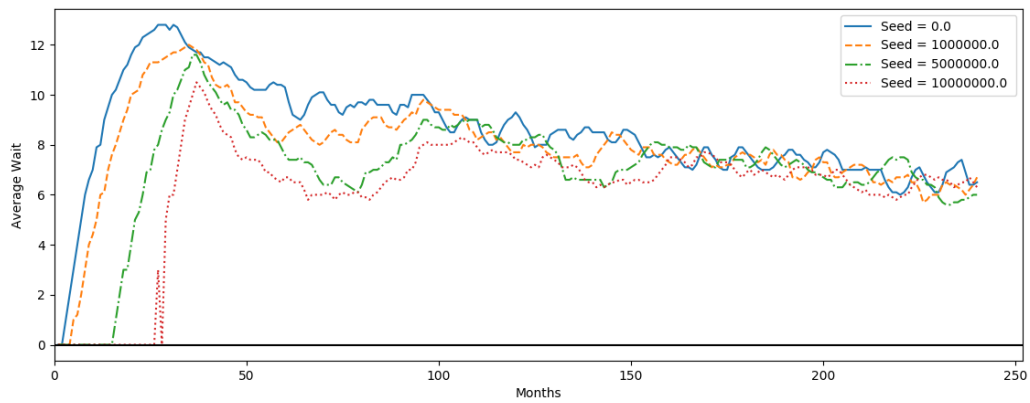


Figure 4: The effects of seed capital (in millions) to the network

To study the effects of fund lock period, the period in which the member has to wait from withdrawing his savings after fully paying back his loan, different values of fund lock period is tested in the simulation as depicted in Figure 5. For fund lock period of 6 months, the network converges to steady state more quickly than for shorter fund lock periods. It is also clear from the graph that the fund lock period has a significant effect on all plots after 50 months, which means the fund lock period helps stabilize the network. Figure 6 shows the effect of forced pre-savings to the network. The value of pre-savings is a fraction from the total saving points a member has to have in order to balance out his loan. It can be seen that the pre-savings requirement pushes the graph to a lower average waiting period. This is because the pre-savings requirement gives some weight (depending on the amount of applied loan) to the members in waiting list, as a member is not allowed to enter the queue for applying a loan until he has enough pre-saving points. This extra rule makes the list more fairly distributed, in oppose to every member randomly enters the waiting list regardless the amount of loan one is applying.

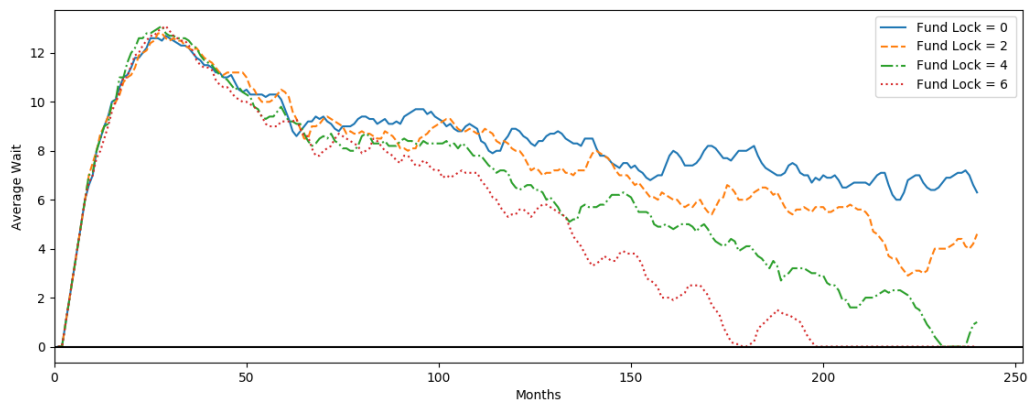


Figure 5: The effects of fund lock period (in months) to the network

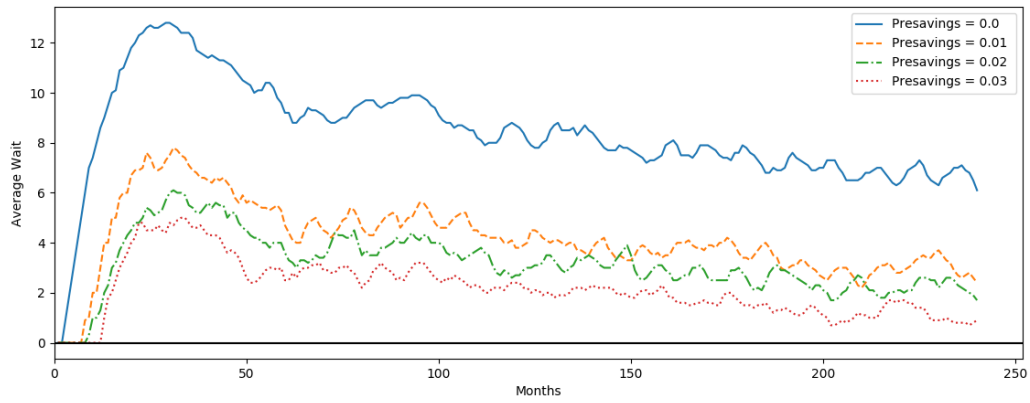


Figure 6: The effect of forced pre-savings to the network (% of total points required for a loan)

After studying the effects of individual parameters, the non-profit cooperative credit network could be designed to optimize the needs of the whole network. Figure 7 shows the effect of varying two important and inter-related variables, the fund lock period and the seed capital. It is interesting to see that regardless of the seed capital, if the fund lock period is existent, which in this case is set to 4 months, the network converges to zero around the same time, even though more slowly for the case of zero seed capital. To further improve the network, a minimum pre-savings requirement could be added to help the network converge to zero more quickly. Figure 8 shows this effect. It can be seen that for fund lock period of 4 months, 5 million seed capital, and 0.5% required pre-savings from total points, the network converges to steady state by the 130th month. It can also be seen that without the help of a seed capital, the same network could converge to steady state around the 190th month.

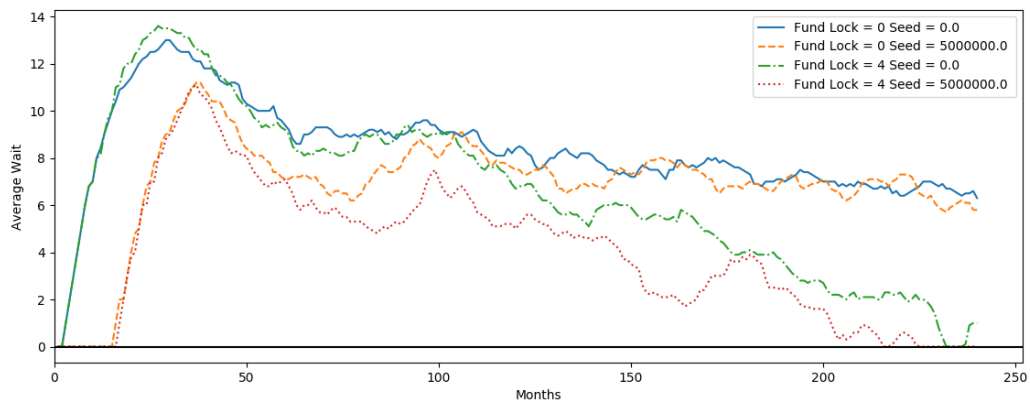


Figure 7: The effect of both fund lock period and seed capital to the network

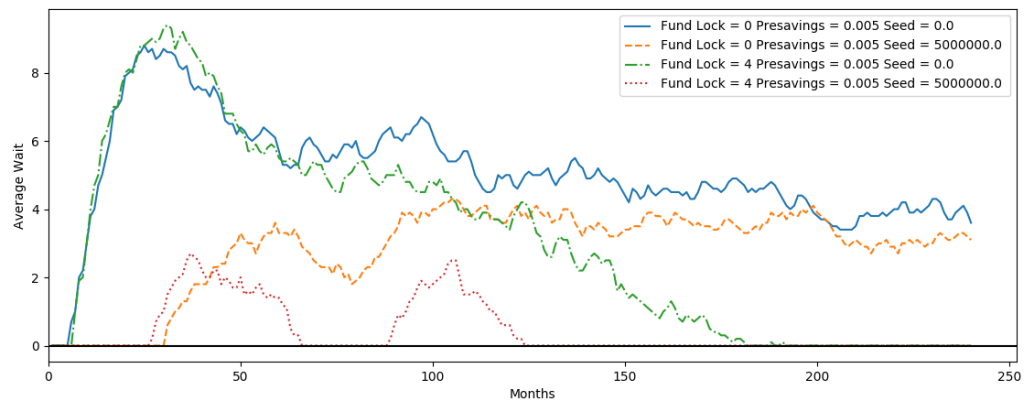


Figure 8: The effect of pre-savings to the network with fund lock and seed capital

6. Conclusion

The simulation model presented in this paper successfully explores a non-profit cooperative credit network (NPCCN) inspired by the JAK Members Bank of Sweden. The network shows responsivity towards the changes in parameters and rules that are set for each member of the network. In the future, more independent and dependent parameters could be incorporated into the system such as the natural behavior of each member in a more realistic economy setup. Hopefully, this work contributes sound academic support from a simulation perspective, in facilitating future research in a non-profit cooperative credit facility, which upholds Islamic ethics.

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The History of Arrival of Rohingya in Malaysia

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Abstract

Arriving in Malaysia with refugee label as a part of their identity, the Rohingya in Malaysia strive to continue their survival to save themselves from the ongoing war, murder, oppression and genocide in Myanmar. As the number of refugees grows, this can cause numerous adverse effects to the economy of the country and the locals if not controlled. Therefore, the sudden rise of the Rohingya in Malaysia has been a nuisance to the government and the local people. Despite the benefits received by Rohingya and the Malaysian government, there are still many problems arise from this. This paper will analyze the history of the arrival of Rohingya to Malaysia and the admission pattern of Rohingya refugees to Malaysia. The research methodology applied is the analysis of books, documents, interviews, journals and past papers.

Keywords: History of ethnic existence; ASEAN; ethnic cleansing, genocide

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1. Introduction

Refugee is an individual involved in any political upheaval, racial reasons or views and crises such as hunger or disaster. As a result, these individuals are forced to flee his or her country. In 1990, there were 15 million refugees' worldwide, involving 21 countries (Richard Hoggart 1992). According to Louise W. Holborn (2008) refugees are individuals who abandon their homes or communities and move to another place, voluntarily or forcibly by powers such as war, attack, persecution or natural disaster. In 2015 the United Nations High Commissioner for Refugees (UNHCR) recorded a total of 65.3 million refugees around the world who need protection, of which 53% are refugees from Somalia, Afghanistan and Syria (UNHCR n.d.). Quoting Hamidi Adam & Ravichandran Moorthy (2015) refugees is seen to breed numerous problems to the new, unauthorized host country, including refugee overflow and problems regarding economy, voting system, education, health and socio-politics. According to Amir Hussin Baharuddin (2015) the influx of Rohingya refugees to Malaysia will cost the country's economy because the government is compelled to spend millions of ringgit to cover the food, clothing and placement costs. From the aspect of health, some of the refugees could be carrier to communicable disease that causes infection and eventually bring fatal to Malaysians for instance, tuberculosis (TB) and hepatitis (Naufal Idris 2015).

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2. Research Objective

1. To identify the history of Rohingya's ethnic who lives as a refugee.
2. To identify the impact on Malaysia as a host country to Rohingya refugees.

3. Literature Review

3.1 History of Rohingya in Myanmar

Hariati & Rohaida (2012) were among the earliest in Malaysia highlighting on the Rohingya issues by stating that Rohingya's ethnicity in Myanmar is disowned by the Myanmar government due to discrimination and persecution which denied the Rohingya language and culture to be a part of the ethnic group recognized by the Myanmar government. These opinions are divided into several phases, the first phase: the signing of the Citizenship Act 1982 in which the Rohingya ethnics are excluded from the 135 ethnicities of Myanmar. The second phase is the denial of right for education and healthcare. The third phase is the incessant restrictions on economic aspects that contributed to hunger and disease outbreaks and the fourth phase; the massacre of the Rohingya ethnic by the Arakan Buddha in order to banish them and seize their land in Arakan forced the Rohingya to flee and live as exiles in neighboring countries.

