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## Unpacking Qalb Behavioural Traits through the Lens of Maqasid al-Shariah: A Pathway to Foster Inclusive Entrepreneurial Intentions in the Muslim Community

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### Abstract

In Malaysia, a worrisome trend is emerging as an increasing number of individuals find themselves trapped within the poverty bracket and the Base of the Pyramid (BoP) socioeconomic groups. To address the economic and social challenges faced by these marginalized communities and to contribute significantly to poverty reduction and overall well-being, inclusive entrepreneurship has emerged as a pivotal strategy. This study delves into the critical imperative of inclusive entrepreneurship, which often eludes existing quantitative measurements of societal well-being. These measurements frequently overlook the fundamental dimensions of social and psychological well-being inherent to inclusive entrepreneurship. Drawing from the Islamic framework of Maqasid al-Shariah, which elucidates the objectives of Islamic law, we introduce a unique concept—Qalb-based Entrepreneurial Traits. These traits are rooted in moral values and ethics, forming a bridge between Islamic principles and entrepreneurial intentions. Using a quantitative approach, we explore the determinacy of these Qalb-based entrepreneurial traits in conjunction with three key antecedents derived from the theory of planned behaviour. Our study specifically focuses on assessing the entrepreneurial intentions of Muslim students enrolled in Malaysian institutions of higher learning (IHLs). Our survey encompassed 287 respondents, and we conducted a rigorous multiple regression analysis using PLS-SEM to scrutinize the relationships between these variables. Our findings leave no room for doubt—Qalb-based behavioural traits exert a significant influence on inclusive entrepreneurial intentions (IEI) among Muslim youth in Malaysia. Furthermore, we uncover that gender plays a moderating role in the relationships

between Darurriyyat and Tahsiniyyat Qalb behavioural traits and inclusive entrepreneurial intentions, shedding light on the nuanced dynamics of these determinants. In essence, this study offers valuable insights into the pivotal role of Islamic ethical principles in shaping inclusive entrepreneurship. Beyond theoretical contributions, it provides practical implications for policymakers and stakeholders dedicated to addressing the pressing challenges of poverty and social well-being within the Muslim community in Malaysia.

**Keywords:** Inclusive; entrepreneurship; intention; Qalb; Maqasid al-Shariah

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## 1.0 Introduction

Modern Muslims stand on a rich heritage of scholarly excellence, producing research and innovation benefiting the ummah and the world. However, recent reports indicated worrying trends, the bottom of the economic pyramid (BoP) or the B40 is not improving, and Muslims are making relatively small impacts in terms of global research and innovation. More research is needed to increase the impact in the global arena; and to come up with innovative solutions that can improve the well-being of the ummah specifically. We need to produce more actors from the ummah who are enterprising and offer solutions that will not only benefit themselves but the community at large. Where more entrepreneurs help regions to address socioeconomic disparities, as well as reduce regional inequalities leading to fostering inclusive growth (Sánchez-Hernández & Maldonado-Briegas, 2023). In other words, there is a need to produce more inclusive entrepreneurs (entrepreneurs that offer inclusive innovation goods and services) from the ummah to empower the ummah.

Youth participation in entrepreneurial activities contributes to economic wellness innovatively as well as to personal development which improves the well-being of society and provides solutions for social issues. Youth entrepreneurial activities create

jobs for others as well as themselves, decreasing unemployment rates, and increasing the number of productive members in society. They manage to be independent financially, take care of their families, and maintain households (Afutu-Kotey, Gough, & Yankson, 2017). More specifically, students in higher education show high interest in entrepreneurship (Geldhof, Malin, Johnson, Porter, Bronk, Weiner, & Damon, 2014), where education generates a higher entrepreneurial action (Ripolles & Blesa, 2023). This is associated with higher opportunity recognition. Through supporting programmes which promote a strong entrepreneurial potential (Olugbola, 2017), participants see the importance of understanding the factors influencing the entrepreneurial intention of youth.

### **1.1 Research Problem**

Many indexes measure the well-being of societies quantitatively such as HDI (the human development index) as well as GDP (the gross domestic product) but ignore the social and psychological elements that play an important part in every human decision and behaviour. Furthermore, these often are derived from conventional underlying theories which are largely western perspectives. Maqasid al-Shariah model on the other hand is able to explain and construct human traits and behaviours according to the objective of Islamic law. Yet there is no research as yet undertaken to explore the Maqasid al-Shariah potential as a tool for measurement of the well-being of a society. Specifically, as explanatory factors affecting entrepreneurship and innovation to affect the well-being of the society. On the innovation development side, where sustainable development goals have promoted the well-being of all ages, the fifth version of sustainable development goals emphasises the enhancement of gender equality and female empowerment.

Moreover, the eighth version has given the main focus on inclusive, economic sustainability, decent work, and employment. Special microfinance for women entrepreneurs to empower them addresses the challenges associated with gender-inequality (Quagraine, Adams, Kabalan, & Dankwa, 2021). Besides, entrepreneurship studies based on gender showed a gap between males and females which mainly is favourable to males (Bacq et al.,2011; Pines et al.,2012; GEM, 2016), including in the

countries that claim themselves as having gender equality, and Malaysia is one of them (GEM, 2016). The initial phase of entrepreneurial activities is gender-sensitive due to some reasons such as culture, society, and economic.

## **1.2 Research Objective & Questions**

Hence, these validate the justification that all targets and aims should be incorporated and become a part of the country's bigger mission and vision. Therefore, this research seeks to address the problems highlighted by coming up with recommendations that can encourage innovative solutions that can elevate the standard of life of the ummah and uplift them from the bottom of the pyramid. Specifically, this work proposes to utilise the Maqasid al-Shariah model in the theoretical framework to investigate the determinants for inclusive entrepreneurial intention amongst Muslim youth in Malaysia.

This research demonstrates the factors that influence inclusive entrepreneurial intention (IEI) to bridge the existing gaps in nurturing morally balanced and clarifies whether gender plays a part in predicting this intention. Therefore, the three main research questions are:

RQ1: What are the factors that influence the inclusive entrepreneurial intention of Muslim youth in Malaysia?

RQ2: Do Qalb behavioural traits influence the inclusive entrepreneurial intention of Muslim youth in Malaysia?

RQ3: Does gender matter in predicting the inclusive entrepreneurial intention of Muslim youth in Malaysia?

## **2.0 Literature Review**

### **2.1 Inclusiveness & Maqasid al-Shariah**

In line with innovation and well-being, inclusive innovation seeks to expand access to essential goods and services, thereby improving quality of life. The Global Research Alliance 2012 defined inclusive innovation including the five dimensions as “any innovation that leads to affordable access of quality goods and services creating livelihood opportunities for the excluded population, primarily at the base of the pyramid, and on a long-term sustainable basis with a significant outreach”. Accordingly, these dimensions will be used as elements in forming the inclusive innovativeness trait. The inclusive entrepreneurship concept as it portrays the discriminated people’s participation in entrepreneurship where the target is to aid them in solving their issues economically and socially (Pilková, Jančovičová & Kovačičová, 2016). Inclusive business support inclusion of the BoP population into business alleviates poverty (Prahalad & Ramaswamy, 2004; London & Hart, 2011; Okada, Stanislawski & Amponsah, S, 2021). Businesses can be inclusive by offering reasonably priced products and services, and also by considering the involvement of BoP group as workers, employees, and manufacturers (Petkoski, 2014; UNDP, 2010; Naguib, Oppermann, & Rosendahl, 2013). Inclusive entrepreneurship emphasises the enrichment and empowerment of society socially and politically leading to a society that is independent, self-reliant, and has self-belief.

