

AAMC 2019
The 13th Asian Academy of Management International
Conference 2019

DETERMINACY OF QALB BEHAVIORAL TRAITS TOWARD
INCLUSIVE ENTREPRENEURIAL INTENTION AMONG
MUSLIM STUDENT

Mhd Louai Sarhan (a)*, Kamarulzaman. Ab Aziz (b), Atikah Mohd Zulkifle (c)
*Corresponding author

(a) Faculty of Management, Multimedia Univeristy, Cyberjaya, Malaysia, 1141200006@student.mmu.edu.my

(b) Faculty of Management, Multimedia Univeristy, Cyberjaya, Malaysia, kamarulzaman.aziz@mmu.edu.my

(c) Faculty of Management, Multimedia Univeristy, Cyberjaya, Malaysia, 1132700392@student.mmu.edu.my

Abstract

Malaysia is transforming into an entrepreneurial nation thus addressing the unemployment issue, poverty, income inequalities, and lack of goods for those at the base of pyramid (BoP), highlights the need to have more inclusive entrepreneurs. On the other hand, in context of Islam, the Muslim's businesses must focus primarily on pleasing Allah, and that includes fulfilling one's religious obligations, conducting a consistent business with the ethical and moral Islamic standards, and contributing as well benefitting the society as a whole. Therefore, there is a need to nurture the creation of learned values-driven talents to become holistic and well-balanced entrepreneurs. This study will develop a conceptual model of Qalb-based entrepreneurship that test and explain the relationships between the three different levels of Qalb entrepreneurial traits and the inclusive entrepreneurial intention of Muslim youths. Therefore, this study will have important implications especially to policy makers in promoting and developing future entrepreneurs in Malaysia.

2357-1330 © 2020 Published by European Publisher.

Keywords: Entrepreneurial, inclusive, innovation, intention, Muslim, Qalb.



1. Introduction

As indicated by Global Entrepreneurship Research Association (2017), Malaysia is in the economic group of being efficiency-driven, which is progressively competitive, with increasingly proficient processes of production and improved quality of products; however, it is not at the stage of innovation yet. While innovative entrepreneurship is the key to move from an efficiency-driven to innovation-driven economy (Dzidrov et al., 2016), Malaysia is giving special attention to the young generation of entrepreneurs as the future key for assisting and upgrading the industrial structure and even creating new industries and opportunity, through wide range of policies and initiatives (SMECorp. Malaysia., 2016) such as SME Masterplan (2012-2020), Eleventh Malaysia Plan, National Key Results Area, Malaysia Social Enterprise Blueprint (2015-2018). All these initiatives have been established to encourage as well as support all Malaysians to be engaged in business sectors inclusively and innovatively; however, the entrepreneurial intention in Malaysia has been decreasing from 13% of the population in 2012 to 6% of the entire population in 2016 aged 18-64 as shown in (Table 01) as retrieved from the Global Entrepreneurship Monitor report and cited in the SME Corp report (SMECorp. Malaysia., 2016).

The world's BoP is around 4 billion people with a market potential of around \$5 trillion. The BOP's market reflects an aggregate of customers with comparatively low levels of earning, at almost lower than USD 1500 annually (Jebarajakirthy et al., 2015). In Malaysia, the lower 40% of households (B40) or the lower two quintiles of salary dispersion remains a vast and heterogeneous gathering of households at about 2.7 million families (UNDP, 2016). The Economic Planning Unit in Malaysia classified the Base or the bottom of the pyramid population as every person who earns RM100 per day and below, and it covers 40% of the population in Malaysia (EPU, 2016). Median monthly wages for paid employee in 2016 is RM1,703 and the mean monthly salaries & wages is RM2,463 (Department of Statistics Malaysia, 2015). In addition, the debt level of the B40 family units that earn RM3,000 every month or lower, is seven times that of their yearly household income. Given this high level of debt, households could easily fall into destitution when experiencing sudden income loss or any misfortune.

Table 01. Entrepreneurial attitudes and perceptions in Malaysia

Entrepreneurial Attitudes & Perceptions	2009	2010	2011	2012	2013	2014	2015/16
	% of population aged 18-64						
Entrepreneurial intentions**	5	5	9	13	12	12	6

Note: Global Entrepreneurship Monitor report cited in the SME Corp report (SMECorp. Malaysia, 2016)

There is an embedded lack of entrepreneurial capabilities and innovation in most of the B40 market, at medium, small, and even micro enterprises. Moreover, the inclusiveness of innovation at the national level in Malaysian market is low. Based on The Conference Board Org (2016), in the emerging and developing economies, business experts need to go past applying their abilities and skills in the conventional ways to adapt products and services that exist and make new and innovative products and services to address the requirements of the local markets (Taj et al., 2016). Making effective and sustainable entrepreneurship needs the entrepreneur to be proactive, innovative, and a risk taker. Likewise, the individual requires a profound comprehension of inclusive innovation matters (Hooi et al., 2016).

Global innovation growth rate has been declining and that leads to the holding back of capital investment, slowing down the human capital development, mismatching and insufficient labour market skills, and innovation challenges for small businesses (Koen et al., 2017). In Malaysia, the SME Masterplan 2012-2020 clarified that small and medium enterprises are facing difficulties and constrained with access to technology and innovation, management abilities, and skilled workforce. Since innovation is key for competitiveness in the international markets, Malaysia aims to establish sustainable growth in the long-term based on the contributions from its productivity gains driven by innovation. The government took several initiatives to bring the innovation capacity to the next level such as the establishment of the Yayasan Inovasi Malaysia (YIM) as well as the Malaysian Global Innovation and Creative Centre (MaGIC). In 2013, Malaysia has been ranked 32nd in the Global Innovation Index; in 2015, it was ranked 59th while some neighbor countries such as Indonesia and Philippines were ranked 29th and 7th respectively; and in 2017, Malaysia's rank declined to 64th (Global Entrepreneurship Research Association, 2017). The OECD claimed that based on the data retrieved from the Department of Statistics, the overall innovation level in the Malaysian domestic firms is low and it drags productivity growth down (OECD, 2016).