The writing of *A History of Arakan: Past & Present* proves the existence of the history of Islamic civilization in the Arakan region, which not only have been denied by the Myanmar government, but also been labelled as immigrants in Arakan Province. Through this writing, the Rohingya Muslim is duly to be helped in terms of citizenship law and humanitarian advocacy as history has documented the greatness of Islam in Arakan Region during the reign of the Mrauk-U Dynasty between 1430 and 1638. The writing itself was set to aim for the world communities to understand that the history of Rohingya Muslims that lived in the Arakan region has begun thousands of years ago.

The history of this civilization is such fundamental information in identifying the origins of the Rohingya civilization before the civilization was destroyed in the hands of British Indians (Mohammed Yunus 1994). In the context of the nation's identity, M.A Tahir Ba Tha (2007) stated that Myanmar has repudiated the existence of Rohingya Muslims during the establishment of Myanmar and the constitutional law. Referring to the author, the historical record has also witnessed the change of the Islamic name of the rulers with Buddhist name. For example, based on the political history of Islam, Naramekhla (1430-1434 A.D.) was actually Solaiman Shah. Some of the evidence presented by the researcher in denying Rohingya as an immigrant in Arakan Country is the language of their own, a systematic form of home, a strong faith, a celebration of festivities, agricultural products, wedding customs, food processing method, religious rituals, sports and games, songs and literature. This study is seen to be useful as it relates its theme to the sociological issues such as the grandeur of Islamic politics, the elimination of historical facts, religion, residence and culture.

When the government of Myanmar disavowed the prejudicial action towards the Rohingya in Rakhine who actually intended to administer Arakan, it is said to protect the lives and ensure the area is safe from criminal activities such as rape, robbery and murder (Lindblom et al. 2015). The Buddhist in this area have been chanting slogan for security and opposing the Rohingya's law offender in Arakan. At the same time, the Burmese government said would be held responsible if any killing among the ethnic group is convicted as the crime removal policy involving conspiracy, the involvement of civilian, and genocide attempt against Rohingya is implemented.

In the context of economic sanctions imposed on the Rohingya community in Myanmar, besides living with the ongoing threat of armed murder and destruction of residences, the economic pressures is seen by researcher as another problem for this ethnic group, based on report by the human rights protection agency. When the Arakan Buddhists killed the supplier of rice of the Mrauk-U town, the scarcity of rice supply resulted in hunger crisis. A series of attack threats somehow caused the Rohingya community to feed on grass and rationed rice only. While this study is important in terms of highlighting a different approach than other studies in expressing a critical understanding of the Rohingya refugees, it would be more significant if the author presented the writing in more thorough, precised and balanced way with empirical evidence and did not come out with generalization without being supported by strong evidence.

3.2 The perception of outsiders against the ethnic of Rohingya

According to Imtiaz Ahmed (2009), in terms of the role of foreign investors, the Myanmar government took the matter of the role of the military lightly in fighting crimes convicted by the Arakan ethnic against the Rohingya Ethnic in the Rakhine Region as their main interest is on the global economy. The Myanmar government's efforts are also seen just to obscure the views of foreign investors, so that the issue of Rohingya is depicted as illegal immigrant issues, rather than a national issue as Rohingya's ethnicity has never been recognized by Myanmar government.

Thus, this has made the persecution against Rohingya's ethnic intensified in the Rakhine Region in no way it is undermining the foreign investment in Myanmar. Alas, the Rohingya faced the deadly consequences because the Myanmar government is supported by the investors in curbing the violence of the Rohingya who have been labelled as Islam terrorists in the Rakhine Territories, just to keep their investments in Myanmar safe and sound. This theory explains why there is no such thing as international economic sanction imposed on Myanmar after decades of the country's oppression against Rohingya. To not deny its usefulness, especially from the perspective of the ideas, this theory outlines how we should scientifically analyze the problem of oppression against the Rohingya refugees.

In the context of relocating the Rohingya refugees, the Master's thesis study written by Trudi Lee Andres (2014) which took place in San Diego, said that when the refugees arrived in San Diego, the main thing to do was to restore them from the trauma of war, providing the basic necessities, examining their health and rehabilitate the condition of the refugee who is in a state of fear. The refugee rehab approach in San Diego covers the aspect of thought, moral values, culture, economy and politics as the life of the Rohingya in Myanmar is completely different from the civilians of San Diego. Their presence in San Diego will definitely be in need of job opportunities, political protection, economic-related knowledge, health access, environmental well-being, language barriers and religious well-being. What the volunteer of San Diego did to the Rohingya refugees, who have different socio-cultural backgrounds compared to San Diego residents, in terms of motivation in order to rebuild the self-confidence during mental recovery process along with the psychological approach, have given them a new hope for their future life in San Diego. Thus, this study does not address the sociological aspects such as culture, religion, status and lifestyle as well as class and ethnic analysis.

According to Linda Crossman (2014) in her thesis writing, she stated that the powerful countries such as the ASEAN, the European Union, the National Union, and the United States failed to play a role in protecting the Rohingya from massacre. The root of the cause to the war and genocide is never found due to injustice and discrimination. Hence, the decades-long of persecution by the Buddhist of Myanmar resulted in the situation where the Rohingya generation today living in a state of depravity and threatened by a crisis of warfare. From her view, this designated calamity is not a terror or war, but just some sort of new idea of today's definition of ethnic cleansing for the purpose of fulfilling certain goals for example, to give political authority to the ruling party.

3.3 Malaysia and Rohingya issues

On a note, Malaysia and Thailand collaboration is crucial to aid and defence the ethnic population, but the study found that housing issue and education needs are not the main concern of Malaysia. This study proposed that Malaysia should cooperate with NGOs and UNHCR to save the Rohingya from the Myanmar political crisis and human trafficking and also involved in education and placement programs designed by UNHCR (Daniel Sullivan 2016). In terms of international protection proposed by Alex J. Bellamy (2010) the accountability to protect the oppressed refugees should be carried out by setting the three core thrust of protection on this ethnic and supply more attention on issues involving genocide, ethnic cleansing, war crimes and humanitarian crimes.

Furthermore, according to Amnesty International (2010) report, the denial of rights that resulted in the torture of Rohingya refugees in Malaysia was due to the consistency of Malaysia's failure to ratify international standards that protect and promote the rights of refugees and asylum seekers, among which are the International Covenant on Civil and Political Rights (ICCPR), Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT), the United Nations Convention against the

Elimination of All Forms of Racial Discrimination, the International Covenant on Economic, Social and Cultural Rights (ICESCR) and The 1990 International Convention on the Protection of the Rights of All Foreign Workers and Their Family Members. However, according to this study, Malaysia still needs to respect the principle of non-refoulement which is a customary international law which means that a person can not be returned to a country where they are faced with oppression or other human rights violations, can not be denied admission when in residence on the border of a country, forced repatriation case (where a person is deported to the country of origin without their consent), sent to another country who has no guarantee of refugee protection and the prohibition on torture. Malaysia also has obligations under the treaty which it has ratified as the Convention on the Rights of the Child (CRC), which formally has the obligation to take care of refugee children. During the Vietnamese refugee crisis in 1975, Malaysia has partnered with UNHCR on humanitarian missions and allowed it to be the lead agency responsible for refugees and asylum seekers. In its limited capacity, UNHCR provides all activities related to registering, documenting and ensuring the status of asylum seekers and refugees. Malaysia's accountability in assisting the economic activity and survival of the Rohingya refugees is an important aspect to be examined in ensuring that the country is able to move towards a developed nation status. Historically, the Rohingya is a 'temporary resident' class created by the government in accordance with the logic of equality of international law in the administration of Malaysia.

Moreover, the refugee's economy status mentioned by Azizah Kassim (2012) stated that the absence of documents led to the failure of the refugee to have formal job that can protect them from any risks and refraining them from utilizing the facilities of the workers as enjoyed by registered foreign workers. According to Azizah Kassim (2012), there are even Rohingya refugees at the east coast of Malaysia engaging in the agricultural sector and selling their crop consisting of fruits and vegetables to the middleman. In reality, these refugees are largely living below the poverty line where the daily income of the refugee is only RM30-RM40. However, according to Azizah (2012), there are a few successful Rohingya refugees that have lived in the country for three decades, usually in the construction, sub-contractors and trading sectors.

The poverty status of the refugee has led to poor implications on their education, housing, health, food and other resources. Besides that, referring to Linde Lamboo (2017) the reason why Rohingya refugees choose to leave Acheh and move to Malaysia is due to family factors, good job opportunities, the pressure from Indonesia's government and the success stories of Rohingya in Malaysia. All of these push-and-pull factors somehow visualized Malaysia as a destination and causing the number Rohingya refugees to grow every year and compromised the Malaysians. He added, the idea of 'attraction' is just another way of how to choose and how to construct differences between humans through their own objectives and all of this is just one construction for the ethnicity discourse.

Furthermore, Intan Suria Hamzah et al. (2016a) stated that the Rohingya refugees have no document of citizenship status, economic stability, politics, social life and living in large Muslim populations resulting in Malaysian government to deal with great adversity. Meanwhile, Intan Suria Hamzah et al. (2016b) narrated the hardship faced by Rohingya refugees were to the extent of risking lives to the trafficking syndicate just to make it to Malaysia, while there were also some friends of theirs died during the journey. In terms of income, they are doing a variety of small-scale economic activities by working as garbage collectors, working at restaurants and become laborers. They also stayed together in a small house and lived a difficult life. Despite that, they are still grateful because they can work in Malaysia, which is a peaceful Muslim country and are hoping that their next generation will be supplied with sufficient education to develop in unison with the Malaysian. Although both of these studies are important in terms of highlighting a different approach which is the sociological approach, it will be more meaningful if the author is more thorough and balanced in terms of presenting data with empirical evidence and did not come out with generalization without being supported by strong evidence.

4. Methodology

The qualitative study was conducted which involved facts, information, statements, comments, impressions, meanings, concepts, features, symbols, perceptions, metaphors, feelings and so on. This method enabled researchers to develop deeper understanding of the phenomenon in reality in actual fact. The data obtained in this qualitative research are in the form of books, magazines, dissertations, journals, papers, seminars, official diaries, pamphlets, interviews and observations. For documentation research, it is a technique conducted by

researchers to obtain data and evidence through the study of the history of the Rohingya people in documents and records. It refers to the process of collecting data by conducting research and reading of documents related to the issues studied (Charles Issawi 1962: 36). Using documentation, it is the way of collecting data by conducting research on documents related to the problems. Meanwhile, history is the number of studies, changes, events and pasts (Abdul Halim Haji Mat Diah 1987: 120). History is a reflection of the past on humanity and its environment, which is structured scientifically based on timeline with interpretation and explanation, giving insight and understanding of what is happening (Sidi Gazalba 1976: 44).

5. Results and Discussion

5.1 The life of Rohingya refugee in Malaysia

Tan Pok Suan (2006) who studied on the life of non-status Rohingya refugees showed that living without identification documents and the recognition of the Myanmar government made it difficult for them to obtain employment to cover living expenses, surviving poverty and unemployment, covering medical expenses and gaining rights for education for the young generation of Rohingya as they are being denied for government schools whilst the private schools are imposing ridiculously high fees that is beyond their ability. Researcher also stated that the children of Rohingya refugee who were born in Malaysia dealt with the difficulty to have birth certificate without the help of local residents. Without birth certificate, there will be no work permits, no travel documents, no formal education and no identity cards and so on.