The Islamic point of view sees the inclusion principle as all communities can completely enjoy sovereign riches. As a result, no one will be oblivious to the opportunity to contribute to their country's prosperity. This is attainable by justice, equality, and fraternity (Ismail & Mat Nor, 2010). The human unity concept is deeply embedded in Islam as a reflection of the principle of Tawhid or unified creation (Haron, Rahman, & Possumah, 2015). The concept of human unity or brotherhood and equal treatment of each individual in society must be measured by social justice. On the other hand, Islam rejects stereotyped attitudes of prejudice, fanaticism, and conflict as explanations for differences (Sachedina, 2001). Each community member's basic requirements are addressed; Implementing the mandate at-takaafu al-ijtimai, which covers economic or social security insurance and provides assistance to those who cannot afford it (Haron et

al., 2015). Islam allows a person to have greater income in line with their nature and requirements, as long as they remain true to themselves and meet their commitments to society, whether by Zakah or Sadaqah (charity) Infaq (donation). Zakah is a pillar of Islam and it should be distributed to the poor and deprived people at the discretion of the payer (Hoque, 2023; Karim, 2014; Mallat, 1988). Islam advises the wealthy to remain humble and not boast about their wealth. Wealth inequality and a large income gap will not exist in the community if the Islamic doctrine (including the execution of Shariah and justice rules) is followed. In this line, Maqasid al-Shariah is comprehensive and encompasses moral principles directly applicable to modern life, and any lifestyle that is deemed ethical and permissible fulfils its purposes (Amin et al., 2011). Its application provides an inclusive development of mankind where moral values can be strategically built through integrating the practical image of Islam and maintaining social justice not only on a religious note but also morally, emotionally, intellectually, as well as physically (Sulayman, 2014). In the entrepreneurship context, Maqasid al-Shariah has strong links between objectives of Islamic entrepreneurship (Mohammed Shehu, Ahmed, and Al-Aidaros, 2015) where it can be a guidance for entrepreneurship ethical practices (monitors with high moral values) in conducting business as it is one of the main aspects of life. According to Nizam and Moussa (2017) as well as Tarique, Islam, and Mohammed (2021), Maqasid al-Shariah can be the composite index that measures the performance of socio-economic policies. That is because of its guidelines for ethical decision-making and the concerns of the well-being of the entire society.

## **2.2 Qalb & Entrepreneurship**

The Qalb (heart) as spiritual and super sensory organ that is in control of more superior cognitive purposes like awakening of transcendent reality, beliefs, significance and purpose of creation. Yousofi (2011) addressed the correlation between people's physical and mental health and religious entanglement. In studying the Islamic ethics and values they found that humans are gifted with three things that distinguish us from other creations which are wisdom ('Aqil), spiritual heart (Qalb), and carnal desires (Nafs) which cannot be seen by others. Qalb is a component that controls someone's personality

whether it is positive or negative where mukhlisin and muhsin (sincere and benefactor) are signs of good Qalb (Abbas, 2017; Baharuddin & Ismail, 2015). This study showed the possibility of linking the heart with mind that reflects personality traits embedded in Maqasid al-Shariah framework, where we argue that humans can be led by the heart the same as mind and in some cases better, especially so when the person has a good heart is a good person and will take the better initiative.

Entrepreneurship constitutes the utilization of an individual's cultural, social, and economic resources, all with the purpose of enhancing their living standards (Fontefrancesco & Mendonce, 2022). However, the Islamic point of view of entrepreneurship has a different perspective to Western entrepreneurship. It does not separate religious practices and business (Hassan & Hippler, 2014). Religious value systems enhance the business start-up rate positively (Carswell & Rolland, 2007; Margaca & Rodrigues, 2023). They also determine the regulatory systems for the legal development, the norms and values of behaviour, and the individual's knowledge ability (Audretsch, Bönte, & Pawan, 2013). Muslim business activities must focus primarily on pleasing Allah, which includes fulfilling one's religious obligations, conducting a business consistent with the ethical and moral standards of Islamic practices, and contributing to the benefit of society as a whole. Mohammed Shehu, Ahmed, and Al-Aidaros (2015) have asserted that Islamic law guides entrepreneurial activities to success on the individual level as well as the community level. According to Yaacob and Azmi (2012), a successful entrepreneur does not only succeed in making money and profit, but encompasses all aspects required by Islam; namely obligations towards his or her family, social obligations, and obligations towards the other Muslims in the locality.

### **2.3 Theory of Planned Behaviour & Entrepreneurial Intention**

In the Malaysia context, Bidin, Othman and Mohd-Shamsudin (2012) as well as Bazkiaei, Khan, Irshad and Ahmed (2021) have found that the three antecedents of the theory of planned behaviour that are significant towards the entrepreneurial intention of youth. However many graduates do not turn out to be entrepreneurs after their graduation, especially Malays, despite the government's call. This is consistent with Ambad and

Damit (2016) who found that personal attitude, perceived behavioural control, and perceived relational support are the predictors of entrepreneurial intention of Malaysian youth. However, Ahmad, Xavier, and Bakar (2013) have identified three kinds of perceptions, which are individual perceptions, perceptions about entrepreneurial opportunities and socio-cultural perceptions. These perceptions influence the intention of youth to establish their own business and take entrepreneurship as a career choice. Moreover, Mushtaq, Hunjra, Rehman, and Azam (2011) found that not only higher education is needed to create a new venture, but also the networking along with self-independence as well as self-reliance. This proves that higher education grooms young graduates and prepares them for new venture creation. This is consistent with Lyu, Shepherd and Lee (2023) as well as Mohamad, Lim, Yusof, and Soon's (2015) research that asserts the majority of students who received entrepreneurship education are persistent in having the intention of becoming entrepreneurs. Despite this, it is clear that students who receive the exposure towards entrepreneurship education, as well as development entrepreneurial programs (Mustapa, Al Mamun, & Ibrahim, 2018), whether it is conventional or unconventional, have massive potential to be entrepreneurs; research has not yet filled the gap in identifying what makes the intention decrease. Hence, there is a serious need to explore further the factors that influence youth intention in order to encourage the youth to become entrepreneurs in Malaysia.

#### **2.4 Gender & Entrepreneurship**

On the other hand, Unravelling the attributes of different personalities would assist in comprehending different behaviours between these two genders (Visser & Roelofs, 2011). Nählinder (2010) discovered that males and females are dissimilar in terms of their determination to innovate. Females are driven to innovate because they could acknowledge the needs of other people and are keen to lend a hand, while males are more triggered by demanding and ego-oriented circumstances (Croson & Gneezy, 2009). "Innovativeness of women is sometimes hampered by low self-confidence and low prioritization of work issues over family or household issues" as narrated by Kirkwood (2013) and Nählinder (2010). Overconfidence which is a more popular attribute in males

than females may be the reason for variance in risk-taking inclination where males can be seen to be more overconfident to succeed in risky circumstances than females (Croson & Gneezy, 2009). In comparison with males, females are inclined to undervalue their competency and achievement, and do not give recognition of their accomplishment. Females also often underrate their abilities in positions and tasks that are deemed as masculine like innovation (Verheul et al., 2005). Hence, it is crucial to consider gender as a possible significant moderator of the relationship between the determinants of entrepreneurial intention (EI) and following behaviour. By considering this, it shall lead to a greater understanding of the determinants, and subsequently the root of these differences in inclusive entrepreneurship. Though many researchers have studied gender as a moderator in the relationship between entrepreneurial intention and its antecedents such as (Karimi et al., 2013), (Díaz-García & Jiménez-Moreno, 2010), and even more recently (Chaudhuri, Agrawal, Chatterjee & Hussain, 2023), but it remains unknown in the context of the inclusive entrepreneurial intention and this what this research intends to explore.

### **3.0 Research Methodology**

#### **3.1 Research Design**

A quantitative research approach by collecting data in a natural setting (Sekaran & Bougie, 2014) where non-contrived settings will be applied in this study. The time horizon is cross-sectional collecting primary data. As for target population, the unit analysis for this study is individuals who are Muslim; youth who fall under 15-40 years old according to The National Youth Development Policy (NYDP) in Malaysia 1997; and students at the tertiary level of higher education. Accordingly to Ministry of Higher Education department of Malaysia, the target population that meets the criteria is 1,325,699 students.

The sampling technique is purposive, nonprobability or non-random sampling when subjects of the target population fulfil specific criteria (Battaglia, 2008). On the same line, other studies examining entrepreneurial traits and intention (Jena, 2020;

Krueger, Reilly, & Carsrud, 2000; Malebana, 2014; Oyedele, 2018; Sebeho, 2020) have recommended purposive sampling as an appropriate technique to examine the statistics of the entire population. To specify the minimum sample size, the researcher has used G\*Power application of 3.1.9.2 version to calculate the recommended sample size for this research, which includes 7 predictors towards the dependent variable. Result shows this research requires a minimum sample size of  $n=153$

### **3.2 Hypotheses Development**

The objective of this exploratory deductive reasoning research is to gather preliminary information and test proposed hypotheses to predict the relationships between Qalb behavioural traits, the three antecedents of the theory of planned behaviour, and inclusive innovativeness towards IEI, as well as testing the moderation effects of gender of Muslim youth in Malaysia.

#### **3.2.1 Qalb behavioural traits (QBT) towards inclusive entrepreneurial intention (IEI)**

This research has employed the model of Maqasid al-Shariah to explain and represent the QBT. Incorporating the Maqasid al-Shariah model into the theoretical framework for entrepreneurial intention is crucial for aligning business activities with Islamic ethics, emphasizing societal well-being over mere profit. This holistic perspective ensures a culturally sensitive and comprehensive understanding of entrepreneurial behaviour, particularly in Muslim-majority regions, where it goes beyond economic considerations to encompass broader ethical goals and values.