Malaysia is looking to increase the number of innovators and entrepreneurs, and improve inclusiveness. Studies have explored antecedents for behaviors, however specific antecedents for inclusiveness is under explored. Pilková et al. (2016) indicated the importance of involving knowledge from academic researchers in exploring the entrepreneurial intention of youth and women in order to increase the number of inclusive entrepreneurship activities. Moreover, the study by Liñán and Fayolle (2015) on entrepreneurial intentions based on a comprehensive literature review, incorporated a total of 409 journal articles which considered entrepreneurial intention published from the year 2004 to 2013. Their study clearly showed the scarcity of studies on inclusive entrepreneurs' intention and behavior and inclusive innovation broadly. However, the existing gap between entrepreneurial intention and action among young people, in considering the inclusive innovation path, requires identifying the specific requirements of inclusive youth entrepreneurs and objectives of the intervention (Paunov, 2013). Hence, there is a need to understand specific antecedents for inclusiveness among the Muslims youth in order to be able to influence the production of more inclusive innovators and entrepreneurs.

From the point of view of the Islamic entrepreneurship, economic activities and religion are inseparable, resulting in a set of economic behaviors that are guided not only by legal, ethical and secular guidelines, but by Islamic guidelines as well (Hassan & Hippler, 2014). Moreover, the success of Muslim entrepreneurs and businesses evaluation is not only measured by the financial gains, but also by how well religious objectives are achieved. Moreover, people outfitted by Allah with an assortment of blessings empower them to carry out their obligations. The blessings are strength of the body, power, and vitality of the heart (Qalb). Islam has clarified the need for the appropriate working of Qalb to think to create knowledge; it will assist individuals with carrying the caliphate (succession) obligations on earth in a proper manner, under the direction of the Sunnah and the Quran.

It was found investments on science and productivity among OIC countries, as estimated by expenses on R&D and quantities of patents and publications is lesser than what it should be in respect to the populace sizes. The OIC has almost a fourth of the total world populace, however its expense on research is just 2.4%, with 1.6% on patents, and 6% on publications. The OIC has claimed that there is a

knowledge gap in the Muslim world based on its inadequacy in science, innovation, and technology (Atlas, 2014), and more advancement is needed to accomplish financial wellbeing of the Ummah.

1.1. Entrepreneurship and inclusiveness

Entrepreneurship generally involves the creating of new business (Dees, 2001), identifying opportunities for marketable needs (Hatten, 2009), describing economic activities undertaken by social individuals (McKenzie, 2002), and highly engaged with innovation (Ab. Aziz, 2017). The most current research assure that entrepreneurs should acknowledge and practice inclusive innovation in order to lead to more economic sustainability by having sustainable innovation (Berkowitz, 2018), practicing sustainable innovation contributes to social, economic, and environmental value creation (Rantala et al., 2018). From other hand technological inclusive innovation plays a very significant role in poverty reduction (Botchie et al., 2017), because inclusive business tackles social economic challenges by including the low income community in the business chains (Likoko & Kini, 2017), thus inclusive entrepreneurship is a representation under-represented groups involvement in entrepreneurship aiming to assist them in order to overcome social and economic problems (Pilková et al., 2016). Previous and older studies also asserted on that inclusive business supports inclusion of the base of the pyramid (BoP) population into businesses, for alleviation of poverty (London & Hart, 2011; Prahalad & Ramaswamy, 2004). "Inclusive business involves creation of development impacts using economically viable business models that lead to positive ecological impacts for the short and long term" (Wach, 2012, p. 9). From development overview, "inclusive business model, low-income populations can provide markets, workforce and that small-scale producers can strengthen the supply chain for businesses" (Likoko & Kini, 2017, p. 85). Therefore, engaging and presenting the poor as consumers, suppliers, distributors, or producers, can trigger the realization of social economic opportunities and values for base of the pyramid (BoP) communities in commercializing ways. Most inclusive business models from participated communities focus on the inclusion of the base of the pyramid (BoP) as producers, employees, business' owners or/and costumers of affordable services and goods (Markus Dietrich, 2013; Naguib et al., 2013; Petkoski, 2014; UNDP, 2010).

1.2. Entrepreneurship and Maqasid al-Shariah

Successful entrepreneurs are usually more responsible and socially engaged (Yaacob & Azmi, 2012), and being part of Islamic Ummah required these entrepreneurs to be responsible not only toward them selves and their family but also extend to community, nation and Ummah as all. Whilst, Maqasid al-Shariah explain the meanings and the goals of the Shariah in every law. Al-Fasi (2011) has defines the Maqasid al-Shariah as "to understand the Islamic belief and goals from the Shariah perspective in addition to the unfolding secrets in any given matter as prescribed by Islamic law". Knowledge of Maqasid al-Shariah is absultely necessary for every mujtahids when they delivere opinions, and more especially when opinions differ (Al-Fasi, 2011; Al-Ghali, 1996). Maqasid al-Shariah under the traditional classification is divided in the necessity three levels, which are firstly necessities (darurat), secondly needs (hajiyyat) and thirdly luxuries (tahsiniyyat). Necessities or Darurat are more categorized in what conserves one's wealth, soul, faith, offspring, and mind. The necessities are considered basic or essential of matters for humanbing and human life. Needs or Hajiyat are less essential for humanbing and human life itself, and luxuries or Tahsiniyyat purposes are meant as 'beautifying purposes' in traditional expression (Auda, 2007).