Furthermore, according to researcher, the risk of detainment and being deported to the border are also a problem for them, as they only have UNHCR identity cards that do not claim their status as refugees. However, the power of social network among the Rohingya refugees have helped them to continue living in Malaysia. Tan Pok Suan (2006) also claimed that the Rohingya refugees are in uncertainty in continuing the continuity of their ethnic identity. Tan has divided some of the aspects that barricade the Rohingya to continue their life in Malaysia:

- a. Poverty, unemployment and no job security.
- b. The future of the education of Rohingya refugees in Malaysia.
- c. Inadequate medical treatment.
- d. Birth certificate issue.
- e. Security, detention and imprisonment issues.

Azizah Kassim (2012) revealed that Rohingya's ethnic have undertaken various economic activities together to create a community of Rohingya in various places such as Kuala Lumpur, Penang, Kedah and several other parts of Malaysia. This community ensure the continuity of language and culture by practicing the use of their language in daily life and conducting various cultural activities together such as celebrations, fasting ceremonies and so forth. Rohingya Ulema Council (2013) also promoted any forms of education that influenced the language and culture survival have been carried out as well as fardhu ain classes and reading, counting and writing classes have been conducted in the Rohingya community surau in collaboration with several local and international welfare bodies. These fardhu ain classes and reading, calculating and writing classes encouraged the socio-cultural ties in the continuity of the language and cultural practice while opening employment opportunities for the Rohingya (Azizah Kassim 2012) ethnic group.

5.2 The total of Rohingya refugees in Malaysia

As reported by the United Nations High Commissioner for Refugees (UNHCR) there were 108,760 registered immigrants from Myanmar in Malaysia for year 2015, compared to 95,380 in 2013. The increment has bred problems in terms of educational opportunities, the difficulty of obtaining registered jobs, arrested by the local authorities while conducting economic activities, unregistered workers and very small wage rates (Berita Harian 2016). Therefore, a study was conducted to identify the approach to survival of Rohingya refugees in Malaysia. In May 2016, the latest statistics depicted that 52,960 Rohingya refugees live in Malaysia and work in the country. Most of them work as laborers, traders, farmers, entrepreneurs and assistants in the supermarket.

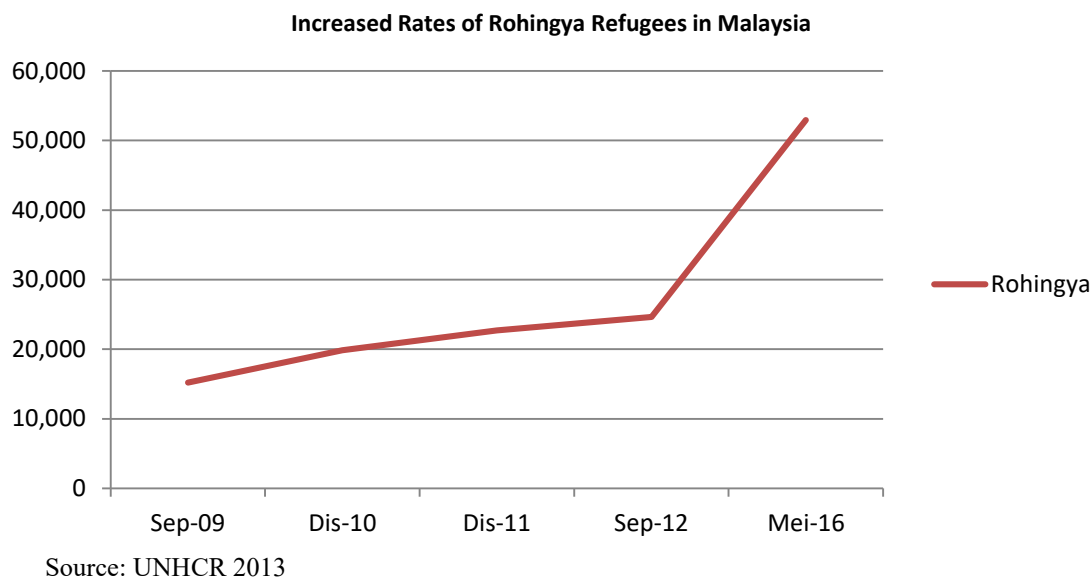


Figure 1: The Effect of Increased Rohingya Refugee in Malaysia

Looking at the tough life and the futile future faced by their children, there are some who give up their children to Malaysians by changing their citizenship status to be adopted by Malaysians (Azizah Kassim 2012) and some are collecting used items for recycling and opting to become beggars to raise their children.

5.3 The Impact of Rohingya refugees to Malaysia as a host country

5.3.1 Human trafficking

The discovery of 139 graves with 29 suspected human trafficking camps are feared that it could contain the remains of dozens of Burmese Rohingya migrants found in Perlis's forest recently. This clearly marked that the activities of the trafficking syndicate between the Malaysian and Thai borders were actively planned and protected (Malaysiakini 2015). According to Intan Suria Hamzah et al. (2016a), human trafficking activities involving the Rohingya causes PDRM and the Malaysian armed force to intensify the operation of combating human trafficking syndicates. The rapid growth of the economy has brought along the problems of foreign workers, illegal workers, migrant smuggling and human trafficking. According to statistics, the total cases of human trafficking from 28th February 2008 to 31st May 2016, there were 1,151 cases with 1,656 arrests, while those suspected to be trafficked were 7,863 and the number of victims was recorded at 2,492 persons (Utusan Melayu 2016).

5.3.2 Epidemics

The government is worrying over the transmission of tuberculosis (tuberculosis or tuberculosis) which is a contagious disease and a respiratory tract disease caused by bacteria. This bacterium is a very strong bacteria that takes a long time to treat it. These bacteria often infect the organ of the lungs (90%) compared to other parts of the human body. Tuberculosis (TB) is a contagious disease that is still in the world's attention. Until today, there is no free TB country. The death and pain rates due to mycobacterium tuberculosis are also stakingly high. Apart from that, there are Rohingya refugees who suffer from Hepatitis B virus that is highly contagious via contact with blood or contaminated body fluids. It is 100 times more easily contracted than HIV. The disease can be detected through liver function tests. In severe cases, it can bring fatality due to liver damage where parts or all of the liver is destroyed. Chronic liver disease can lead to cirrhosis and liver cancer, one of the most common cancer types in the world (Daily rays 2015).

Meanwhile, according to Khatijah HA Abdullah and Suzaily Wahab (2012) Koro-Like syndrome is a disease where the patient assumes the genital will shrink and disappear from the body and in extreme circumstances, the sufferers feel that the shrinking genitals will kill themselves. This symptom is caused by psychosexual conflict and high pressure that hit the Rohingya refugees. Besides that, the Associated Erectile

Dysfunction is a long-term effects of illness caused by trauma of war, socioeconomic situation and history of child abuse. According to researchers, in the long run the stress can result in trauma causing psychosexual syndrome which will lead to the inability to sustain the survival of the Rohingya refugee for the next generation. The impact of various illnesses creates anxiety over Malaysians against the viruses as well as the government is forced to spend large amounts of money to treat and curb the spread of the disease.

5.3.3 Victims of crime

Apart from the personal belongings being confiscated by the local enforcers, some of them also faced persecution for alleged illegal UNHCR cardholders and been arrested and detained (Azlinariah Abdullah 2014). Not only that, the PDRM also has successfully uncovered the activities of children trafficking at the price of RM1,200 to RM1,500 per children, for begging purpose after saving nine children and two teenagers in a premise at Jalan Hang Kasturi in Kuala Lumpur at (Steven 2017).

5.3.4 A threat to economy

The uncontrolled admission of Rohingya refugees in the country will somehow threaten the economy. As a small country, the spending on managing the Rohingya refugees will involve a huge sum of millions of Ringgit. Thus, Malaysia is restricting the influx of Rohingya refugees and urges the big and large-scale countries such as the middle east countries to take on the role of defending more Rohingya refugees into their country (Naufal Idris 2015).

5.4 Actions need to be taken

5.4.1 Providing employment opportunities

The Malaysian government has introduced the Pioneer Project for Rohingya Employment specifically for the cardholder of United Nations High Commissioner for Refugees (UNHCR). Principally, there are about 300 Rohingya holding the United Nations High Commissioner for Refugees (UNHCR) cards who had undergone security and health screening would be employed in selected companies in the plantation and manufacturing sectors. They will be placed in selected companies in the plantation and manufacturing sectors to provide them with skills and financial resources to sustain their lives before being relocated to a third world country. This is one of the government's humanitarian initiatives in managing the UNHCR cardholders in the country even though Malaysia is not a member of the UN Convention on Refugees 1951 and the 1967 Protocol. Based on records, the number of authorized cardholders in Malaysia is 194,474 people from 62 countries, and a number of 133,517 people or 89 percent of the total are from Myanmar, in which 55,565 people are the Rohingya (Shakil Hamid 2016).

5.4.2 Cooperating with other countries

Qatar is among the countries involved in providing help through the Qatar Development Fund (QDF), in which they channel financial aid to Rohingya refugees who are the cardholders of UNHCR's United Nations High Commissioner for Refugees. QDF aims to execute three different projects focusing on providing training skills in the plantation and manufacturing sectors, conducting pre-schooling and primary schooling for the children and a health insurance scheme for the Rohingya (Astro Awani 2017).

6. Conclusion

To conclude, it is proven that Rohingya is a group of ethnicities without a country and denied citizenship. Because there is no clear policy on the status of the Rohingya in Malaysia, their status can not be ascertained. However, the introduction of the Working Permission Printist Project to the United Nations High Commissioner for Refugees Cardmember (UNHCR) helped some of these refugee groups.

As a country that has not signed the Protocol 1967 and the 1951 Refugee Convention, Malaysia's laws do not provide any part in hosting any refugee status.

In fact, the identity card provided by UNHCR is not recognized as legitimate documents should be owned by Rohingya. Due to these difficulties, the Rohingya which accounted for nearly 60,000 people in the

country faced many problems especially in terms of economy, health, education and self-protection and vague future.

This future of ambiguity is not only faced by the current generation but among the successors, teenagers and Rohingya children. Despite the blurring problems of the future, they are still struggling to live a life of difficulty. The Rohingya people who dream of a life in their own country in one day, they are keen on their cause in ensuring the survival of identity is maintained. This can be seen in the discussion above that they care for religion, appearance, daily food and language for communication purposes. Their interaction is also ensured to help the welfare of the Rohingya in this country. Several organizations have been set up on the consciousness of protecting Rohingya's welfare from time to time reminding us that the Rohingya in this country should not be put aside but should be defended so that in the future, they can return to their homeland with a recognized status.

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Islamic Values in Philosophy of *Tawhidic* Science

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Abstract

Tawhidic Science is a philosophy that is developed based on Islamic worldview (*tasawur Islam*). The ultimate objective of *Tawhidic* Science is to revive Islamic scientific tradition by giving understanding to Muslim scientists about Islamic epistemology, hierarchy of knowledge, position of *tawhid* in scientific activities. It also emphasizing the understanding of relationship between Allah, man and nature based al-Quran and Sunnah. This philosophy plays an important role as a framework of integration between reveal (*naqli*) and acquired (*aqli*) knowledge hence implanting Islamic values in science and technology. This article tries to acknowledge the values contained in the *Tawhidic* Science and its roles in development science and technology (S&T) in Islamic world. The values can be divided into four main groups which are *Rabaniyyah*, *Akhlakiyyah*, *Insaniyyah* and *Wasatiyyah*. Each group contains several other values that can be applied to development S&T. The understandings of Islamic values in *Tawhidic* Science can be a guidance to stake holder in S&T in making decision that complied with *sharia* and Islamic teaching.