This model was conceptualized from different angles by renowned Muslim scholars starting with Al-Shatibi (1302H) implemented an inductive reasoning method followed by Al-Juwayni (1979) and Al-Ghazali (1970) who considered the mensuration method. They have produced a comprehensive model of necessities that classifies every trait, action, decision, and even behaviour into three different levels namely Darurriyyat

(Necessities), Hajiyyat (Needs), Tahsiniyyat (Luxuries). However, from then up to now there has been no research undertaken to explore the Maqasid al-Shariah potential as a tool for measurement of the well-being of society. There are many developed indexes that measure the well-being of societies quantitatively such as HDI the human development index as well as GDP the gross domestic product. But all those indexes have ignored the social and psychological elements that play an important part in every human decision and behaviour giving it realistic comprehensive measurements while Maqasid al-Shariah with 3 different classifications is able not only to explain human traits and behaviour but to construct it as well according to the objectives of Islamic law. On the other hand, Maqasid al- Shariah could be used as component of a socio-economic system (Chapra, 2009). Hence, the following testable hypotheses are formulated to question the effect of QBT on the intention of youth being entrepreneurs who look forward to producing products that are not limited to profit maximization but also to the well-being of society:

H1: There is a significant relationship between Darurriyyat (Necessities) Qalb behavioural traits and inclusive entrepreneurial intention of Muslim youth in Malaysia.

H2: There is a significant relationship between Hajiyyat (Needs) Qalb behavioural traits and inclusive entrepreneurial intention of Muslim youth in Malaysia.

H3: There is a significant relationship between Tahsiniyyat (Luxuries) Qalb behavioural traits and inclusive entrepreneurial intention of Muslim youth in Malaysia.

### **3.2.2 Three Antecedents of TPB towards inclusive entrepreneurial intention (IEI)**

According to the literature reviews and previous studies, the intention model of the theory of planned behaviour (Ajzen, 1991) is a very solid model for analysing entrepreneurial intention. However, this model and many other intention models have been testing the relationship between the TPB antecedents namely attitude, subjective norms, perceived

behavioural control towards the entrepreneurial intention in general. Whereas this study focuses on the IEI of Muslim youth in Malaysia, therefore the following testable hypotheses have been developed:

H4: There is a significant relationship between attitude (Att) and inclusive entrepreneurial intention of Muslim youth in Malaysia.

H5: There is a significant relationship between subject norms (SN) and inclusive entrepreneurial intention of Muslim youth in Malaysia.

H6: There is a significant relationship between perceived behavioural control (PBC) and inclusive entrepreneurial intention of Muslim youth in Malaysia.

### **3.2.3 Inclusive Innovativeness (II) and inclusive entrepreneurial intention (IEI)**

Personality traits are what differ entrepreneurs from non-entrepreneurs and that what previous research has been searching and testing. Individual characteristics and the surrounding context play a pivotal role in shaping one's entrepreneurial intention (Qingqing, Collins, & Ranabahu, 2021) also "...continues to be of interest in entrepreneurship research" (Rauch & Frese, 2007, 46). There are various personality traits that engage with entrepreneurial intention such as optimism, innovativeness, risk-taking, and competitiveness (Ozaralli & Rivenburgh, 2016). The importance of innovativeness as a personal trait of entrepreneurs comes from turning knowledge and new ideas into new values creatively. Innovativeness is capability and inclination of entrepreneurial leaders to be imaginative and capture the right moment to develop new and functional concepts, invent new demands, launch fresh inventions of products and services (Chen 2007; Gupta, MacMillan, & Surie, 2004). Data from studies have proven that innovation is the main reason for initiating a new business and creates a substantial influence on accomplishment of the enterprises (Hisrich, Peters, & Shepherd, 2008). A lot of researchers assert that entrepreneurs possess a greater level of innovative characteristics compared to fellow executives or other employees (Gürol & Atsan, 2006). However, there is no focus yet on the inclusive innovativeness which relates not only to innovation but also to well-being as well as considering the unrepresented or marginal

group. Hence, the following testable hypothesis has been suggested to analyse the relationship between inclusive innovativeness and the entrepreneurial intention of Muslim youth in Malaysia to produce inclusive products or services:

H7: There is a significant relationship between inclusive innovativeness and inclusive entrepreneurial intention of Muslim youth in Malaysia.

### **3.2.4 Gender as moderator towards inclusive entrepreneurial intention (IEI)**

The results of the studies conducted previously show that almost all entrepreneurial criteria lean towards masculinity as the aims of being an entrepreneur are to attain authority and money (Carsrud & Brännback, 2011). Verheul, Thurik, Grilo, & Van Der Zwan (2012) discovered that both genders long for independence, self-accomplishment, job fulfilment, and obtainment of other non-monetary elements. However, females lean towards non-monetary elements in choosing a work role compared to males. Females cherish flexible time more for looking after their children and families than money. They are more likely to strive for a middle point between their career growth and responsibility towards their families. Budig (2006) discovered that the key inspiration of female entrepreneurs is to find evenness between work and families' needs. Shinnar Giacomini, & Jansen (2012) explain that self-employed females evaluate non-monetary elements as a more significant aspect (Wibowo, 2017). To clarify these doubts about whether gender makes any difference in IEI, this research has suggested the hypotheses testing the moderation effect of gender in this model:

H8a: Gender moderates the relationship between Darurriyyat Qalb behavioural traits and inclusive entrepreneurial intention of Muslim youth in Malaysia.

H8b: Gender moderates the relationship between Hajiiyyat Qalb behavioural traits and inclusive entrepreneurial intention of Muslim youth in Malaysia.

H8c: Gender moderates the relationship between Tahsiniyyat Qalb behavioural traits and inclusive entrepreneurial intention of Muslim youth in Malaysia.

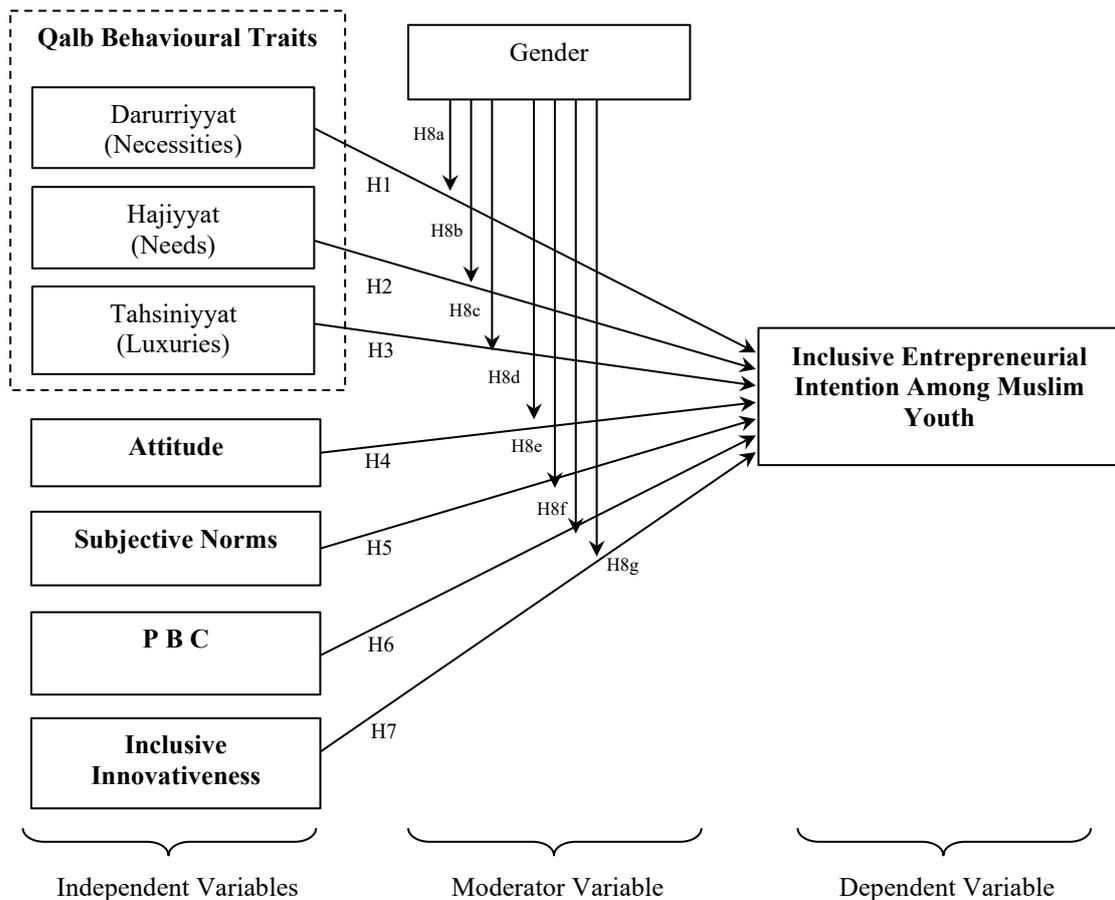
H8d: Gender moderates the relationship between attitude and inclusive entrepreneurial intention of Muslim youth in Malaysia.