1.3. Islamic entrepreneurial traits

Muslim entrepreneurs appear with higher potential of being inclusive and think of Umma when they create products or services more than non-practicing Muslim entrepreneurs (Gursoy et al., 2017). According to the literature, several studies have explored various Muslim entrepreneurial traits (Abdullah, 2013; Adamu et al., 2011; Faizal et al., 2013; Yaacob & Azmi, 2012), but there are not any critical variations in defining the traits of Muslim entrepreneurs, where most of the scholar agreed on giving the priority to Allah and follow Islamic principle in business and trading. In general, obvious similarities exist among them. The variations do not create a huge disagreement. Therefore, we are adopting in our study the outlined characteristics of Muslim entrepreneurs by Faizal et al. (2013), which is the most comprehensive comparing to the other research in addressing and outlining the 9 characteristics and traits of Muslim entrepreneurs. The adopted Muslim entrepreneurial traits will be tested at each level of necessity (darurat, hajiyyat, and tahsiniyyat). The following is the 9 Muslim entrepreneurial traits (Table 02).

Table 02. Muslim entrepreneurial traits (Faizal et al., 2013)

Muslim Entrepreneurial Traits			
1	Trustworthy	6	Halal as a Top Priority
2	Concern for the Welfare	7	Worship to Allah is a Priority
3	Do not Waste	8	Practicing High Moral Values
4	Caring for the Society and Environment	9	Knowledgeable
5	Faith (Taqwa) to Allah	-	-

1.4. Qalb-based leadership

A group of researchers (2015) in Malaysia conducted a study on Islamic Leadership and Maqasid al-Shariah investigating separated Islamic leadership themes through literature analyses of Islamic and conventional Leadership. This research employs the principles of the higher objectives of Shariah or Maqasid al-Shariah to justify the importance of identified Islamic leadership themes and behaviours from the pointview of Islam, and it analysed the content of four different recourses applying qualitative methodology in analyzing the literature, which the recourses are:

1. The " Hadiths " and " Qur'an "
2. Servant Leadership and Managerial Leadership literature
3. Traditional Islamic Leadership.
4. Modern Islamic Leadership

The research has found and structured 25 themes of the Islamic leadership behaviors. The themes are shown in (Table 03).

Table 03. The Islamic leadership behaviors themes

The Islamic Leadership Behaviors Themes					
1	Trustworthiness and Integrity	10	Empowerment	19	High Self-Reliance and High Self- Esteem
2	Employees Orientation	11	Social Responsibility	20	Moderation and
3	Self-evaluation	12	Flexibility	21	Good in Communication

4	Patience	13	Non-Calculative, (10)	22	Free from environmental-constrains
5	Outcome Orientation	14	Justice and Equity	23	Earnest
6	Cheerful	15	Esprit De Corps	24	Modesty and Shyness
7	Feared when angry	16	Bravery	25	Avoid Conflict.
8	Empowering Intelligent, Wisdom and Encourage Synergy	17	Spirituality, Religiousness and Piety	-	-
9	Role Model	18	Impartially	-	-

The suggested themes measure Islamic leadership in various perspectives. The Islamic measures can be utilized in measuring how effective the Muslims' professionals according to the Islamic perspectives and higher objectives of Shariah (Mahazan et al., 2015). These measures will be adopted in our study and compared with Islamic entrepreneurship themes and traits to produce Islamic entrepreneurial measurements and traits (ref page:50).

Furthermore, Mahazan et al. (2015) Sahlan have discussed specific items developed to measure Islamic leadership values and behavior based on the framework of Maqasid al-Shariah, where they relocated these items into three meaningful categories of the Maqasid al-Shariah framework to give a better understanding of the level of priority given by Islam to values and behaviors based on the necessity levels that are necessities (darurat), needs (hajiyyat), and luxuries (tahsiniyyat).

2. Problem Statement

Modern Muslims stand on such rich heritage of scholarly excellence, producing research and innovation benefiting the ummah and the world at large. However, the recent reports indicate a worrying trend. Given the extremely small footprints the Muslims are making in the global research and innovation domain generally, and the large percentage of the community at the bottom of the economic pyramid (BoP) or the B40, that rise the questions of what should a leading Muslim country such as Malaysia do to provide exemplary replicable solutions? What is the outlook for future development of products and services that will improve the quality of life among the Muslim ummah specifically and those at the BoP or B40 in general?

3. Research Questions

This study will demonstrate Qalb behavioral traits' influence on inclusive entrepreneurial intention to bridge the existing gaps in nurturing morally balanced and responsible human beings based on the verses of the Quran, and support programs that could be developed to transform the intention, attitude, and mindset of those who have not considered entrepreneurship to be a reliable career option.

1. What is the relationship between Qalb behavioral traits and inclusive entrepreneurial intention of Muslim youth in Malaysia?
2. What is the relationship between inclusive innovativeness and inclusive entrepreneurial intention of Muslim youth in Malaysia?