Keywords: *Tawhidic* Science; Islamic values; science and technology; worldview

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1. Introduction

Many scholars have discussed that science and technology (S&T) are not value free as what have been thought. Otherwise S&T are embedded with the values (value-laden) of the side that developed it (Yusof 2007; Shahrir 1999; Nasr 1990). The premise of science neutrality rooted from the western philosophy of positivism which is over-glorifies the rational thinking and defying other source of knowledge such as revelation and metaphysics. It is well known that this philosophy is resulted from the conflict between scientists and church in Europe. In the end, western society views S&T must be objective and absolutely free from any value especially religion.

According to Merriam-Webster the word value means relative worth, utility, or importance. In Arabic language, value is rendered as *al-qayima* (القيمة). According to Ibn Manzur (1989) in *Lisan al-'Arab*, he commented value as price, goodness and evaluation. The definition of value in the context of this paper leads more to the perspective of axiology (theory of value) that are questions that discuss what is right and wrong.

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Western's axiology only focuses on the element of moral and etiquette in attempt to define its value. Value from the western perspective is defined as the combination of among degrees of element and normative element that moulds the framework of human's life (Paul Taylor 1961). It is a lasting standard in terms of time and arranging human behaviour system (Clayde & Kluckhohn 1985). Value is also a manifestation or product from the desire and motive that are recognised from the society and culture (Mukerjee 1965). In short, value can be defined as the human acceptance and evaluation against something, either it is measured positively or negatively that are based on belief, etiquette and norms of the society. However, according to Islamic out view, balance of value is not just prioritising only the element of normative but also putting the element of faith in measuring either some matters, acts or words are good, beneficial, harm or despicable (Shuhairimi 2008).

It is obvious that the difference between western and Islam's concept of value is Islam puts the priority of revelation as the main reference in deciding well or bad of something. However, this does not mean Islam defies the role of intellect and culture but both of these aspects must be guided by revelation. Islam even positions intellect as the main tool for interpreting and understanding revelation in shaping framework of Islamic value. Al-Quran and Sunnah give basic guidelines, and the role of *ulama* (scholars) is to interpret those guidelines based on the authentic interpretation methodology so that they are aligned with the place, time and era.

2. The Connection between Worldview and Values

Tasawur or worldview plays a vital role in shaping the value of a society as it is an understanding or one's assumption of the world where it is based on their religion and civilisation (Abdul Wahid 1999; Shukri 2014). Worldview is also act as a framework and a basic to forming one's belief, opinion and action (Vidal 2008). In short, it is the most basic thing in developing value and belief which will transform into actions.

In western history, concept of value keeps undergoing changes according to the changing of its worldviews. Something might be wrongly assumed at a time but good at the other times. The best example that can be made as a study case is the western's judgment on homosexuality and same sex marriage. Western society back then were really against homosexuality and same sex marriage because it was wrong on their balance value that was affected by Christianity worldview. However, nowadays western's worldview is more dominated by the philosophy such as humanism and secularism. So their value also undergoes changes according to the new worldview. Nowadays homosexuality is considered as good as heterosexual, and people have right to choose their sexual orientation. Plus, the majority of western society has accepted same sex relationship in their social system and a lot of countries have amended the law in allowing and approving same sex marriage.

Same goes with the moral issue and science etiquette whereby judgment against this issue is also can be changed from time to time. A value balance that is based on positivism philosophy does not have clear resolution either good or bad which causes it is easier to be exploited and manipulated based on lust and man's desire. This matter does not happen to Islam because Islamic worldview has never changed as long the reference is al-Quran and Sunnah. Islamic value is a constant and permanent throughout the era although it is embraced by different races and countries. For this reason, Islamic values are able to be the universal value standard for all mankind despite from religion background and races.

3. Islamic Value in *Tawhidic* Science Philosophy

Tawhidic Science is a science philosophy that is based on the concept of *tawhid* and to acknowledge the existence of Allah as the creator and make Him as the centre of every scientific activity. *Tawhidic* Science Framework can be illustrated in Figure 1 below:

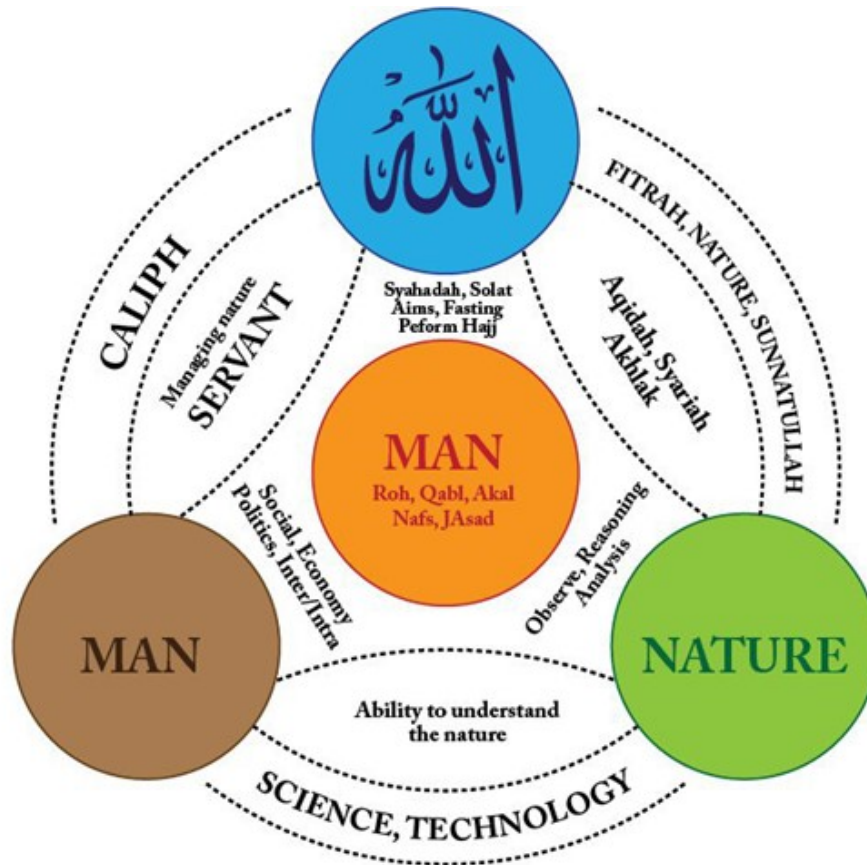


Figure 1: Basic entities in the framework of *Tawhidic Science*

At its simplest, within the framework of *Tawhidic Science*, there are three main entities that are to be considered: God, man and nature; whereas in the conventional science the entity of God is absent. Therefore, the relationship between all these three entities must be understood in order to comprehend the concept of *Tawhidic Science* (Mohd Yusof et al. 2015). The relationship between these three entities is the core of *Tawhidic Science* philosophy and if it is analysed it is packed with Islamic value.

According to Yusuf al-Qaradhwani (1998), Islamic value is divided to *Rabbaniyyah* value (divinity), *Akhlakiyyah* (moral), *Insaniyyah* (humanity) and *Wasatiyyah* (balance). These four values are closely related to each other and must be taken as a whole. If only one value is taken or left, then it cannot be backed up to Islam. The combinations of these four values are also common characteristics in everything that is called as Islamic. Plus, these values are the main characteristics of Islamic law, Islamic civilisation and Islamic education as a whole. All these values can be found in *Tawhidic Science* that should be implemented by Muslim scientists in the framework of changing western science paradigm that is considered as that free from value. Islamic values in *Tawhidic Science* can be summarised in Figure 2 below:

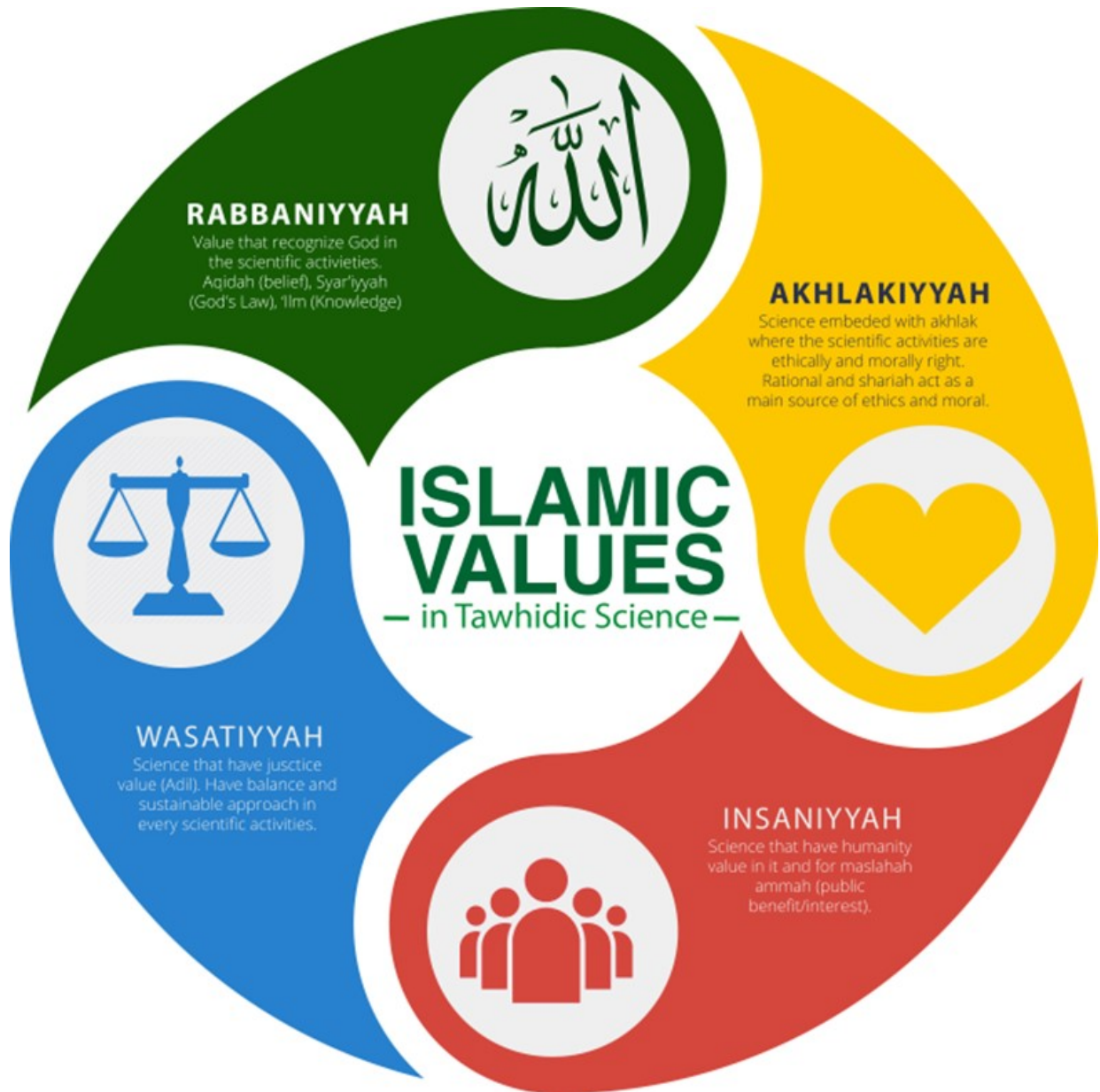


Figure 2: Islamic value model in *Tawhidic* Science philosophy

3.1 *Rabbani* value

Tawhidic Science philosophy makes *Rabbaniyah* value which is the value of divinity as its main core. This element is a noticeable difference with western science philosophy that does not acknowledge God's position in its philosophy (Kamal Hassan 1989). These values are crucial in because it acknowledge and realise the existence of god in every aspect and level of scientific activity. Muslim scientists from that point should acknowledge the existence of a law (God's law) that limits science activity. In *Tawhidic* Science, *Rabbani* value contains many other related values such as:

a. The value of *aqidah* (faith)

The value of *aqidah* in this philosophy explains the oneness of Allah through concept of *tawhid*. It also explains the relationship of Allah with human beings and the world. This value projects an understanding that Allah is the Creator and the only God we should worship. He that has created all beings of the world that includes the land and the sky and what lies in between (al-Furqan 25: 59) and He holds the power and knows what is happening in the world. In addition, the creation of the world is a sign of Allah's greatness (Fussilat 41: 37). It is created at a specific rate (al-Qamar 54: 49), balanced (al-Mulk 67: 3) and follows the system and

the rules organized by Allah that is known as *Sunatullah*. Hence, the scientific knowledge should observe and capture this phenomenon that is subjected to follow the *Sunatullah*.