H8e: Gender moderates the relationship between subjective norms and inclusive entrepreneurial intention of Muslim youth in Malaysia.

H8f: Gender moderates the relationship between perceived behavioural control and inclusive entrepreneurial intention of Muslim youth in Malaysia.

H8g: Gender moderates the relationship between inclusive innovativeness and inclusive entrepreneurial intention of Muslim youth in Malaysia.

Towards achieving the research's objectives, the results of hypotheses testing H1-7 will be answering RQ1 and RQ2, respectively H8a-8g will answer RQ3. These are illustrated in the following Figure 1 as the theoretical framework of this study.



**Figure 1: The Theoretical Framework**

### 3.3 Questionnaire Design

The questionnaire is designed to study the measurements of QBT and IEI. The questionnaire covers all the needed data to be collected and analysed to test the proposed hypotheses and answer the research questions. The questionnaire consists of 5 main sections. Each section represents different variables. As shown in Table 1, QBT and inclusive innovativeness (II) variables are formatively measured variables where their items have formative nature. On the other hand, the IEI and the three antecedents of TPB are reflectively measured variables where their items have a reflective nature. The researcher has coded the 91 items of QBT with consideration to the three levels of Maqasid al-Shariah. Refer to Appendix A1.

**Table 1: The Questionnaire Design**

| Section | Title          | Items | Approach | Variable Type | Source                          |
|---------|----------------|-------|----------|---------------|---------------------------------|
| 1       | Demo           | 17    | Adopted  | -             | Ab. Aziz (2017)                 |
|         |                | 4     | Formed   | -             | Hair et al. (2017)              |
| 2       | QBT            | 91    | Adapted  | Formative     | A. M. Mahazan et al. (2015)     |
| 3       | II             | 5     | Formed   | Formative     | Global Research Alliance (2012) |
| 4       | IEI            | 6     | Adopted  | Reflective    | Ab. Aziz (2017) & Ajzen (2005)  |
| 5       | (Att, SN, PBC) | 9     | Adopted  | Reflective    | Ajzen (2005)                    |

This research employs the partial least squares structural equation modelling PLS-SEM because it offers advanced methods to test and assess the structural development of this exploratory model. It uses suitable measurements and tests for the evaluation of a structural model, as it is initially formulated to predict and expand the effectiveness of theory proving by establishing model fits standards (Hair, Ringle, \*Sarstedt, 2011). PLS can handle both formative and reflective variables (Bollen, 2011), which suits the nature of this study.

#### 4.0 Results

The survey extended to cover 287 respondents who meet the criteria of the target population.

##### 4.1 Demographic & Descriptive Analysis

The demographic analysis reveals that the surveyed population, predominantly aged 20-25, consists of 62.8% females and 37.2% males. In terms of residency, Selangor Darul Ehsan and Johor Darul Ta'zim had the highest representation. Education-wise, 92.4% were pursuing a degree, with social sciences and humanities being the prevalent fields.

Parents' occupations indicated that 46.9% of fathers were employees, while 56.3% of mothers were housewives. Household income distribution showed 53.1% falling into the B40 income group. In terms of entrepreneurship, around 49.5% attended relevant programs, 71.5% had family or friends involved, 14.8% were founders, and 60.3% had prior entrepreneurial experience. The data provides comprehensive insights into the diverse demographic characteristics and entrepreneurial backgrounds of the respondents.

The descriptive analysis shows the majority of Skewness and Kurtosis values are within the acceptable range as Hair, Hult, Ringle, & Sarstedt (2017) recommended, which is greater than -1 and lower than 1. The data is not skewed, too peaked, or too flat explaining how the data is normally distributed. Besides, during bootstrapping analysis, the "bias-corrected" option was selected. Moreover, Kolmogorov-Smirnova values of all indicators present a good fit, and Shapiro-Wilk values are greater than 0.05 indicating normal distribution. Accordingly, all tests present the data satisfying a normal distribution.

#### **4.2 Assessment of Formative Measurement Model**

The validity assessment for formatively measured variables includes the convergent validity test as recommended by Hair et al. (2017), which tests how much the formatively measured variables correlate positively to the same reflective measured variables is known as redundancy analysis. However, in this research the formative variables namely Darurriyyat Qalb trait (D), Hajiyyat Qalb trait (H), Tahsiniyyat Qalb trait (T), and inclusive innovativeness (II) are newly formed and introduced to the body of knowledge that have yet to test reflective measurements that can be used to validate the formative measurements of those variables. Therefore, the global indicator item has been employed as an alternative to test the validity of the formative measured variables. The global item is an endogenous single-item variable that summarizes the essence of the variable the formative indicators purport to measure (Hair et al., 2017). The global indicator was developed and measured on a scale of 0 (not at all) to 10 (definitely) for each formative variable also coded respectively as the global indicator of Darurriyyat Qalb trait as GID, global indicator of Hajiyyat Qalb trait as GIH, global indicator of Tahsiniyyat Qalb trait

as GIT, and global indicator of inclusive innovativeness as GIInnov. The path coefficient between each formative measured variable and its global indicator item has been tested individually and the results in Table 2 confirm with significant correlations supporting p-values equal to 0.000 for all path co-efficiencies. Hence, the formative variables according to the analysis are valid and suitable for use in this research.

**Table 2: Correlations with Global Indicators**

| <b>Correlations with Global Indicators</b> | <b>Path Coeff.</b> | <b>P-Value</b> | <b>Appendix</b> |
|--|--------------------|----------------|-----------------|
| D > GID                                    | 0.433              | 0.000          | G 1             |
| H > GIH                                    | 0.390              | 0.000          | G 2             |
| T > GIT                                    | 0.280              | 0.000          | G 3             |
| II > GIInnov                               | 0.313              | 0.000          | G 4             |

The reliability assessment includes testing the multi-collinearity through the variance inflation factor (VIF) outer and inner values, the results of algorithm calculation on PLS-SME show all VIF values do not exceed 5.0 and there is not any multi-collinearity issue or overlapping between the indicators which confirms the reliability of the formative measurements. Continuing the reliability assessment, the outer weights of all indicators of the formatively measured variables are significant with a P-value below 0.05 that does not require any removal of measurements (Hair et al., 2017), concluding that the formative measurements are reliable.

### **4.3 Assessment of Reflective Measurement Variables:**

The validity assessment for reflectively measured variables includes the convergent validity that is assessed by outer loadings and average variance extracted (AVE). According to results in Table 3, all outer loadings are greater than 0.7 (Hair et al., 2017) assuring the validity of measurements, and AVE values are greater than 0.7 referring the variables explaining more than 70% of the variances of their indicators, fulfilling the

convergent validity meaning the measurement indicators and variables are valid to be used in this model.

The reliability assessment includes testing the internal consistency reliability through Cronbach's alpha, where 0.7 and greater is the acceptable range (Hair et al., 2017), all measurements satisfy the criteria therefore Att, SN, PBC, and IEI reflective variables are internally consistent as well as reliable. This is supported by composite reliability (CR) results where all values are greater than 0.6. The single item "gender" is not required for Cronbach's Alpha or composite reliability analysis (Hair et al., 2017).

#### **4.4 Structural model path coefficients**

The structured model relationships are assessed by path coefficients (Std. Beta) representing the hypothesized relationships between the variables and P-value assesses the 5% significance level testing the probability of error occurring (Hair et al., 2017). Values are represented in Table 4 with one star (\*) for significant relationships. Also, the model accuracy is tested by Coefficients of determination (R<sup>2</sup>), and the result shows the endogenous variable IEI is substantial with 0.95 R square high value, indicating a high level of predictive accuracy.