4. Purpose of the Study

Islam also made clear the necessity to use Qalb to feel and live, in order to improve the quality of one's self as well as the nation as whole, therefore Qalb has been included in this study to measure the intention. The excellent values of the entrepreneurs such as integrity, morality, respecting others, trustworthy, dynamic personality and reaching a full humanness are very much related to the condition of Qalb al-Salim (Good heart). Allah (God) created three things in people: wisdom ('Aqil), spiritual heart (Qalb), and physical desires (Nafs) and we cannot see any of them (MahdaviKhou & Khotanlou, 2012), where 'Qalb' chooses to make the wisest decision (Emrullah & Hadimi, 2001; Heidari et al., 2014).

Qalb-Based model is a recent study that was introduced in 2016 by the higher education leadership academy (AKEPT) and it has yet to be tested in the context of entrepreneurship. Therefore, there is a need for more contribution to the body of knowledge regarding the Qalb-based entrepreneurship, and the influence of the Qalb behavioral traits as the antecedents of entrepreneurial intention with a view of implementing the Islamic rules.

This study proposes that a key to the situation is to produce inclusive entrepreneurs (an inclusive entrepreneur is defined as an entrepreneur that offers inclusive innovation goods and services) from among the graduates coming out from Malaysian institutions of higher learning (IHLs). There is a need to understand the determinants for those youths to become inclusive entrepreneurs in order to face the unemployment issue, poverty, and income inequalities.

5. Research Methods

According to the similarities of personality, characteristic, and traits between leaders/managers and entrepreneurs (Johnson, 2011; Vecchio, 2003; Zimmerman, 2014) this study maps the 9 Muslim entrepreneurial traits and matches them with the 25 Islamic leadership behavioral themes that were found in Qalb-based leadership studies as in the following (Table 04).

Table 04. Islamic leadership behavioral matched with Islamic entrepreneurial traits

Islamic Leadership Behavioral Themes		Islamic Entrepreneurial Traits	
1.	Trustworthiness and Integrity	Trustworthy	1.
2.	Employees Orientation	Concern for the Welfare	2.
3.	Esprit De Corps		
4.	Outcome Orientation	Do not Waste	3.
5.	Social Responsibility	Caring for the Society and Environment	4.
6.	Free from environmental-constrains		
7.	Spirituality, Religiousness and Piety	Faith (Taqwa) to Allah	5.
		Halal as a Top Priority	6.
		Worship to Allah is a Priority	7.
8.	Self-evaluation	Practicing High Moral Values	8.
9.	Patience		
10.	Non-Calculative		
11.	Equity and Justice		
12.	High Self-Esteem & High Self-Reliance		
13.	Impartially		

14.	Moderation and Balance				
15.	Good in Communication				
16.	Earnest				
17.	Cheerful				
18.	Feared when angry				
19.	Role Model				
20.	Avoid Conflict				
21.	Flexibility				
22.	Bravery				
23.	Modesty and Shyness				
24.	Empowering Intelligent, Wisdom and Encourage Synergy			Knowledgeable	9.
25.	Empowerment				

5.1. Theoretical framework

This research aims to develop the Qalb-based Entrepreneurship model that explains the impact of the three levels of Qalb behavioral traits on the entrepreneurial intention and behavior among the youth. This research addresses these three levels as Darurriyyat Qalb Traits, Hajjiyyat Qalb Traits, and Tahsiniyyat Qalb Traits. The model suggests the three levels as first independent variable and inclusive innovativeness as second independent variable that influence the dependent variable the inclusive entrepreneurial intention of Muslim youth in Malaysia. The following is the theoretical framework for the current study (Figure 01). Inclusive innovativeness is added because as a trait represents the level of inclusive innovation of the Muslim youth in Malaysia who will be studied in this research. While innovation is considered as a result of innovativeness, therefore innovativeness can be seen as a capacity to innovate, or innovativeness is the degree in which innovation can be done.