This value has defined the position of mankind in this world as His slave and *Khalifah* on earth. The duties of the mankind are to worship Allah (al-Dhariyat 51: 56) and as the *Khalifah* of Allah that has the duties to maintain a prosperous world (Hud 11: 61) and to create safety as well as happiness in this world (al-Maidah 5: 16). With this spirit, scientists and professional Muslims will understand clearly that science and technology are one of the methods to achieve the ultimate goal of Islam which is to preach to the mankind to have faith in Allah and to do good deeds (al-Dhariyat 51: 56). Any scientific activities that hold upon such understanding will be considered as ibadah and good deeds.

b. The value of knowledge ('ilm)

The values of knowledge can be defined as the understanding of Islam towards the philosophy of knowledge and specific information on science and technology that is stated in the Quran. The introduction of Quran to the mankind has brought forth a new chapter in understanding knowledge where Islam ranks knowledge the highest and noble. The nobleness of the knowledgeable has been explained in the Quran whereby Allah lifts up the position of the faithful and knowledgeable to a certain degree higher than those who are faithful but not knowledgeable (al-Mujadalah 58: 11). There are many verses of the Quran that discusses knowledge and if comprehended, it will form a framework of the Islamic Philosophy Knowledge that is clear and aligned with Islam in terms of epistemology, ontology and the hierarchy of knowledge. Islam has clearly stated that the main source of knowledge is the revelation that has been brought down to the prophet (the Quran and the Sunnah), and after that will only come *aqli*, the heart (*qalbu*) and the senses (Husaini 2013). Hence, reveal knowledge (*naqli*) and accuired knowledge (*aqli*) must be applied and positioned fairly in any scientific activities to achieve the integration of knowledge. Other than that, al-Quran is filled with scientific knowledge. The scientific knowledge in the Quran must become an inspiration in the scientific research of a Muslim. However, the usage of the verses must be followed by a clear understanding of the Islamic hierarchy of knowledge to avoid misunderstanding which uses scientific proofs the justification of the validity of the Quran (Shahrir 1993).

c. The value of *Syari'yah*

Tawhidic Science contains *syari'yah* value. *Syari'iyah* value here means every S&T activity must be based on Islamic *syariat* and make them as a barrier that should be followed. In other words, S&T field is aligned with the desire and the objective of *syarak*. Islamic society is free to make activity in S&T with being limited with and driven with *syarak*. The clear necessity here is for Muslim scientists to have basic knowledge in ensuring the direction of S&T research is not strayed from Islamic education and really contributes to the development of Islamic civilization (Shahrir 1993).

3.2 The value of *Akhlakiyyah* (morale)

In producing a good S&T, this value must exist on the etiquette and morale of science. Although etiquette and morale exist in conventional S&T its secular value balance cannot prevent or solve the impairment of S&T. The value of *akhlaq* in *Tawhidic* Science places revelation guideline and *sharia* law as its core. It summarises good deeds that that is wanted by the god to its creature. Then, *akhlaq* references that suits these criteria is only Rasulullah SAW. It is our responsibility as a Muslim to translate it into S&T activity so that the Islamic *akhlaq* value is made as guidance and something to be followed. This value is not just external by nature that is being assimilated into the protocols or rules only, but also internal by nature that covers manners and behaviour of a scientist. *Akhlakiyyah* value can be segregated into a few values that are contained in commendable value (*mahmudah*) such as the value of honesty, justice, responsibility, *ihsan*, *taqwa*, professional, and *itqan* (hardworking).

3.3 The value of *Insaniyyah*

Generally, this value upholds the value of mankind in S&T and makes mankind the winner of its main objective and not backing up the safety and prosperity of mankind. The main objective of S&T is to help mankind in fulfilling their needs and necessities thus creating a better and comfortable life. In other words, S&T is responsible in fulfilling one's need or problem. After the first objective is achieved, S&T is used to gain its second objective which is to fulfil the needs of Islam by being caliphs and prospering the world. Both of these objectives are driven by rabbaniyah value that in the end will bring to its ultimate goal as a Muslim which is for bringing themselves closer to Allah.

a. The value of humanity

The humanity value of Islam is not similar to the humanism concept by the West as it is the opposite from the concept of God. The humanity value that lies within this philosophy is to glorify mankind in science and technology, but not denying the values and roles of the *Rabaniyyah* aspect. This value can be divided to few aspects of values such as freedom, brotherhood, sympathy, love and help each other. With these values, the benefit of science and technology can be felt by all mankind and could avoid cruelty such as domination, monopoly and exploitation of science and technology by the third countries.

b. The values of culture and society

The philosophy of *Tawhidic* Science recognizes the role of culture and society in shaping S&T. According to Shahrir (2010), S&T must be shaped based on the local culture as it has the values and understand the local societal context and needs. This is similar to the context of language whereby *Tawhidic* Science encourages the usage of local language (Malay in the context of Malaysia) without denying the importance of foreign languages such as English and France. The usage of Malay language in S&T is prioritize as it has the values of culture, philosophy and meaning that is not available in other languages. Furthermore, the usage of Malay in S&T as well as other field of knowledge will enhanced the dynamism of the language and become status of the language of knowledge. This is because the language that has achieved such status is an important element in the building of a civilization (Yusof 2016).

3.4 The value of *Wasatiyyah* (balance)

The existence of the *wasatiyyah* value or balance in the *Tawhidic* Science is important to ensure the development of S&T is balanced and sustainable. This value ensures the scientific activities are on the right track in the effort to keep the world prosperous. There are some values that are involves in shaping the balance in S&T such as:

a. The value of *Adil*

This value is not just about justifying the truth; but it also acts in shaping a balanced approach for the S&T development. *Adil* is quite different from justice because adil is placing a right thing to the right place while justice is giving the same opportunity to everyone. So the value of *adil* must be embrace in order to have a real justice in terms of planning S&T future development. The path and focus of science must be shaped within the framework of *usul fiqh* whereby putting *maqasid syariah* (objective of sharia) as the goal. By applying this principle, the acknowledgement of *maslahah* (public interest) in S&T can be prioritizing into three categories which are *dharuriyyat*, *hajiyyat* and *tahsiniyyat*. Hence, S&T will be developed in justly because it enables mankind to solve problems of public interest. In contrary to the modern S&T, the priorities and focus of development are aligned with the agenda of capitalism where profit becomes the main agenda.

b. The value of sustainability and balance

Balance in S&T is regarded as important to maintain the sustainability of natural resources. Every S&T stakeholder must take into consideration on the balance and prosperity of Mother Nature to avoid overexploitation of the natural resources.

4. Conclusion

There is definitely no short cut in nurturing Islamic value into S&T as it is cannot be done superficially. The effort of nurturing Islamic value must be done internally. In nurturing and implementing Islamic value in S&T, the first thing to be done is to reshape the worldviews based on what Allah wants through al-Quran and Sunnah. This is the true meaning of *tasawur Islam* or the Islamic worldview. Next, a clear Islamic worldview will develop a strong faith and belief about Islam which is called as *aqidah*. From the strong belief towards Islamic teaching, the real Islamic values will emerge on every action and behaviour of a Muslim in every field including S&T. In the end, all the activities that based on Islamic values in will produce value-laden products such as knowledge, technology, system and culture. At this state, then only the development of Islamic countries will run as we dream of, without any dependency towards foreign powers and technology.

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*Islamic Value System in
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Human Capital Development among Death Row Inmates

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Abstract

The death row prisoner subjects to inmate who is awaiting execution after being sentenced to death. The execution period of death sentences to the death row prisoners varies between prisoners and there are some of them have been on death row for lengthy years before the sentence is executed. This long waiting period is associated with a long and complex trial process. Severe punishment and long waiting time mount a great deal of pressure to the death row inmates. This huge pressure can lead to greater problems if not handled properly. The responsibility for managing this death row prisoner is in the hands of the Malaysia Prisons Department because during the trial period, the death row prisoner cannot be bailed and must be detained in prison. While in prison, the Malaysia Prisons Department is responsible for the welfare and implementation of rehabilitation programs to the prisoners, including the death row inmates. Despite the different punishment imposed to the prisoners who have a certain period of time, somehow this does not exclude them from undergoing the rehabilitation programs for their human capital development. It is important to ensure that the system in the prison works perfectly because the failure of the system to function properly can lead to a failure in the rehabilitation process for the prisoner.

Keywords: Death row inmates; Malaysia Prison Department; human capital development

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1. Introduction

Death penalty is a form of punishment assumed as the ultimate punishment. This is because there will be no other punishment that can be implemented on a particular prisoner after the death penalty is executed. Hence, because of this factor, the death penalty is a form of punishment that often invites various forms of discussions both nationally and internationally. Malaysia as a country which has still been implementing and executing this death penalty could not get away from any discussion regarding this issue. Among the matter that has always been discussed on is the righteousness of sustaining or abolishing the death penalty. The majority who gave support in sustaining the death penalty have justified that there are still severe cases happening in our society for instance homicide, child abductions, and armed robbery. These crimes have caused major fatal on society.

Apart from that, international terrorism activities using the religion's name such as Islamic States (IS), Daesh and al-Qaeda which has threatened the sovereignty and national security are also part of the arguments on the righteousness of why this form of punishment should be sustained. Some of those who are involved in the campaign for the abolition of this punishment in the opposition argued that this form of punishment is no longer relevant to current development because it violates the human rights and majority of developed countries have abolished it. This form of punishment is also said to have failed in giving a

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precautionary impression towards serious crimes associated with death penalty such as homicide and drug cases where the statistics have displayed an increase on the punishment related to these crimes despite the on going implementation of the execution. In fact, some countries that have abolished the death penalty have lower rates of crime such as the Netherlands and Norway as well as demonstrating the need to revise the fairness of the death penalty in curbing the crime. In Malaysia, Malaysia Prisons Department (JPM) is the party responsible for executing the death penalty. In addition, JPM is responsible for carrying out the rehabilitation process to prisoners of the death penalty just as the other prisoners of war.

2. Death Row Inmates in Malaysia

There is no specific period of death penalty execution for death row inmates in Malaysia and on average it may took years before the execution is done. Based on two recent executions in Malaysia in 2017 and 2016, have shown a significant difference between waiting time for a death row prisoner to serve a sentence. In the execution of death penalty for two death row inmates in 2017, High Court has sentenced the death sentence on April 2010 and both of the death row inmates have been sentenced to death on March 2017 after waiting for almost 7 years. Before that, one of the death row inmates has waited for 12 years before being sentenced to death on 23 September 2016 after being sentenced to death by the High Court on 23 February 2005. If we are to perceive all the cases mentioned, it has obviously showed that the period of a particular death row prisoner to undergone the execution is different from each other and the death row inmates might have to wait for a very long time before they are executed. A long period for the death row inmates to wait for the execution of the death sentence has also been acknowledged by Ahmad Faudzi Awang (2004), he has used the death sentence executed by Taiping Prison as an example where there are several death row inmates who have to wait up until 8 years before the execution of death is done.

The waiting period which took up to years is not a brief period and the trials undergone were not simple as they have to go through three levels of court starting from High Court, Appeal Court and Federal Court. After that, the death row inmates will have chances to appeal to Pardons Board if the Federal Court still maintains the death sentence given to the death row inmates. The long period and complicated process will surely give pressure to the prisoner and if this pressure is not overcome wisely, it will give negative effect to that particular death row prisoner.