**Table 3: Internal consistency and the convergent validity**

| Construct | Item | Outer Loading | AVE   | Cronbach's Alpha | CR    |
|-----------|------|---------------|-------|------------------|-------|
| Att       | Att1 | 0.785         | 0.825 | 0.893            | 0.924 |
|           | Att2 | 0.912         |       |                  |       |
|           | Att3 | 0.880         |       |                  |       |
| SN        | SN1  | 0.916         | 0.818 | 0.889            | 0.921 |
|           | SN2  | 0.828         |       |                  |       |
|           | SN3  | 0.812         |       |                  |       |
| PBC       | PBC1 | 0.896         | 0.803 | 0.878            | 0.915 |
|           | PBC2 | 0.774         |       |                  |       |
|           | PBC3 | 0.850         |       |                  |       |
| IEI       | IEI1 | 0.872         | 0.805 | 0.902            | 0.905 |
|           | IEI2 | 0.850         |       |                  |       |
|           | IEI3 | 0.895         |       |                  |       |
|           | IEI4 | 0.882         |       |                  |       |
|           | IEI5 | 0.901         |       |                  |       |
|           | IEI6 | 0.847         |       |                  |       |

**Table 4: The structural model evaluation**

| Hypothesis           | Std. Beta | P-Values | Hypothesis    |
|----------------------|-----------|----------|---------------|
| H1 D -> IEI          | 0.083     | *0.042   | Supported     |
| H2 H -> IEI          | 0.095     | *0.020   | Supported     |
| H3 T -> IEI          | 0.020     | 0.383    | Not Supported |
| H4 Att -> IEI        | 0.382     | *0.002   | Supported     |
| H5 SN -> IEI         | -0.083    | 0.174    | Not Supported |
| H6 PBC -> IEI        | 0.402     | *0.004   | Supported     |
| H7 II -> IEI         | 0.106     | *0.008   | Supported     |
| H8a D >Gender> IEI   | 0.397     | *0.027   | Supported     |
| H8b H >Gender> IEI   | -0.035    | 0.438    | Not Supported |
| H8c T >Gender> IEI   | -0.462    | *0.010   | Supported     |
| H8d Att >Gender> IEI | -0.364    | 0.089    | Not Supported |
| H8e SN >Gender> IEI  | 0.305     | 0.105    | Not Supported |
| H8f PBC >Gender> IEI | 0.113     | 0.202    | Not Supported |
| H8g II >Gender> IEI  | -0.115    | 0.233    | Not Supported |

\* P-value < 0.05, indicates a significant relationship

## **5.0 Discussion**

Present your findings. The discussion in this research covers every hypothesis individually as follows.

### **5.1 Qalb behavioural traits towards inclusive entrepreneurial intention**

Darurriyyat behavioural traits are a type of trait according to Maqasid al-Shariah; as objects or actions or practices are basic necessities of life. These necessities include the aspects of protecting one's belief or faith, children or offspring, intellect, and wealth. Essentially, the provision of the basic necessities is one of the core principles of Islam, where fulfilment of Darurriyyat is crucial to ensure and maintain the normality and structure of a functioning society. This strive is to preserve and improve the well-being of the individual and society at large. Nevertheless, Hajiyyat QBT are essential to relieve one's adversity and predicament, this refers to conveniences and complementary needs that ease the daily hardships. That explains being inclusive is essential in Islam and it is a necessity as well as a need to produce inclusive products for the purpose of increasing the well-being of the entire community.

In discussing Darurriyyat QBT in comparison with conventional models, we found similarities with Maslow's Hierarchy theory (1943) which are basic physiological and safety needs, but he has taken no notice of faith in religion, similarity with Vroom's expectancy theory (1964) that emphasises on wealth creation as motive, similar with McClelland's need theory (1961) that asserts the necessity of acquiring and learning knowledge. Also, Hajiyyat QBT goes along with McGregor's theory Y (1960), because arguably, individuals who are motivated by their complementary needs (Hajiyyat) will accomplish achievements to make their life better, as well as with McClelland's need theory where entrepreneurs increase production capacity based on the need for achievement degree. Hajiyyat QBT meets the third principle (crazy quilt) of Effectuation theory by Sarasvathy (2008), as a partnership is sought to eliminate hardship, survival, and increase the wealth for all parties.

Tahsiniyyat QBT does not essentially reduce or lessen the adversity but beautifies the individual by impacting other people's lives. It is the innate desire to reach refinement and flawlessness in tradition and practices of human beings. Where improving the well-being starts within, intention will lead to behaviour, which requires high self-efficacy that represents a stronger belief in one's capabilities. Self-efficacy is an entrepreneurial trait as defined by Bandura (1977) in his extended social cognitive theory, which also influences the social entrepreneurial intention as stated by Krueger, Reilly, and Carsrud (2000). However, reaching the top of the pyramid of Maslow's does not represent the intention of being an inclusive entrepreneur which is essential and necessary in Muslim communities. This also means that the fulfilment of Tahsiniyyat QBT does not require the prior fulfilment of Darurriyyat or Hajiyyat QBT.

## **5.2 Three Antecedents of TPB towards inclusive entrepreneurial intention**

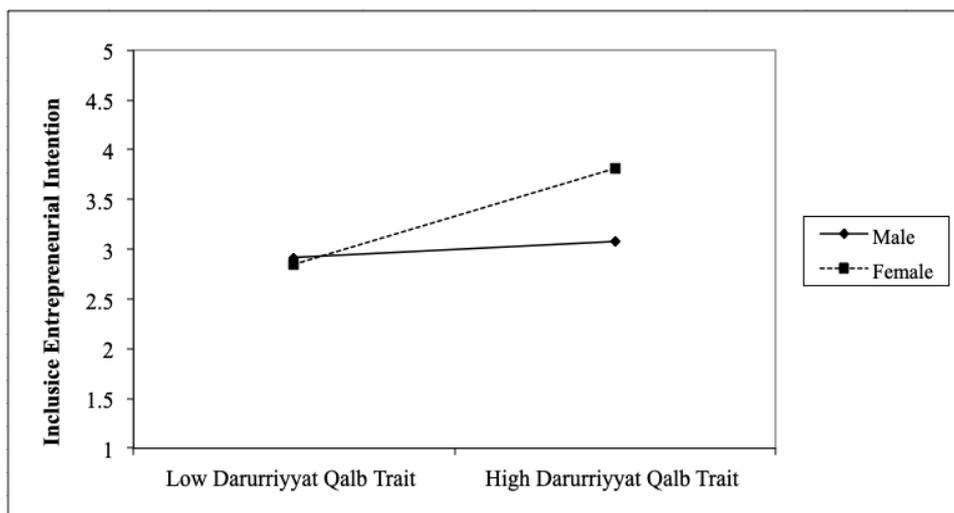
The results of the three hypotheses testing namely Att, SN, and PBC towards inclusive entrepreneurial intention are consistent with research studies the entrepreneurial intention of youth in Malaysia such as Ambad and Damit (2016) and Aloulou (2016), Malebana (2014) in South Africa, Gelderen, Brand, Praag, Bodewes, Poutsma, & Gils (2008) in Netherlands, Also with Krueger et al. (2000) who validated and justified the employment of the theory of planned behaviour in predicting entrepreneurial intention. Attitude and perceived behavioural control are significant predictors of intention to produce inclusive products as well as solutions. Also in discussion, the higher locus of control could be the reason for lower social norms impacting parallelly on the intention which indicates the new generation of youth in Malaysia is considering it less important to have the approval and support of relatives, friends, or important people in their life circle. In other words, they are behaving more independently to be inclusive entrepreneurs or producing inclusive products and services.

## **5.3 Inclusive Innovativeness and inclusive entrepreneurial intention**

Traditionally, affordable access to products or services is associated with lower quality due to entrepreneurs seeking wealth maximisation. However, inclusive innovation has a completely different principle, it promotes affordable access along with high-quality products and services, and wealth maximisation can be met through a massive outreach and innovation in structuring a sustainable business model that is able to stand alone without government or subsidiary support. In the same context, although each massive outreach might differ, it should be large enough to reach and include the excluded population which is the BoP group as is this study's focus. However, promoting inclusive innovation might require more knowledge sharing and education to increase the awareness of the possibility of delivering such products.