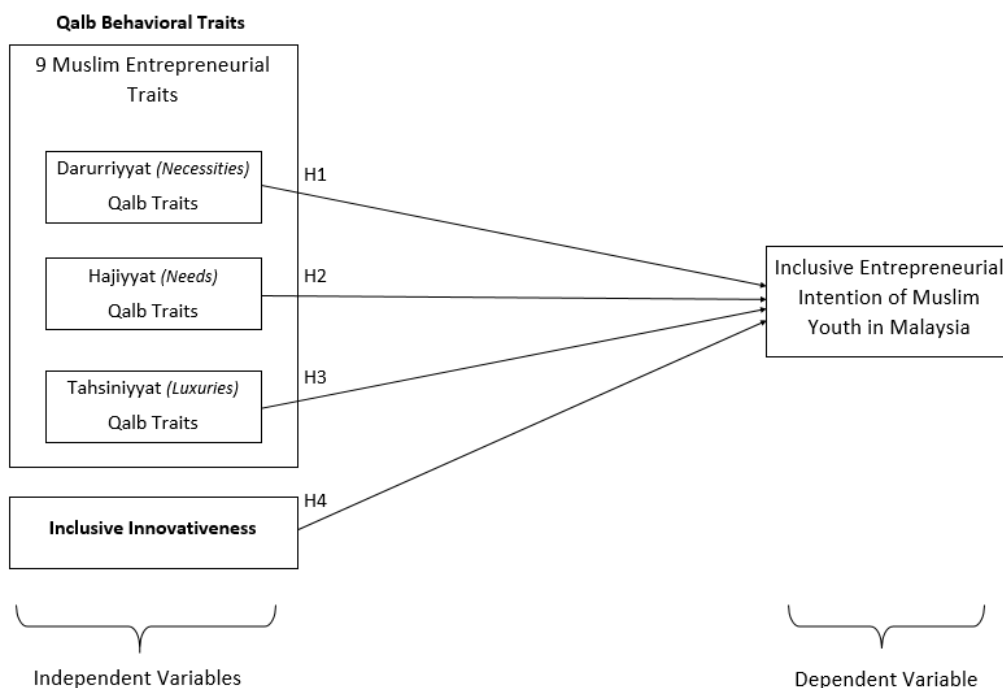


Figure 01. The Qalb behavioral traits' theoretical framework

The instrument development consists of four sections, first section consists of 14 questions, while sections 2, 3, and 4 are measured using a 5-points Likert scale (Kothari, 2008), the answers are on continuous scales from (1- Unlikely) to (5-Likely) while the middle point is (3-Neutral). Section Two includes 5 items each one measures one aspect of inclusive innovativeness the independent variable (Excluded Population, Affordable Access, High Quality, Sustainable Business, Massive Outreach). Section Three consists of 6 items that measure the inclusive entrepreneurial intention the dependent variable. Section Four includes 91 items adopted from AKEPT project on Qalb-Based Leadership (Mahazan et al., 2015), those 91 items are adapted to fit Qalb-Based Entrepreneurship research and measure the behavioral traits of Muslim entrepreneurs. The 91 items or measurement are classified in three levels under Maqasid al-Shariah {necessities (daruriyat), needs (hajiyat), and luxuries (tahsiniyyat)}, and mapped to the 9 themes or characteristics of Muslim entrepreneurs.

This quantitative research sees relationships regarding social phenomena from a mechanistic view, studies population of Muslim youth (17-40 years old) of Malaysians and internationals at the tertiary level of higher education in Malaysia estimated by 812,653 represents. Questionnaire technique is used to collect the primary data convenience sampling technique, instrument development included the 91 items that adopted and adapted from the Qalb-based leadership to form and measure Qalb behavioral traits. The data will be collected applying Non-Contrived settings and the time horizon is Cross-sectional. This research employs the partial least squares structural equation to assess the structural development of the exploratory model of Qalb-Based Entrepreneurship, that tests the relationships of the newly formed latent variables or constructs with the dependent variable the inclusive entrepreneurial intention. For sample size G*Power application was used to calculate the minimum sample size applying the setting of the "Linear multiple regression: Fixed model, R2 deviation from zero procedure provides power analyses for omnibus F-tests of the null hypothesis that the squared multiple correlation between a variable and a set of predictor variables" (Rindskopf, 1984), which are 4 predictors in this study and the effect size reveals the sample size as N=129 to achieve $\alpha = 0.05$ and power of 0.95.

6. Findings

The pilot study included 51 respondents of Muslim students who study in Multimedia university and Limkokwing university in Cyberjaya. The pilot study went into four stages of analysis. First stage involves studying the clarity and relevance where both are measured using a 5-points Likert scale (Kothari, 2008), second stage will include the descriptive statistics of section one of the questionnaire, third stage involves studying the validity and reliability of the measurements on SPSS, and fourth stage involves studying the validity and reliability of the measurements using SEM-PLS algorithms.

1. According to the results of the averages of responses on the questions' clarity and relevance, all questions' averages are above 4 that indicates the questions seem to be clear and no amendment or correction is required.
2. According to Cronbach's Alpha testing, all items are valid and reliable. The items of tahsiniyyat qalb traits and inclusive innovativeness have good consistency respectively 0.856 and 0.725, while the items of darurriyyat qalb traits, hajiyat qalb traits, and inclusive entrepreneurial intention have excellent consistency respectively 0.952, 0.908, and 0.918.

The framework/model of this research is a combination between formative and reflective variables. More precisely, the four independent variables are formative constructs while the dependent variable is reflective construct resulting a Formative-Reflective model. The formative measurement and reflective measurements requires a different approach of validation and they will be tested independently as Bollen (1984, 1989) recommended. In assessing the reliability evaluation of formative constructs, multicollinearity is tested (Diamantopoulos & Siguaw, 2006). Multicollinearity explores when indicators are tapping into same aspects of each construct (Petter et al., 2007). Therefore, the Cronbach's Alpha results are only valid for the reflective dependent variable, which is the inclusive entrepreneurial intention as reliability and validity tests.

On the other hand, to test the validity and reliability for the formative construct should test the Variance Inflation Factor (VIF) to assess the reliability of formative measurement model (Wan Afthanorhan, 2014), all the independent variables in this research namely (Darurriyyat Qalb traits, Hajiyyat Qalb traits, Tahsiniyyat Qalb traits, and Inclusive Innovativeness) are formative constructs and required VIF test. Multicollinearity to be measured by variance inflation factors VIF, where VIF value should not exceed 5.0 in order to not have any problem with multicollinearity (Hair et al., 2010). Variance Inflation Factor (VIF) shows how much the indicator variance explained by other influences in the model. VIF Should be lower than 5.0 otherwise, remove indicator according to Cassel et al. (2000), Fornell and Bookstein (1982), Diamantopoulos and Siguaw (2006), and Ringle et al. (2012). Accordingly, the researcher has evaluated the formative items that employed to measure the formatove construct to determine if there is any multicollinearity issues or conceptual overlap among the indicators and removed the collinearity indicators and retest the PLS Algorithm after each deletion of the indicators. The high inflation level items/measurements have been removed through 7 stages of removal and retesting.