This negative effect has been acknowledged by Abdul Aziz Abdul Razak (2012), the death row inmates are facing with a very high pressure because first, the death sentence has been given to them and the chances for them to be free is very low. This kind of pressure should not be left out because unresolved pressure will lead to unexpected events which can harm themselves and their surrounding such as the prison officers and other prisoners.

These unexpected incidents such as the attempt to escape, fight scenes, suicidal and the attacking of the prison officers could also occur in order for them to get some attention. Their status as the death row inmates is often defined as the special individuals who sometimes demand various things from the prison warden. However, when their needs are not fulfilled or delayed for the compliance of the prison rules, thus these unexpected events will be disclosed. The statistics in table 1 showed unexpected events done by the death row inmates:

From Table 1, it is clear that the unexpected events done by the death row inmates have led to great harm not only to them themselves but also to those around them. Suicide action, the attempt to suicide or escape, fights and attacking the prison officers are life threatening and will disrupt the smoothness of the system in prison.

Rhea D. Partyka (2004) in her research on 26 death row inmates has identified five categories of pressure which are deprivation, intrusion, isolation, helplessness and painful self-reflection. Deprivation and intrusion are two of pressure categories most often encountered with, with 22 (84.62%) respondents. Deprivation and intrusion are mentioned as the general themes because both of these were faced by almost all of the respondents. Followed by 19 (73.08%) respondents were facing isolation where they mentioned their difficulties in facing social isolation. 14 (53.85%) respondents confronted with helplessness and 18 (69.23%) respondents experienced painful self-reflection.

Events	2005	2006	2007	2008	2009	2010
Suicide	2	3	1	-	3	2
Serious fights	5	3	7	4	3	5
Attacking prison officers	2	-	-	1	-	1
Gang Fights	3	5	6	3	4	4
Attempt to escape	1	-	-	-	-	-
Smuggling of prohibited items	9	8	10	11	8	9
Suicide Attempts	3	4	4	3	1	-
Hunger Strike	2	-	2	3	5	2

Source: Abdul Aziz Abdul Razak (2014)

Table 1: Events done by the death row inmates

This research has clearly demonstrated that death row inmates have experienced various forms of pressures and several of them are facing with various forms of pressures. These various forms of pressures were stemming from many factors for instance, the surrounding related to the situation in the prison itself and the attitude of the other prisoners and prison officers. Other than that, the pressure stemmed from them themselves such as the feeling of losing their family, the fear and anxiety, the attempt to be dominant and failed to stay positive with the sentence has led to these pressures.

Therefore, in order to overcome this problem, Malaysia Prisons Department is fully responsible to ensure these death row inmates to undergone the rehabilitation programs just like the other prisoners. Among the rehabilitation program implemented is the one with religions based. Malaysia Prisons Department is committed in running religion based programs for the restoration of these death row inmates inner self. This seriousness could be perceived throughout all of the programs where all of these religions based programs have specific guidelines and the plans are well organized under the Religion Unit, Malaysia Prisons Department and is occupied with long term plan that is Human Development Program (PPI) (Malaysia Prisons Department).

The necessity of these religion based rehabilitation is reinforced with the research by Zaizul (2012), who mentioned that the rehabilitation process on the rape criminal offenders in Malaysia should emphasize on the values of religion in the offenders because that criminal conduct is of a nature of inside-out and not outside-out. This demonstrates the importance of religious restoration which touches the spiritual aspect needed in the context of restoring criminal offenders. These connections are strengthened with the research by Saifulazry (2014) who found that, the implementation of religion module on the prisoners has not just affected the prisoners but also has impacted the prison officers in good ways.

3. Rehabilitation Programs by Malaysia Prisons Department

Prison is a distinct institution compared to other institutions that exist in the modernized society nowadays. The differences do not only consist of those external aspects but also the internal aspects where a group of trained workforce exists in this institution in order to operate and manage a group of people called as 'prisoners'. These prisoners do not voluntarily to go to prisons but they are forced to do so and are forbidden to leave the prisons according to the time set for them. The unwilling presence showed that the prison authority cannot choose who their prisoners are and these prisoners will have to live in a controlled condition and abide by all the designated rules in the prisons. Prisons now have not solely functioned as a place for detention and control but also play a role in preparing the rehabilitation activities to the prisoners until they are released. This could be seen through various programs, modules and activities consist of physical and spiritual needs that have been prepared for them. The earnestness of Prisons Department in ensuring the

aspects of recovery of these prisoners could be perceived through the existence of Inmate Management Division which is established to be responsible in treating the prisoners based on human values and ensure that the inmates undergo effective recovery through rehabilitation programs provided by them (Jabatan Penjara Malaysia 2012).

3.1 Program Jalinan Kasih

Program Jalinan Kasih is considered as one of Inmate Management Division efforts in prisoners' recovery. This program is based on the main festival days or special days celebration such as Festival of *Eid al-Fitr*, *Eid al-Adha*, Wesak Day, Chinese New Year, Deepavali, Christmas, Mother's Day and Father's Day. Correspondence to these programs' contents, the main purpose is to ensure that the relationship between family members and the prisoners remain unaffected although they are segregated by the bars. Other than that, this program is also designed for the inmates to express the remorse that lies within themselves and the promises they made for their family to turn over the new leaf and be better individuals. Throughout this program also, it is hoped that the prisoners will realize and appreciate the existence of their family because the support from the family is vital not only during the sentence period but also after they are released in the future endeavours.

3.2 Inmates' sports activities

Apart from internal aspects of rehabilitation, rehabilitation in physical aspects is not overlooked. Sports are recognized by the prison authority as the recovery method for these 'behind the bars' individuals. Other than shaping a healthy lifestyle, sports also act as a medium in strengthening the society's relationship among the inmates themselves in a positive way. Through sports, the inmates will strive to cooperate and try to help each other as a team. Sports activities also enable the prison authority in detecting new talents to stand out as the models which have been successfully changed throughout the recovery program in sports activities. Chess, carom, Chinese checkers, street soccer, kick volleyball (*sepak takraw*), futsal, volleyball are amongst the various types of sports that have been organized.

4. Religion Unit

All activities and religious programs conducted in the prisons are under the responsibility and guidelines set by religion unit in correspondence with the rules and regulations under Malaysia Prisons Department. The objectives of Religion Unit are:

1. To prove the earnestness of Prisons Department in guiding the inmates.
2. To change the society's stigma that prisons are not just a place for detention but also a systematic rehabilitation place.
3. To ensure all the inmates attend the religious programs and next are able to turn over the new leaf and change their attitude into better individuals accepted by the society.
4. To give space and opportunity to the public and non-government associations so that they can contribute in these inmates personality recovery activities

4.1 Religious classes

Religious classes conducted by the department are in accordance with Islamic Education Curriculum issued by Malaysia Prisons Department. These classes are commonly held every day in the inmates' prayer room (*surau*). The educators consist of Chief Assistant of Islamic Affairs (S27), Assistant of Islamic Affairs (S17), Islamic Teaching Assistant (KX17, KX20, KX22) and other Islamic teachers recruited from other State Islamic Religious Council and other Islamic Society Organizations and Non-Governmental Organizations (NGO). Beliefs (*aqidah*), fiqh (*faqah*), morals (*akhlak*), history (*sirah*), al-Quran/elocution (*tajwid*) and hadith are among the subjects that have been taught to the inmates during these classes.

4.2 Halaqah (religious gathering)

Every prison institution is required to run *Halaqah* Program as mentioned in the Human Development Plan (PPI). Phase II of *Halaqah* Program emphasizes on the personality's strengthening aspect that has been

considered as one of the most fundamental elements in inmates' recuperation activities. Several input related to religion have been discussed in the program such as the study of al-Quran, beliefs (*aqidah*), fiqh about the worship (*feqah ibadah*), history of Rasulullah PBUH (*sirah Rasulullah*) and many more.

4.3 Islamic talk (*tazkirah*)

Islamic talks or *tazkirah* are given to the inmates. The occasions are held every week or every month in conjunction with Islamic Festival Days celebrated by the Muslims or other times deemed necessary. Besides religious related activities in the form of classes and Islamic talks, Malaysia Prison Department authority has also conducted several religious related competitions. For instance, al-Quran Recital Competition (*Majlis Pengujian Tilawah al-Quran*) and *Marhaban* Competition for Malaysia Prison Institute.

4.4 Human development plan (PPI)

Starting from February 2002, the implementation of recuperation module is carried out in compliance with the Human Development Module. In November 2008, a new module which is Educational Guidance Module is established under the Human Development Module focusing on small offences and also used for the first time convicts sent to prison. Human Development Plan is established to aid in achieving a more systematic rehabilitation system. Furthermore, the objectives of Human Development Plan are also to rehabilitate the inmates into individuals who have self-identity, better morale aspects and equipped with various skills. The inmates who will be released into society are expected to be chastened and able to contribute to the society in the future. Human Development Plan is implemented according to the levels set as follows:

4.4.1 Orientation phase

Every inmate has to go through this phase for a period of two months. The modules that will be conducted during this phase are the Education Module and Recidivist Module. The objectives of this phase are to firstly shape the inmates' discipline in order to ensure that they abide to the rules and regulations of the prison. Secondly, it is to create balance between mental and physical rehabilitation activities. Lastly, this module will plant positive values and self confidence among the prisoners.

4.4.2 Consolidation phase

The module in the phase is the core treatment in PPI which will be conducted for six months. This phase emphasizes on the shaping of one's self and changes in behaviour. The modules conducted in this phase are as follows:

a. Community therapy module

This module is conducted for six months and focuses specifically on inmates who are involved in drug addiction and have been sentenced to imprisonment multiple times. The purpose of this module is to help them recover from drug addiction and guide them in creating strong self-confidence.

b. *Halaqah* module

This module is conducted for six months and focuses on inmates with low levels of religious education. This module is conducted using the '*pondok*' education system with the aim of allowing the inmates to appreciate and practice Islam as a lifestyle.

c. Education and guidance module

This module focuses specifically towards inmates who were involved with multiple crimes and is a continuation from Education and Guidance Module in the orientation phase.

d. *Tegar* module

This is a special module for inmates who persist on bringing negative values towards other inmates and have the tendency to break the rules and regulations of the prison.

e. *Putra* module

This is a module specific for young inmates with the aim to guide them in succeeding in the academic examinations that they will take. The activities conducted are classes such as the 3M's, which are reading, writing and counting (*membaca, menulis, mengira*). There are also other classes provided as preparations for candidates who will sit for major examinations such as Penilaian Menengah Rendah (PMR), Sijil Pelajaran Malaysia (SPM), and Sijil Tinggi Pelajaran Malaysia (STPM).

4.4.3 Skills phase

a. Vocational module

This is a module specific for inmates who have passed Personality Strengthening Phase and have acquired a CGPA of 3.0 and above. The aim of this module is to equip inmates with specific skills and at the same time involve them in recovery activities.

4.4.4 Pre-release phase

This module is based on reflect where inmates have to revise and reflect on what they have learned and apply them in their daily lives. This module is aimed to prepare inmates with the prospects of facing the society along with their perceptions and to encourage public involvement in helping inmates become part of the community. Among the activities conducted are pre-release, field work and outside cooperation.

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Town Planning Criteria by Ibn Khaldun

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Abstract

Town planning is a process of action or effort to build a framework for achieving the development of an area that emphasizes the well-being of the communities, enhancing living standards and values based on Islamic values, expanding industry and agricultural sectors and safeguarding the environment and enhancing learning in line with the development of the industry itself and within a certain period of time. The objective of this article is to discuss the town planning criteria by Ibn Khaldun in urban design themed of Knowledge City and Garden City that can be applied in urban physical study on the site chosen. In general, Ibn Khaldun has stated town planning criteria taking into account the aspects of the population safety and other life within the city, urban defence aspects, aspects of nature care, site location and urban geographic aspects and social aspects of the local community. The research used qualitative method by analysing the main contents of the data, namely from the book of Ibn Khaldun's Preface, papers, journals and related videos. In addition, the continuous observation of the site area was also undertaken to see the changes associated with the physical planning of the city. The findings show that there are seven town planning criteria proposed by him. These criteria are the residential to be built in a walled area while the city needs to be built in a strategic area, keeping the city's atmosphere from air pollution, the city is built close to the river or clean running water, has a good pasture for livestock, land used for farming, location of the city adjacent to the forest and the sea. Although there are difficulties in applying the criteria in urban planning, it can be modified according to the location, location, geography, culture and population of the city.