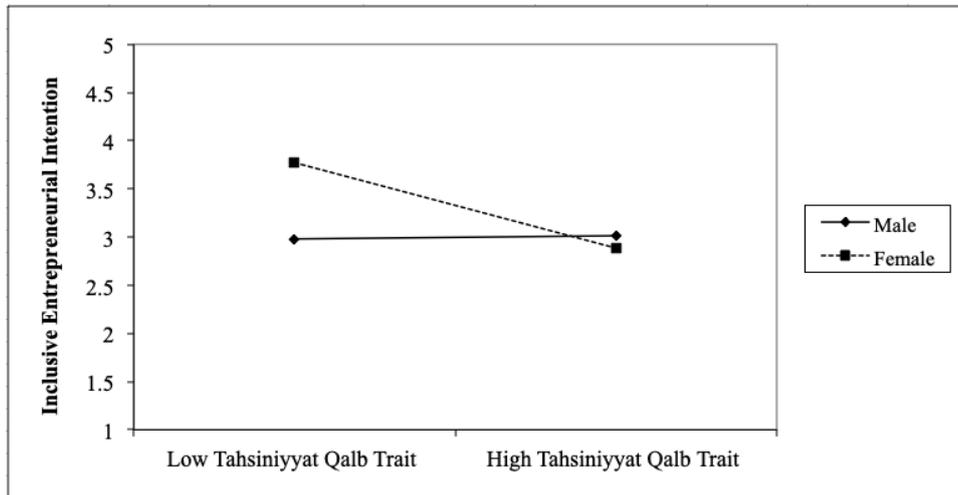
#### 5.4 Gender as moderator towards inclusive entrepreneurial intention

The discussion of the moderation effect of gender focuses only on the supported hypothesis as the non-supported hypotheses show no difference between males and females.



**Figure 2: Moderation effect on Darurriyyat QBT & IEI**

To devise the interaction of the gender moderation effect on the relationship between Darurriyyat QTB and IEI this research followed the procedure as well as the template to produce the graph that has been used and recommended by Dawson (2014), Dawson & Richter (2006), and Aiken & West (1991). The gender is a binary variable where male=0 and female=1, therefore the regression analysis for the moderator was an unstandardised coefficient as recommended. According to Figure 2, the interception between the two lines confirms that the gender moderation effect on this relationship. Also, the female line shows higher IEI when they have higher Darurriyyat QBT while the male line shows very slightly higher IEI when they have higher Darurriyyat QBT.



**Figure 3: Moderation effect on Tahsiniyyat QBT & IEI**

According to Figure 3, the interception between the two lines confirms that gender moderation affects the relationship between the aforementioned variables. Also, the female line shows a lower IEI when they have a higher Tahsiniyyat QBT while the male line shows a very slightly higher IEI when they have a higher Tahsiniyyat QBT.

## 5.5 Affecting Social Sustainability

Similarly, to the findings presented earlier, (Rehan, Block, & Fisch, 2019) explored and confirmed the positive impact of both Islamic values and Islamic practices on entrepreneurial intentions. (Ismail & Shaikh, 2017) explored how the Sustainable Development Goals (SDGs) align harmoniously with the principles and philosophy of Islam. Also, how the Maqasid al-Shariah underscores the significance of human well-being, encompassing spiritual, physical, intellectual, and economic dimensions. The paper reviews the relevant literature and identifies a number of key principles of social sustainability in the Islamic economy, including social justice, equity, and solidarity. The paper also discusses the challenges and opportunities for promoting social sustainability in the Islamic economy. The research findings linking QBT and IEI align with the paper's findings. Specifically, both highlight the importance of QBT for promoting social sustainability. The paper's discussion of social sustainability in the Islamic economy can be extended by considering how QBT can be developed and nurtured in Muslim youth entrepreneurs leading to inclusive enterprises contributing to the social sustainability of the Muslim community.

Next, (Dembele & Bulut, 2021) discussed the role of Islamic social finance in promoting sustainable development. The paper discusses the various Islamic social finance instruments and products that are available and how they can be used to address social and environmental challenges. The paper also discusses the challenges and opportunities for developing and expanding the Islamic social finance market. Our research findings align with the paper's findings by recognizing the importance of Islamic finance for promoting social sustainability. Arguably, QBT can influence the decision-making of Islamic financial institutions and investors.

Overall, the findings of this study provide valuable insights and knowledge that can be used to develop programs and initiatives that support and nurture inclusive entrepreneurship in this population. Policymakers and educators can develop programs and initiatives that promote QBTs among Muslim youth, such as character education programs and training on Islamic business ethics. Entrepreneurship support organizations can provide tailored support to Muslim women entrepreneurs, taking into account the unique challenges they may face. Muslim youth who are interested in becoming

entrepreneurs can focus on developing their QBTs, such as empathy, compassion, and social responsibility.

Specifically, agencies such as the Department of Islamic Development Malaysia more popularly known as JAKIM, should take the insights highlighted from the findings into consideration when planning and designing their programmes and interventions for community development in general as well as for Muslim youths' development specifically. The department had been lax in cultivating "youth-friendly" strategies and stances. Thus, it is recommended that JAKIM should forge strategic alliances and network with educational institutions in order to remedy this weakness. Furthermore, higher education institutions in the country generally will have Islamic welfare and zakat offices, student associations such as Usrah (Ibrahim, Kamsani, & Champe, 2015) and mosques on campuses, which all position them well to be effective partners that can help implement programs designed to cultivate good QBT leading to higher IEI levels. JAKIM should explore the potential in developing more QBT-based programmes, to review and enhance their policy framework to strategically embed QBT and inclusive entrepreneurship agenda for the development of the Muslim community. This can affect a paradigm shift where the economic development of the Muslim community is championed by homegrown inclusive entrepreneurs and enterprises. Muslim Youth Movement of Malaysia (ABIM) is a non-governmental organization that works to promote social justice and Islamic values among the Muslim youth in Malaysia. Based on the findings, ABIM can advocate for policies that support inclusive entrepreneurship among the Muslim youth in Malaysia. Next, Yayasan Pembangunan Ekonomi Islam Malaysia (YADIM) is a government agency that is responsible for the development of the Islamic economy in Malaysia. The findings can help YADIM to develop more effective programs and services for Muslim youth entrepreneurs. For example, they could develop a program that teaches Muslim youth entrepreneurs how to use QBTs to build a more sustainable and inclusive business. Selangor Bursa Zakat Selangor is a state-owned Zakat collection and distribution agency in Selangor, Malaysia. They are known for their innovative and effective use of zakat funds to support social development programs, including programs for Muslim youth entrepreneurs. Based on the findings the agency could develop a grant program for Muslim youth social enterprises. Yayasan Waqf An-Nur is a non-profit organization that provides education, health, and social

welfare services to the Muslim community in Malaysia. Our research findings can help Yayasan Waqf An-Nur to develop more effective programs and services for Muslim youth entrepreneurs. For example, they could develop a program that teaches Muslim youth entrepreneurs how to develop their QBTs. Furthermore, with QBT and inclusive entrepreneurship being the underlying principles, Mosques can be incorporated and managed as inclusive businesses, making them more sustainable and less dependent on public funds also charity. Entrepreneurial mosques would become vibrant hubs that not only address local needs but also offer a variety of innovative activities or facilities that would enhance the community's overall quality of life.

Lessons learned from any initiatives adopted by the above agencies may benefit other organizations in Malaysia that address social sustainability, inclusiveness, and entrepreneurship development generally such as Social Enterprise Alliance Malaysia (SEAM) and Yayasan Hasanah. Also beyond Malaysia, best practices can be shared with international organizations that address social sustainability, inclusiveness, and entrepreneurship development for the global Muslim community, including Islamic Solidarity Fund for Development (ISFD) and Islamic Development Bank (IDB).

## **6.0 Conclusion**

Fundamentally, Darurriyyat QBT focuses not only on protecting and preserving the basic needs of individuals but on promoting the well-being of the community at large as well i.e., inclusiveness. Thus, there is a significant relationship between Darurriyyat QBT and IEI (H1). In other words, those with a higher level of essential necessity behavioural traits will have a higher likelihood of forming an IEI. The significance of the relationship between Hajjiyyat QBT and IEI (H2) is supported and discussed from different perspectives. It can be suggested that inclusive entrepreneurs who strive to increase the well-being of the entire community are likely to have a high level of complementary need behavioural traits, where such entrepreneurs strive to ease other people's hard lives by providing inclusive solutions. However, according to the hypothesis testing, the results show no significant relationship between Tahsiniyyat QBT towards IEI (H3). Thus, it can be deduced that being an inclusive entrepreneur who strives to increase the well-

being of the entire community does not require the individual to have a high level of beautifying or adding elegance to life behavioural traits. This suggests the fundamental importance of being inclusive generally and for entrepreneurs specifically.