The result shows the measurements were good quality. No multicollinearity issues found according to (VIF) values, which should not exceed 3.3 (Hair et al., 2010; Hair et al., 2011; Petter et al., 2007). The maximum VIF value of this model was 3.187 for Darurriyyat Qalb traits, 3.278 for Hajiyyat Qalb traits, 2.754 for Tahsiniyyat Qalb traits, and 2.128 for Inclusive Innovativeness. These suggest multicollinearity is not a problem as shown in (Table 05).

Table 05. The valid and reliable items/measurements of all dependent formative constructs

N	Item	VIF	N	Item	VIF	N	Item	VIF	N	Item	VIF
1	D1	2.817	1	H12	2.265	1	T14	1.862	1	Inc.Innov1	1.261
2	D10	1.872	2	H13	2.492	2	T15	1.423	2	Inc.Innov2	1.346
3	D11	2.549	3	H20	2.12	3	T16	2.439	3	Inc.Innov3	1.734
4	D18	3.044	4	H21	2.201	4	T17	1.384	4	Inc.Innov4	1.805
5	D19	1.776	5	H22	2.251	5	T24	1.852	5	Inc.Innov5	2.128
6	D2	2.599	6	H23	2.015	6	T25	2.754			
7	D3	2.852	7	H48	1.996	7	T26	2.569			
8	D31	2.075	8	H49	1.875	8	T27	2.19			
9	D32	2.082	9	H59	2.487	9	T28	2.706			
10	D34	3.012	10	H60	2.182	10	T29	1.791			
11	D35	3.052	11	H64	1.667	11	T50	1.976			
12	D36	1.991	12	H66	1.656	12	T62	1.476			
13	D40	1.822	13	H67	1.71	13	T68	2.035			
14	D41	2.364	14	H77	1.982	14	T79	1.562			
15	D42	2.572	15	H81	1.87	15	T91	1.451			

16	D45	2.43	16	H82	1.967						
17	D46	2.482	17	H85	2.312						
18	D47	3.187	18	H86	2.008						
19	D5	2.254	19	H88	1.624						
20	D51	2.139	20	H90	1.798						
21	D53	2.757	21	H65	3.14						
22	D70	2.291	22	H74	3.278						
23	D8	2.217	23	H80	3.192						
24	D83	3.186									
25	D84	2.123									

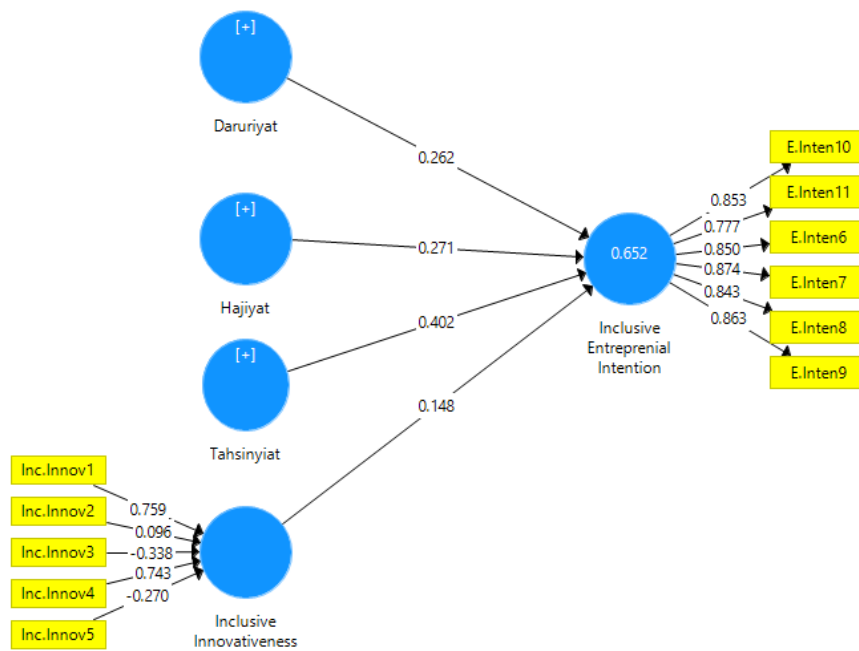


Figure 02. The correlation between constructs

The researcher has further checked the correlations (Figure 02) inbetween the constructs; where all of them are below the threshold 0.71 (Andreev et al., 2009), suggesting very limited concerns of the discriminant validity of this model constructs.

7. Conclusion

The result of the bootstrapping the framework of this study in the SEM-PLS shows the goodness fit of the formative and reflective variables together. Furthermore, the result in Figure 02 shows that there are relationships between all independent variables and the dependent variable accordingly. The relationship between Darurriyyat Qalb traits and Inclusive Entrepreneurial Intention has the lowest indicator as 0.262 comparing to Hajiyat Qalb traits has 0.271, while Tahsiniyyat Qalb traits has the highest indicator as 0.402. This order explains the different levels of Qalb traits towards Inclusive Entrepreneurial Intention. The highest level of Qalb traits which is Tahsiniyyat has the strongest relationship with Inclusive Entrepreneurial Intention, and the lower level has a lower relationship respectively Hajiyat Qalb traits representing the needs and Darurriyyat Qalb traits representing the basic level which is necessities. Thus, the researcher will develop the application according to the described assessment further by increasing the

number of respondents. The data will be collected through a questionnaire that will be sent to all public and private institutions of higher education, targeting 350 respondents of Muslim students.

As there is a need to nurture the creation of learned values-driven talent to produce holistic and well-balanced entrepreneurs this model is formulated to test and explain the relationships between the three different levels of Qalb entrepreneurial traits and the inclusive entrepreneurial intention of Muslim youth in Malaysia. This model is purposely created and formulated as this area has never been discussed, tested, or proven before.