Keywords: Ibn Khaldun; town planning; knowledge city, garden city

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1. Introduction

Ibn Khaldun (2009) in *Mukadimah* said that "the city is a home created by the nations when it comes to the desired top of the luxury with everything connected with it. Then they want a peaceful and calm atmosphere, and move on to make the home a home". The statement above is a definition of the city according to Ibn Khaldun. He was an Islamic sociologist who lived between 734H and 809H. His greatness was in politics, history, society, legislation, economics, language and knowledge related to it. However, Ibn Khaldun is better known as the founder of a new science called Social Science or Sociology. Western researchers looked at his heritage with respect and regarded him as a philosopher, historian of civilization, sociologist and political economics (Abdullah Enan 2012).

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Ibn Khaldun real name is Abu Zayd ‘Abd al-Rahman ibn Muhammad ibn Khaldun al-Hadrami. He was born in Tunisia in 1332 and died in Egypt in 1406. As one of the 14th century Arabic historian, he was also named as the founder of modern study, sociological and economic history. Ibn Khaldun lived in one of the most turbulent centuries and based on his experience, he has embodied a best historical philosophy that no doubt was produced by a very intelligent person (Abdullah Enan 2012).

Ibn Khaldun produced many high-profile works. His most famous work is the *Mukadimah* book. This book is a part of ‘introductory’ to a larger book titled *al-Ibar*. This book narrates Ibn Khaldun’s life-long struggle and the impact of contemporary political competition that affects his career. (Abdullah Enan 2012). In general, *Mukadimah* or Prolegomena is about how to find a reason for history and the best way to analyse the fall and rise of a Muslim civilization and culture (Spahic Omer 2011).

Urban development is part of the development of civilization, and as Muslims we cannot build a civilization of glory by liberating ourselves from Islamic bonds (Asri 2011). Dr. Yusuf al-Qaradawi said: “But we want to emphasize from the very beginning that the Islamic (civilization) constructs of Islam would not be like other civilizations that are more concerned with the material corners of life and lust for human beings”.

Although Ibn Khaldun was a well-known Islamic philosopher, he also contributed to the idea of urban planning, at that time. The idea of the city by Ibn Khaldun can be understood through his understanding and experience of civilization and also royal power and dynasty (Spahic Omer 2011). This is because of the influence of royal politics that he had experienced from his teens until the end of his life, make him understand the intricacies of the palace political in detail and how the royal power was able to build and drop a city, government, country and dynasty.

To prove his expertise in terms of the state formation and urban planning, Ibn Khaldun has recorded a special chapter in his *Mukadimah* book which specifically tells about the development of the country, state and city. This chapter is stated in Chapter Four by the named of Countries and Cities, and all other forms of Sedentary Civilization. The Condition Occurring there, Primary and Secondary Considerations in this Connection. In this chapter, there are 22 sub-topics related to dynasties and cities development, national economic management and population finance, political fields, the construction of large buildings, government management and authorities, urban planning and consequences if not complied with it, capitalism and cities ranking, sedentary culture, craftsmanship, language and dialects and other matters relating to society and culture.

This article will be highlighted to one of the sub-topics in the chapter four in this *Mukadimah* book. The fifth subtopics are regarding the requirements for the planning of towns and the consequences of neglecting those requirements. As with its title, this subtopic is a special section of town planning designed by Ibn Khaldun based on his own experiences as a politician and an Arab historian within his time and conditions. In general, Ibn Khaldun has outlined six (6) urban planning criteria that take into account the safety aspects of the population and other living things in the city, urban defences, and environmental care. This is because; the purpose of (building towns) is to have places for dwelling and shelter. Therefore, it is necessary in this connection to see to it that harmful things are kept away from the towns by protecting them against inroads by them, and that useful features are introduces and all the conveniences are made available in them.

The objective of this article is to discuss the town planning criteria by Ibn Khaldun in urban design themed of Knowledge City and Garden City that can be applied in urban physical study on the site chosen which is Bandar Baru Bangi or BBB in Selangor. This is because, BBB has been recognized by the Selangor government as Knowledge City (*Bandar Ilmu*) and the original BBB town planning design by the theme with Garden City (*Bandar Taman*). Nevertheless, the physical aspects of the city’s planning are no longer apparent and even the faded deck of commercial development that grows like mushrooms after rain has flooded this current atmosphere of BBB. This situation is clearly disappointing for those who are craving for a more environmentally-friendly environment of BBB as one of the earliest Knowledge City in Malaysia and Garden City because of the passion of science and the love of Allah’s creatures that burn in the soul of BBB inhabitant and residents. Other than that, this city is also well known for the concept of Malay City, Muslim City besides Knowledge City (Jusoh Hamzah 2012).

Significantly the researchers chose Ibn Khaldun as the main source of reference in this discussion is that his urban planning is still relevant to be used as a solution to this problem even after more than 600 years of his death. This is because his thinking reflects his wisdom to see the future of different places and times but is still appropriate to apply (Carlos 1963). Furthermore, he is a well-respected and well-known Islamic scholar that supposedly as a Muslim, we take his views into account because he takes Shariah opinion of Islam in his urban planning. Furthermore, BBB is a city inhabited by Muslims who have a level of high education that boasts and loves the knowledge and we can see clearly that they are practicing Islam as their way of their life. Therefore, the election of Ibn Khaldun is very coinciding with BBB as Knowledge City and Garden City as supported by Shafie Abu Bakar (2011), “the combination of these two elements makes the community simultaneously loving science and practicing Islam in life. Bangi’s love for knowledge and Islamic life can be seen from their support for any Islamic activities including politics”.

2. Literature Review

2.1 The relation of city, knowledge and garden

In *Mukadimah*, Ibn Khaldun touched the characteristics of the city that he thought the city was referring to a countryside developed by its population and the progress was *tabii* or natural, that is from the level of agricultural development to life (*al-darudah*) rising to meet the needs fulfilment (*al-Hajah*), thus increasing to the level of perfection (*al-kamalat*) and luxury (*al-taraf*). At this stage where the city is emergence (Wan Mohamad 2011).

Town planning is a human manifestation to the environment and the living creatures. The Global Planning and Development Philosophy (*Falsafah Perancangan dan Pembangunan Sejahtera or FPPS*) states that planning and development need to preserve the five basic human life which are life, religion, intellect, heredity and property which is the most important principle in universal life or we called it as *maqasid syariah*. The Integration of spiritual values, civilization and well-being are emphasizing in the design and development of the relationship between; (i) human relations with Creators, (ii) human relationships with humans, and (iii) human relationships with the environment. Therefore, the town planning and development needs to focus on these five aspects to complete the three links above to form a noble and commendable personal of a human.

Ibn Khaldun has explained at length the conditions required for town planning and its consequences if neglecting it. According to him, once a town has been developed and built according to the tastes and views of the builders and it is in accordance with the site’s weather and fulfils the geographical demands then the age of the country is depended on the age of the city (Ibn Khaldun 2009). This is due to the great city or city development being is a symbol of the splendour of a nation's civilization. It illustrates the progress of a nation of sovereign wealth and the majesty of a developed nation that embraces the height of the values and the integrity of the people (Wan Mohamad 2011).

Even though the development of a city is dynamic and needs to be in line with current technology, town planning should be preserved and maintained in terms of good and useful aspects of the population and repaired all its shortcomings. This is because, if it is not planned properly and accordingly, then it will result in maladies and the plans will distress to civil society (Asri 2011). Thus, there will be damage to the community, the place of residence and the city itself. This is because, according to Ibn Khaldun, city or town is the homeland created by the nations when their desires are on the top of luxury and connected with everything that is related to it. Then they wanted a serenity and peaceful atmosphere, and turned their resident into a home. This is suggested that urban planning is not something that should be taken lightly. Allah SWT has mentioned this in surah al-Nahl verse 80 which means:

And Allah made for you houses (which you built) abode and He made for you from the skin of cattle: The tabernacle (the shelter), which you found it lightly (carried everywhere) as you travelled and when you stop and (He also made for you) of the kinds of fur of the cattle, the various utensils of household appliances and ornaments (for use) for a time.

The purpose of erecting the town is to be a place of refuge and shelter. As such, it is desirable that this relationship should be addressed so that all dangerous things are kept away from the town by

safeguarding it from everything which can be misleading and incorporating all that is beneficial and providing all amenities in accordance with urban life (Ibn Khaldun 2009). This is because a good town planning is included as one of the activity to prosper the earth. Even without a good town planning of development on the earth, Allah SWT will lead it into destruction and harm to human life (Asri 2011).

In addition, a part of functioning as a residence, a good city planning is also a field of knowledge development. According to Professor Dr. Mahmud Hamdy Zaqazouq, the main cause of the deterioration of the Muslim civilization is due to the neglecting of the knowledge's importance and development of civilization. If the people ignoring these two things, the effect are that the progress achieved by Muslims nowadays is the result of Western creation or inventions and not the design by Muslims themselves. Islamic civilization in its glorious history has made the cities a place of gathering and protection of knowledgeable and education-thirsty people. Most of the famous cities in Islamic history have the characteristics of knowledge and education centres that should serve as a catalyst and supports of it globally because education and knowledge should not be confined to administrative boundaries and geographical factors (Wan Mohamad 2011).

Ismail Zen (2011) states that in the *tawhid* perception, lays the conclusion of the sustainability of dynamic equilibrium in human relations with nature that ultimately retains the human civilization: the principal of human obligation as a Muslim to seeking knowledge (Ibn Khaldun). Allah SWT (*al-Khaliq*) does not burden humans with a trust that he (human) has no known knowledge to manage it and this responsibility is given with a needed tool which is knowledge. The word of Allah in surah al-Baqarah, verse 31, means:

And He taught Adam all the names and then brought them to the angels and said: Speak to Me the names of those if you are the true ones!

Apart from being a place of knowledge development, the establishment of a city is also a reflection of human to its surrounding environment. The existence of a city that highlights urban concepts in the garden such garden city requires proper and orderly landscape care and maintenance. Landscape care is related to the preservation and conservation of the surrounding environment around the town to create a comfortable and serene environment for occupancy. According to Wan Mohamad (2011), humans have the role of builder, beautifier, and saving the environment but not damaging the nature because its effects not only threaten the human beings, but also destroy the natural system of the universe. The word of Allah SWT in surah al-Rum 30: 41, means:

There has been a great deal of damage and disaster on land and in the sea for what has been done by human hands; (That is why) because Allah wanted them to feel part of the bad deeds they did, so that they would return (repent and repent).

In addition, the best planning and developing that based on the concept of sustainable development will ensure that all natural resources such as hills, mountains, rivers, lakes, air, flora and fauna are safeguarded as well as their stability can be enjoyed by the next generation (Wan Mohamad 2011). The FPPS states that, as a result of not maintaining the environment very well, it will respond in a form that poses a danger, catastrophe and destruction to humans and property, as is happening at the moment such as flash flood, air pollution and other polluted things. In addition, in this context, levelling the hill, cutting steep slopes, and blocking land for development will result in natural disasters. It happens because of the human hand as Allah SWT mentioned in surah above.

According to the Islamic Civilization Planning Era Practice in the Global Planning and Development Guidelines (*Garis Panduan Perancangan Pembangunan Sejagat* or GPPPS) states that planning in the era of Islamic civilization demonstrates the characteristics of planning and development in which the concept of planning used in shaping the city has the value of art and beauty and demonstrating the unity of the *ummah* (society) at that moment, the use of mosques, schools, study centres and libraries as the focus and focal point of urban design. The preservation of nature as an effort towards remembering and appreciating the Creator is also a prominent aspect.