This research employed TPB and the results show that attitude and perceived behavioural control have significant relationships towards inclusive entrepreneurial intention while the subjective norms have an insignificant relationship. As for being an inclusive entrepreneur who is concerned most about well-being and those unrepresented groups and community as a whole, this person's attitude or the degree of favourability to help and support those groups to have a better life; is an important factor that influences the intention of serving them with inclusive goods or services. This is an internal decision to take. In addition, the degree of support received by community and external groups is important to create the intention to be an inclusive entrepreneur, as one person will not be able to work alone in order to help an entire community or marginalised groups if the support has not been provided. That explains the significant relationship between perceived behavioural control and the intention to be an inclusive entrepreneur. However, the subjective norms or the support from the direct, connected circle including parents, close friends, and spouse does not appear as a needed support to develop the mentioned intention. The person does not require the agreement and support of those he is close to, in order to feel the pain of the marginalised group and think of solutions and products that solve problems that have not been tackled or served by other businesses. As long as the person has a favourable appraisal and community support, the intention can be developed to be an inclusive entrepreneur whether the close connection circle supports it or not. In conclusion, the theory of planned behaviour has been useful in predicting the inclusive entrepreneurial intention in this research.

The seventh hypothesis was developed to test whether having inclusive innovativeness traits influences the intention of being an inclusive entrepreneur who produces inclusive goods and services targeting support the well-being of the community generally and B40 groups specifically. When an individual is high in inclusive innovativeness, he/she considers all five dimensions in the process of producing goods or services. The resulting products have value propositions benefiting the marginalised groups, delivering economic values in general and increasing the well-being of the entire

community. Thus, the significance of H7 justifies the importance of inclusive innovativeness antecedent for IEI.

Females have a higher intention to be inclusive entrepreneurs when they have a higher level of Darurriyyat and when they have a lower level of Tahsiniyyat QBT. This explains females' considering inclusivity as essential and not beautifying. This may be regarded as being female nature taking care of the entire family and that could be translated to be taking care of the entire community especially when they have the opportunity, or the capability as well the empowerment. On the other hand, males have not shown much change in their intention of being inclusive entrepreneurs at different levels of Darurriyyat or Tahsiniyyat, given that the concept of being inclusive is slightly more solid for males than females. This might be regarded as having less hesitation being the nature of male masculinity. In the discussion on the other five non-supported hypotheses, at the level of Hajiyyat QBT which is the less essential level, there is no difference in the gender effect, and we can presume that both have equal intention at this level. Regarding attitude as a variable, both males and females show the same level of favourable IEI, and both perceive the support from their close connection circle such as family and partners as not being important to develop the mentioned intention. As mentioned earlier, Malaysia appears to have no gender gap, where both males and females receive equal support from the community to be an inclusive entrepreneur giving them an equal opportunity and support to develop the intention to be so. Regarding inclusive innovation, many previous researchers have argued that males and females differ at the innovation level, but this was not supported at the field of inclusive innovation, probably due to gender equality in Malaysia and being given equal weighting. Males and females appear to have the same level of inclusive innovativeness and there is no difference in developing or predicting the intention to produce inclusive goods and services.

Concluding, gender as a moderator does not affect these five variables towards the intention to produce goods or services that enhance well-being and the economy as a whole. Both males and females are equally supported and are equally willing to support the B40 and unrepresented groups by having the intention to provide inclusive solutions to affordable accessibility, massive outreach, and sustainability with high quality.

## **7.0 Contribution**

In terms of theoretical contributions, this research merges the Maqasid al-Shariah model and the theory of planned behaviour into a unified framework, offering a novel approach to predicting the behavioural intention of becoming an inclusive entrepreneur. Notably, the study tests traits at different levels, providing a comprehensive examination. Additionally, it revives and validates the Islamic model developed centuries ago, demonstrating its relevance in contemporary research. The research methodology introduces both formative and reflective measured variables, a departure from the norm in previous studies. In practical terms, the developed model suggests the use of inclusive entrepreneurship training materials and Qalb-based entrepreneurship courses to address the economic challenges exacerbated by the COVID-19 pandemic. Moreover, the Qalb behavioural traits, validated through this research, can contribute to developing entrepreneurial profiling systems for understanding youth or targeted groups' inclusive entrepreneurial intentions. Regarding policy implications, the model aids policymakers in comprehending youth intentions and determining traits influencing inclusive entrepreneurship. It provides a foundation for developing programs, courses, and funding initiatives to support those with a higher intention to produce inclusive goods and services, thereby enhancing overall economic performance. Furthermore, the Qalb-based approach extends beyond entrepreneurship, offering insights for organizations to understand employees' entrepreneurial traits and tailor training accordingly.

## **8.0 Limitations**

There are a number of limitations that have been faced in conducting this research theoretically such as the lack of research in the domain of Inclusive innovation generally, and inclusive entrepreneurial intention specifically because they are new concepts that very little research has explored, also the term of inclusive innovativeness was very new for most of the participants, yet they could understand the concept behind it easily and the importance of it in order to enhance well-being as well as economic performance by targeting those excluded populations.

There was a limitation in the process of constructing the hypotheses, and in arguing further and deeper about the factors that affect the inclusive entrepreneurial intention in order to discuss the developed hypotheses. On the other hand, the model of Maqasid al-Shariah has been used philosophically as well as qualitatively but not empirically nor quantitatively, which is one of the limitations faced by the researcher in quantifying those qualitative items adapted from Qalb-based leadership.

## **9.0 Recommendations**

This research recommends considering different theories to study and explore inclusive entrepreneurship such as the diffusion of innovation as TPB focuses on personal attitude and perceived support disregarding environmental and economic factors. Also, this research has focused on Muslim youth as the target population, it is recommended to test the model on different age groups, as well as different religious believers, because the Qalb-based model is based on high moral values and traits, where anyone can be a respondent. On the other hand, further research may extend the demographic analysis to cover the financial background of youth and its impact on the intention of being an inclusive entrepreneur. Generally, the Qalb-based model as well as inclusive innovation is new and further research may be carried out in the entrepreneurship field and also other fields. Last but not least, it is recommended to test the 91 formative measurements of that form Qalb behavioural traits on larger groups and various different backgrounds.