Acknowledgments

This research was supported by the Fundamental Research Grant Scheme (FRGS) from Ministry of Education Malaysia [Grant Code: FRGS/1/2017/SS03/MMU/02/10].

References

- Ab. Aziz, K. (2017). Innovation, convergence and the disenfranchised: Investigating the inclusiveness of convergence in Malaysia. *International Conference on Advanced Communication Technology*, 5(5), 921–926.
- Abdullah, S. B. (2013). The characteristics of successful entrepreneurs from Islamic perspective. *Journal of Islamic and Human Advanced Research*, 3(6), 322–345.
- Adamu, I. M., Kedah, Z., & Osman-Gani, A. (2011). Spirituality in entrepreneurship from Islamic perspectives: A conceptual analysis on the effects on entrepreneurial motivation and social responsibility. In *International Conference of the Academy of HRD*. http://irep.iium.edu.my/12337/1/Spirituality_Entrepreneurship_Adamu_Zul_AAhad.pdf
- Al-Fasi, A. (2011). *Maqasid al-Shari'ah al-Islamiyyah wama Karimuha*. Dar al-Salam.
- Al-Ghali, B. (1996). *Shaykh Muhammad Tahir bin Ashur*. Dar Ibn Hazm.
- Andreev, P., Heart, T., Maoz, H., & Pliskin, N. (2009). Validating formative partial least squares (PLS) models: Methodological review and empirical illustration. In *Thirtieth International Conference on Information Systems* (pp. 1-17). Phoenix, USA: Association for Information Systems. <https://aisel.aisnet.org/cgi/viewcontent.cgi?article=1012&context=icis2009>
- Atlas (2014). Final Report. *The Atlas of Islamic world science and innovation*. https://www.atlashonda.com.pk/wp-content/uploads/2016/03/annual_report_2014.pdf
- Auda, J. (2007). *Maqasid al-Shariah as philosophy of Islamic law (A systems approach)*. The International Institute of Islamic Thought.
- Berkowitz, H. (2018). Meta-Organizing firms' capabilities for sustainable innovation: A conceptual framework. *Journal of Cleaner Production*, 175, 420–430.
- Bollen, K. A. (1984). Multiple indicators: Internal consistency or no necessary relationship. *Quality and Quantity*, 18, 377-385.
- Bollen, K. A. (1989). *Structural equations with latent variables*. John Wiley.
- Botchie, D., Sarpong, D., & Bi, J. (2017). Technological inclusiveness: Northern versus Chinese induced technologies in the garment industry. *Technological Forecasting and Social Change*, 119, 310–322.
- Cassel, C. M., Hackl, P., & Westlund, A. (2000). On measurement of intangible assets: A study of robustness of partial least squares. *Total Quality Management*, 11(7), 897-907.
- Dees, J. G. (2001). The meaning of social entrepreneurship. Center for the advancement of social entrepreneurship, Fuqua School of Business, Duke University. http://www.fuqua.duke.edu/centers/case/documents/dees_SE.pdf
- Department of Statistics Malaysia. (2015). *Department of Statistics Malaysia Press Release Vital Statistics*. <https://dosm.gov.my/v1/index.php?r=column/pdfPrev&id=eUM5SGRBZndGUHRCZTc2RldqNGMrUT09>

- Diamantopoulos, A., & Sigauw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, 17, 263-282.
- Dzidrov, M., Ceravolo, L. S., & Simeonov, S. (2016). From efficiency to innovation-driven economy with stimulation of innovation. *International Journal of Scientific & Engineering Research*, 7(11), 1144-1147.
- Emrullah, A. B., & Hadimi, M. (2001). *Ethics of islam* (3rd ed.). Waqf Ikhlas Publication.
- EPU (2016). The Malaysian Economy in Figures. *Economy Planning Unit*, 66.
- Faizal, P. R. M., Ridhwan, A. A. M., & Kalsom, A. W. (2013). The entrepreneurs characteristic from al-Quran and al-Hadis. *International Journal of Trade, Economics and Finance*, 4(4), 191-196.
- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing Research*, 19, 440-452.
- Global Entrepreneurship Research Association (2017). *Global entrepreneurship monitor - Global report 2016/17*. <http://www.gemconsortium.org/report/49812>
- Gursoy, D., Altinay, L., & Kenebayeva, A. (2017). Religiosity and entrepreneurship behaviours. *International Journal of Hospitality Management*, 67(8), 87-94.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (Seventh Edition). Pearson.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 18(2), 139-152.
- Hassan, M. K., & Hippler, W. J. (2014). Entrepreneurship and Islam: An overview. *Econ Journal Watch*, 11(2), 170-178.
- Hatten, T. S. (2009). *Small business management: Entrepreneurship and beyond*. Houghton Mifflin.
- Heidari, A. A., Ghalavand, S. T., & Vasigh, B. (2014). Making the public spaces with spiritual strategy in bushehr. *Procedia - Social and Behavioral Sciences*, 159, 722-731.
- Hooi, H. C., Ahmad, N. H., Amran, A., & Rahman, S. A. (2016). The functional role of entrepreneurial orientation and entrepreneurial bricolage in ensuring sustainable entrepreneurship. *Management Research Review*, 39(12), 1616-1638.
- Jebarajakirthy, C., Lobo, A., & Hewege, C. (2015). Enhancing youth's attitudes towards microcredit in the bottom of the pyramid markets. *International Journal of Consumer Studies*, 39(2), 180-192.
- Johnson, J. E. (2011). Why some leaders can build new organizations: Leadership, individual differences, and gender in entrepreneurship. *ProQuest Dissertations and Theses*, (May), 152-153.
- Koen, V., Asada, H., Nixon, S., Rahuman, M. R. H., Arif, A. Z. M., & OECD. (2017). Malaysia's Economic Success Story and Challenges Economics Department Working Papers No. 1369.
- Kothari, C. R. (2008). *Research methodology, methods and techniques (2nd)*. New Age International (P) Limited.
- Likoko, E., & Kini, J. (2017). Inclusive business—a business approach to development. *Current Opinion in Environmental Sustainability*, 24, 84-88.
- Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11(4), 907-933.
- London, T., & Hart, S.L. (2011). *Next generation business strategies for the base of the pyramid*. Pearson Education, Inc.
- Mahazan, A. M., Nurhafizah, S., Rozita, A., Siti Aishah, H., Wan Mohd. Fazrul Azdi, W. R., Mohd. Rumaizuddin, G., ... Khairunneezam, M. N. (2015). Islamic leadership and maqasid al-shari'ah: reinvestigating the dimensions of Islamic leadership inventory (ili) via content analysis procedures. *IJASOS- International E-Journal of Advances in Social Sciences*, 1(2), 153-162.
- Mahazan, A. M., Wan Mohd Fazrul Azdi, W. R., Siti Aishah, H., Yuseri, A., Mohd. Rosmizi, A. R., Muhammad Yusuf, K., & Rumaizuddin, M. G. (2015). Leadership behaviors in Islam: Integrating managerial leadership and servant leadership. *Middle-East Journal of Scientific Research*, 23(4), 722-728.
- Mahdavikhou, M., & Khotanlou, M. (2012). New approach to teaching of ethics in accounting “introducing Islamic ethics into accounting education. *Procedia - Social and Behavioral Sciences*, 46, 1318-1322.