3. Methodology

This study uses qualitative methods where the main source of reference is from Ibn Khaldun's *Mukadimah* book, the law books of the Global Planning and Development Guidelines (GPPPS) and the Global Planning and Development Philosophy (FPPS). In addition, other sources were also drawn from the academics writings such as articles, journals, videos and urban planning experts. Each data contents had been analysed by the researchers' understanding through readings regarding town planning by Ibn Khaldun, Knowledge City and Garden City criterion and observations at the latest BBB.

4. Results and Discussion

According to Dr. Hj. Tajul Ariffin Noordin (2014), "Bandar Baru Bangi should be developed in compliance with the original goals of Bandar Ilmu, Bandar Universiti, Bandar Bandaraya and Family City Wellness in Unity. It means life in Bandar Baru Bangi must be harmonious with the Islamic way of life as its axis". From that we can know the wishes and ambitions of BBB residents through the New Bangi Town Residents Association (*Persatuan Penduduk Bandar Baru Bangi* or PPBBB) that they want a city life that is more suited to their souls that meet the criteria of an Islamic city. A well-planned and perfectly designed city is capable of reflection based on three of these relationships; (i) human with humanity, (ii) human with Creator, and (iii) human with nature.

Ibn Khaldun also has the same purpose of erecting the city that is to become a place of residence and shelter from all dangers by safeguarding it from all events that can disrupt and include something useful and provide all the amenities that suit the life of the city. This means the need for a city with the level of security, comfort, and infrastructure that is at its best so that local people can enjoy it comfortably.

There are seven urban physical design planning criteria proposed by Ibn Khaldun in the book of *Mukadimah*. For the criteria of Knowledge City and Garden City in BBB, researcher will refer to the Guidelines on Urban Design Standards (GPPRB) as well as the Global Planning and Development Philosophy (FPPS). Both are issued by the Department of Town and Country Planning Malaysia (JPBD).

The first urban planning criteria is that houses should be built into walled areas whereas cities need to be built in strategic areas such as high places like on hills or mountains, in the forest, on the seafront or surrounded by water that can only be accessed or accessible using the bridge (Ibn Khaldun 2009). This is to ensure the safety of the city's residents from enemy attacks. The enemy will have difficulties in attacking the city and the people are able to prepare neatly for the enemy attacks. If we explore the pattern of Ibn Khaldun's life, it is known that he seems to be traumatized by the vagaries of his life as a politician who is often targeted by the opponent. Self-safety is a matter of importance to him so that he sometimes becomes a two-page reader because he wants to save himself from dangers and is willing to cheat his own friends in his political survival. No wonder the safety criteria are among his main agenda in planning the city.

By building a high wall outside the home or city, we can at once protect ourselves and families from uninvited parties from entering our area. Apart from home security, the outside comfort is also been considered. In the context of BBB as Knowledge City and Garden City, the safety factor of the population is strongly emphasized. Even though the residential factors are one of the supporting components for Knowledge City and Garden City in according to the Guidelines on Urban Design Standard (GPPRB), but the selection of safe and comfortable residential sites to the population remains a key agenda.

Layout planning factors such as topography, climate, resources, local culture and low density are the aspects of selecting residential sites in Garden City's physical design. Additionally, the position of buildings that had been built into Garden City is also according to garden conditions or optional sites. It is safer and at the same time, the residents are able to camouflage with the current environment for personal safety. For Knowledge City, its physical planning focuses on the concept of neighbourhood that has a rural environment to create a comfortable, serenity and peaceful emotion among the population. When this emotional care is translated in physical form, residences design should prioritize geography, topography, climate, environment and other related factors. It's complementary each other.

The second criteria are to keep the city's atmosphere from air pollution. Air entering the city should be fresh air, clean and not polluted with dirt dust. If the air is not clean and frozen or close to the rotten or swamped water, the air hygiene will be contaminated and inevitably avoided by disease (Ibn Khaldun 2009). Air pollution can occur through many factors, such as vehicle fumes, open burning and industrial products. Although there is no air cleanliness factor in GPPRB for Knowledge City and Garden City, but for clean air in urban areas, the Garden City emphasizes the diversity of life and enrichment of the natural environment in community life to be preserved by the community itself.

The diversity of life here means, promoting flora and fauna to survive in a controlled way to catalyse living biodiversity. Hence, creating a wide variety of public parks is among the major components of Garden City's physical planning. The goal is to acquire or at least provide space for the public to get fresh air supply. This public park acts as a recreational and social facility for residents to socialize. For Knowledge City components, providing public parks with themed learning methods such as ethnobotanics, library garden concept and others should be introduced to the community. This theme park is basically a public park and recreation and just added with the element of education so users can still learn something while doing recreational activities.

The third criteria is the city should be built near a of clean and open flow water. With the presence of water, it will generally provide comfort to the residents of the city (Ibn Khaldun 2009). With the touched of water element, it can comfort the population that is referring to a peaceful mind, peaceful body and soul and also calm emotion when enjoying the water resources around them. Water is one of the most important elements of life. In addition to being used for everyday affairs, water is also one of the decorative elements in the landscape. With the presence of rivers or other water sources in urban areas, this condition is able to provide peace to the residents.

However, this water source needs to be maintained and well maintained and ensured cleanliness so that its purpose is to provide tranquillity to the residents. Therefore, as Garden City, this water element is indispensable. By integrating architectural components such as simple buildings with natural landscapes such as clean and attractive rivers, they are able to provide good interpretation and insight to the community. The Garden City emphasizes the preservation of a unique and unique natural landscape, one of which is the water source. Construction of the riverfront park can be a recreational area that can be visited by residents as an alternative to self-therapy.

The importance of river or water resources to Knowledge City is that it can be used as a concept of campus and urban landscape. By treating the water source and colonizing the garden and water, it is able to create a peaceful atmosphere for learning and learning.

Fourth, the other needs of the city to be held are good pastures for livestock. Every resident should have livestock for breeding for milk, and to be ridden. If the pasture is near and good, it will make their lives easier, because they will have difficulties in managing them when the pastures are far away (Ibn Khaldun 2009). The Ibn Khaldun approach means providing transport and food for residents to continue living in the city. In his day, these two things can be found by defending livestock such as camels, donkeys, horses, cattle and goats. The animal needs a field to snatch the animal's instincts. Apart from being used for riding, these animals are also sources of protein and calcium to their masters. But in today's era, we use motor vehicles or motorcycles to move as our main carriage.

Food items can be obtained from the retail industry around us. Ibn Khaldun tries to provide an infrastructure or facility for survival in the city. Therefore, BBB as Knowledge City and Garden City needs complete infrastructure facilities, providing user-friendly transmission systems, promoting pedestrian and naval systems, and more. BBB is surrounded by international educational institutions, research and development centres, and industrialized areas. The effective public transport is also required by the authorities for users of BBB travel smoothly, safely and comfortably.

Fifth is the existence of open grounds that can be used for allotments. Grains are a basic source of food. When the fields are nearby, the crops can be obtained easily and quickly (Ibn Khaldun 2009). Although Malaysian main food is rice, it is not easy for us to grow rice as they grow grain, but we can plant other crops such as vegetables and fruits. In view of the current trends, most of the residents in a residential park that

planted a simple crop in their home area despite the fact that there is not much land available. Therefore, Ibn Khaldun's approach is very clever and shows his maturity to look forward. Furthermore, one of the Principles of Garden Cities by TCPA (2013) also states about the land allocated for allotments for the use of the population.

This means that the planners can provide a special piece of land that is suitable for the residents to cultivate activities. Even in GPPRB for BDT is not clearly stated about this type of land or field, but it is mentioned about maintaining at least 60% natural habitat for free space land. This condition means any development undertaken within the city, cannot destroy the environment at least 60% and may be part of the 60% of these are fields or lands that can be cultivated with activities such as cultivation by locals.

Spahic Omer (2011) states that the field or land for farming should be located adjacent to the water source for drainage and treating the soil fertility. For Knowledge City, cultivation of food can create a formal and informal landmark with the theme of relevant knowledge and in this situation, the knowledge of vegetables, fruits and herbs can be learnt by the community. With the existence of land for planting, residents can learn from each other about the plant and increase their knowledge about it.

The sixth criteria are the city adjacent to the forest for the supply of fuel for the purpose of building materials and as fuel (Ibn Khaldun 2009). Timber is also used to make handicrafts, artwork and furniture depending on the type of timber available. For BBB, the nearest forest is the UKM Forest Reserve. However, this forest belongs to Universiti Kebangsaan Malaysia (UKM) and is not for use by local authorities governing the BBB but somehow, the university had been cooperated with the private sector and authorities to levelling some of the hill for some roads projects.

Seventh, the city is close to the sea to facilitate the importation of goods from distant countries (Ibn Khaldun 2009). While this criterion is impossible to apply to BBB due to its positioning factor, but BBB is actually on a very strategic route between several states in Malaysia. BBB acts as the Southern Gate where it is the gateway to the Klang Valley area from the south. BBB is close to Kuala Lumpur International Airport (KLIA), Putrajaya, north-south main highways in Malaysia (PLUS), and Sepang International Circuit.

According to Prof. Chamhuri Siwar (2011), in 1985, BBB was the largest provincial town of south of Selangor which serves as a shopping mall, service, industry, entertainment and comfort. This proves that, despite the fact that BBB is not close to the sea to enable export-import activities from outside the country, it is still able to progress and be competitive with existing activities with its present position. As Knowledge City, according to YAB Tan Sri Khalid Ibrahim, Bangi has good infrastructure to make it truly Knowledge City because Bangi is in a good and conducive environment and is surrounded by many famous and well-known institutions of higher learning.

According to Ibn Khaldun (2009), these are all varied, in line with the differences in the needs and demands of their inhabitants. Sometimes, the founders of the city neglect good natural selection or he only shows what seems important to him or his inhabitants and ignores the other needs. This situation relies heavily on who governs and manages the well-being of the city. It can be seen that political power and government play an important role in leading these responsibilities. Therefore, there are planning and development guidelines for local authorities (PBTs) to use them in administering their respective areas. In GPPRB's book (2003), there are defined urban physical design planning and development criteria required by a city which is the theme of Knowledge City and Garden City because BBB has a large number of educational and research institutions, it is also recognized as Campus Town.

Basically, urban physical design is a development plan to create the identity and image of a city. This identity is important because it is able to give different impact to the city compared to a city that does not have a strong identity. If this image is not maintained and managed properly and perfectly, the probability that the city becomes bad, unrecognized and extinct is extremely high. In line with Ibn Khaldun's opinion, he pointed out that if a city is not guarded according to the proper guidelines, the city will soon be destroyed, not developed and its inhabitants will leave the city.

5. Conclusion

In conclusion, the town planning criteria proposed by Ibn Khaldun in his *Mukadimah* book is still relevant and can be applied in the physical design of BI and BDT in BBB. Although there are difficult criteria to apply in the Knowledge City and Garden City plans at BBB, it can be modified according to the location, geography, culture and population of the city. This study achieved its objective and it is not wrong for the administration to use Ibn Khaldun's urban planning principles in BBB. In addition to taking into account the guidelines proposed by the Malaysian JPBD, by embarking on Ibn Khaldun's spirit at BBB, identity and image of BBB as Knowledge City and Garden City will be more prominent by raising Ibn Khaldun as a city icon. In my opinion, it is not wrong to BBB to have a lot of commercial development, but the regulation of the administration needs to be added plus BBBs personality as the earlier Knowledge City is very stands out and needs to be spiked again so that it becomes the reasons for outsiders to visit BBB and can increase the income and economy of the population in BBB. Therefore, in order to ensure effective urban planning, close collaboration between PPBBB, Local Authorities and politicians is required so that the BBB identity is maintained until at any time.

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