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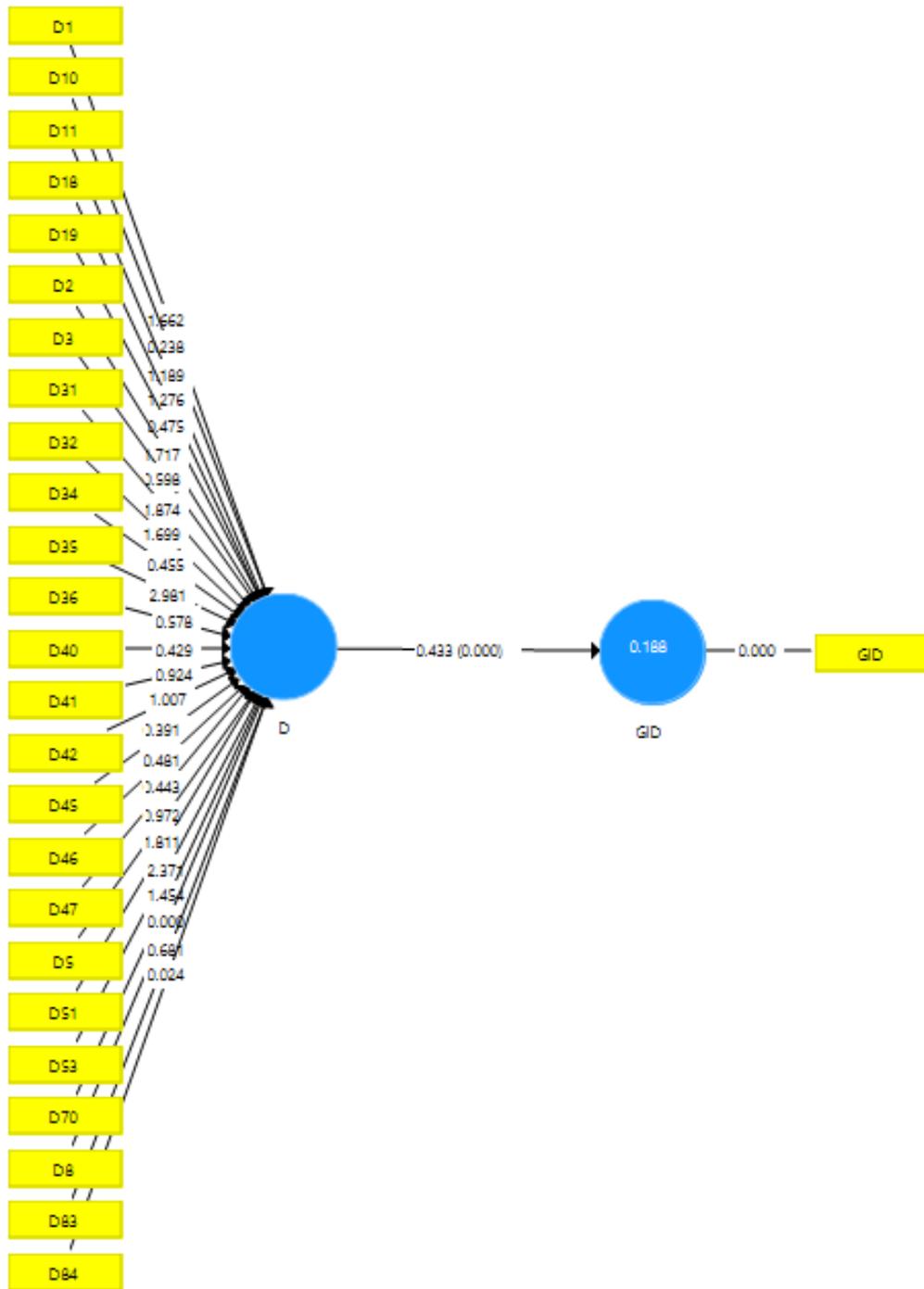
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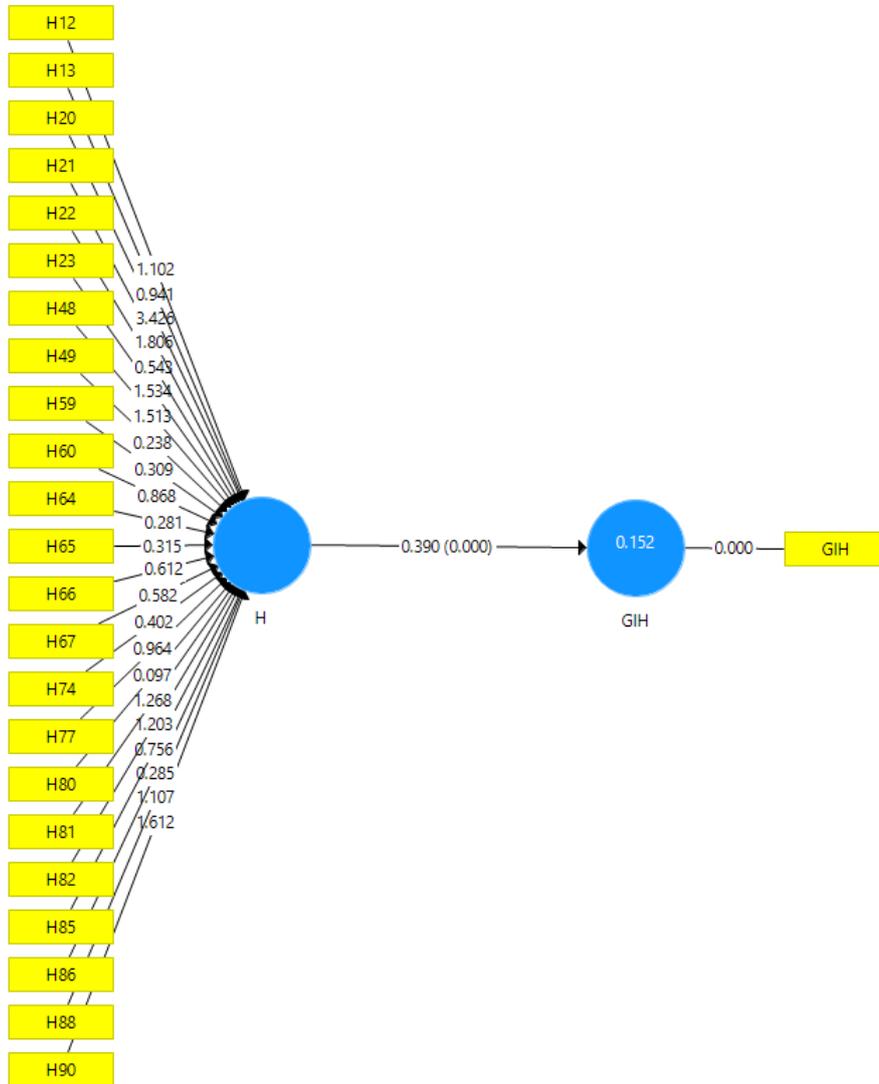
**Appendix A1**

| <b>Muslim Entrepreneurial Traits</b>      | <b>N</b> | <b>Darurriyyat Qalb Traits (D)</b>                          | <b>N</b> | <b>Hajiyyat Qalb Traits (H)</b>   | <b>N</b> | <b>Tahsiniyyat Qalb Traits (T)</b> |
|---|----------|---|----------|---|----------|------------------------------------|
| 1) Trustworthy                            | 8        | D1-D2-D3-D4-D5-D6-D7-D8                                     | -        | -   | -        | -                                  |
| 2) Concern for the Welfare                | 3        | D9-D10-D11  | 2        | H12-H13   | 4        | T14-T15-T16-T17                    |
| 3) Do not Waste                           | 2        | D18-D19   | 4        | H20-H21-H22-H23   | 2        | T24-T25                            |
| 4) Caring for the Society and Environment | -        | -   | -        | -   | 4        | T26-T27-T28-T29                    |
| 5) Faith (Taqwa) to Allah                 | 8        | D30-D31-D32-D33-D34-D35-D36-D37-D38-D39                     | -        | -   | -        | -                                  |
| 6) Halal as a Top Priority                | 6        | D40-D41-D42-D43   | -        | -   | -        | -                                  |
| 7) Worship to Allah is a Priority         | 3        | D44-D45-D46   | -        | -   | -        | -                                  |
| 8) Practicing High Moral Values           | 15       | D47-D51-D52-D53-D54-D55-D56-D57-D63-D69-D70-D71-D72-D75-D76 | 17       | H48-H49-H58-H59-H60-H61-H64-H65-H66-H67-H73-H74-H77-H78-H80-H81-H82-H85-H86 | 4        | T50-T62-T68-T79                    |
| 9) Knowledgeable                          | 2        | D83-D84   | 6        | H87-H88-H89-H90   | 1        | T91                                |
| <b>Total N = 91 Items/Traits</b>          |          | <b>47 Darurriyyat</b>                                       |          | <b>29 Hajiyyat</b>  |          | <b>15 Tahsiniyyat</b>              |

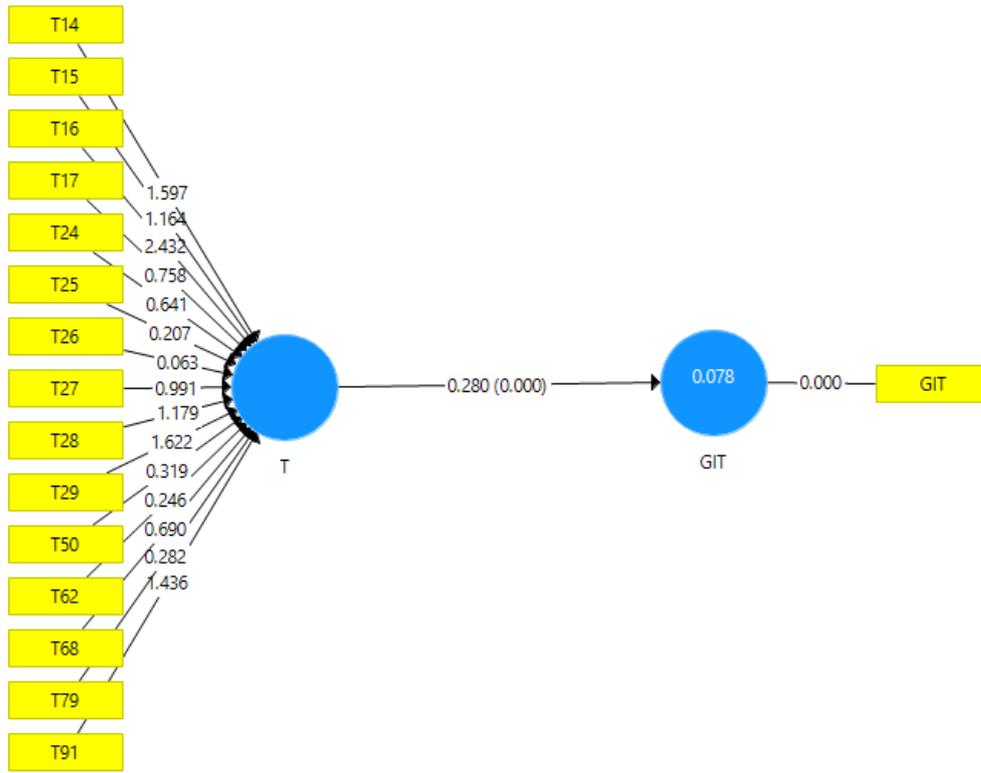
Appendix G1



**Appendix G2**



### Appendix G3



### Appendix G4