- Markus Dietrich, A.B. (2013). *Inclusive business study*. Soc. Asian incubator, entrepreneurship bank, Asian development.
- McKenzie, B. B. (2002). Understanding entrepreneurship: A definition and model based on economic activity and the pursuit of self-identity. https://pdfs.semanticscholar.org/8f84/2d5ec34596b2b2232d3bd79c1c80b659304f.pdf?_ga=2.89912030.431301012.1580829779-515305467.1580829779
- Naguib, J., Oppermann, A., & Rosendahl, C. (2013). Inclusive business models options for support through psd programmes. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).
- OECD. (2016). OECD Economic Surveys. Malaysia.
- Paunov, C. (2013). *Innovation and inclusive development*. OECD Publishing.
- Petkoski, D. (2014). *Firmenich in India: Changing the rules of engagement with low income consumers*. World Business Council For Sustainable Development.
- Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in information systems research. *MIS Quarterly*, 31(4), 623-656.
- Pilková, A., Jančovičová, Z., & Kovačičová, Z. (2016). Inclusive entrepreneurship in visegrad4 countries. *Procedia - Social and Behavioral Sciences*, 220(3), 312–320.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal Interact Mark*, 18, 5-14.
- Rantala, T., Ukko, J., Saunila, M., & Havukainen, J. (2018). The effect of sustainability in the adoption of technological, service, and business model innovations. *Journal of Cleaner Production*, 172, 46–55.
- Rindskopf, D. (1984). Linear equality restrictions in regression and loglinear models. *Psychological Bulletin*, 96, 597-603.
- Ringle, C. M., Sarstedt, M., Schlittgen, R., & Taylor, C. R. (2012). PLS path modeling and evolutionary segmentation. *Journal of Business Research*, 66(9), 1318-1324.
- SMECorp. Malaysia. (2016). “Annual report (Vol. 2016-2017)”, Malaysia: Secretariat to the National SME Development Council, Malaysia. [http:// www.smecorp.gov.my/index.php/en/ sme-annual-report-2016-17](http://www.smecorp.gov.my/index.php/en/sme-annual-report-2016-17).
- Taj, S., George, B., & Thomas, S. (2016). Sustainability and business model innovation at the bottom of the pyramid: A Graduate Business Project. *Business Education Innovation Journal*, 8(2), 13–21.
- The Conference Board Org. (2016). The Conference Board Global Economic Outlook 2016, February 2016. <https://www.conference-board.org/data/globaloutlook/>
- UNDP (2016). Malaysia millennium development goals report 2015. United Nations Malaysia
- UNDP (2010). Business solutions to poverty: How inclusive business models create opportunities for all in emerging Europe and central Asia. *United Nations Development Programme*, 1–5. <http://hdr.undp.org/>
- Vecchio, R. P. (2003). Entrepreneurship and leadership: Common trends and common threads. *Human Resource Management Review*, 13(2), 303-327.
- Wach, E. (2012). IDS practice paper research summary 9: Measuring the “inclusivity” of inclusive business. IDS Pract Pap.
- Wan Afthanorhan, W. A. (2014). Hierarchical component using reflective-formative measurement model in Partial Least Square Structural Equation Modeling (PLS-SEM). *International Journal of Mathematics and Statistics Invention (IJMSI)*, 2(2), 55–71.
- Yaacob, Y., & Azmi, I. A. G. (2012). Entrepreneur’s social responsibilities from Islamic perspective: A study of Muslim entrepreneurs in Malaysia. *Procedia - Social and Behavioral Sciences*, 58(1999), 1131–1138.
- Zimmerman, J. (2014). Toward a hypothesis connecting leadership and entrepreneurship. *International Journal of Management & Information Systems*, 18(4), 291–298.