

## **Reconsidering What Entrepreneurial Intention Implies: The Evidence from Malaysian University Students**

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### **Abstract**

*Entrepreneurship development has been designated as a key component in economic transformation and educational programs in Malaysia. The government has introduced various initiatives to cultivate entrepreneurial spirit among younger generations, especially the university students. Despite the magnitude of these efforts, little is known whether university students today are entrepreneurial. Notwithstanding the abundance of literature on entrepreneurship, factors affecting students' entrepreneurial intention and why the number of entrepreneurs and new businesses still remain low require continual assessment. Hence, the present study is aimed at investigating entrepreneurial intention among university students in Malaysia. The extended theory of planned behaviour is adopted to specifically look at the effect of belief and behavioural factors on entrepreneurial intention. Using field data collected from 257 university students in Malaysia, all postulated relationships are examined using partial least squares structural equation modelling (PLS-SEM). The findings suggest that behavioural factors, namely attitude, subjective norm and perceived behavioural control, have significant effect on entrepreneurial intention. It is also found that perceived barriers and perceived support have positive impact on attitude and subjective norms respectively. The study highlights the need to inculcate university students with entrepreneurial knowledge as well as provide platform for them to acquire entrepreneurial experience so as to transform entrepreneurial intention into actual behaviour.*

**Keywords:** Entrepreneurial intention, theory of planned behaviour, perceived barriers and support, university students, PLS-SEM

### **1. Introduction**

Much has been attributed to entrepreneurship for transforming the global economic outlook into what it is today (Carree & Thurik, 2006).

The limited opportunities of the sought after jobs due to competitive environment (Keat, Selvarajah & Meyer, 2011) and the uncertainties surrounding incumbent jobs (Ferreira, Raposo, Rodrigues, Dinis & Paco, 2012) have caused both developed and developing countries to be more reliant on higher level of entrepreneurship to achieve personal objectives and economic growth (Oosterbeek, Praag & Ijsselstein, 2010). As such, entrepreneurship is now widely regarded as the push factor of countries' economic welfare as well as one of the essential business strategies to remain competitive in an increasing globalized business environment. Given its magnitude, entrepreneurship is rapidly becoming one of the focal areas of academic research in terms of its importance and contributions (Tsordia & Papadimitriou, 2015; Keat et al., 2011).

Malaysia, as a leading developing country, has experienced a slump in the rate of entrepreneurship in recent years. Notwithstanding the various government initiatives to promote entrepreneurship and the entrepreneurial spirit among the younger generations, there has been an impasse of new business establishment and low number of new business creation. Besides, the entrepreneurial education within the country has largely failed to affect student to pursue entrepreneurship and be entrepreneurs (Cheng, Chan & Mahmood, 2009). This is shown by the low percentage (33%) of university graduates who enrolled in an entrepreneurship degree being entrepreneurs at the end of their study (Abdullah, Mohamad & Bakar, 2014). The reasons to why university graduates are reluctant to enrol in entrepreneurial occupation can be looked into from motivational perspective (Iakovleva et al., 2011; Kolvereid, 1996a; Krueger et al., 2000, Moriano et al, 2012). Two crucial motivational factors that are commonly associated with entrepreneurial intention (EI) are perceived support and perceived barriers. These factors, however, are mostly studied as contextual factors, implicating the link between entrepreneurial intention and actual behaviour to be involved in entrepreneurial occupation (Kristiansen & Indarti, 2004; Krueger, 2008; Luthje & Franke, 2003). Studies to date favour the investigation of the strength of relationship between entrepreneurial intention and actual entrepreneurial behaviour contingent upon these two contextual factors. The present study sets to depart from the aforementioned. Instead, it intends to investigate the effect of both constructs as internal beliefs or orientations in sculpting one's attitude and compliance propensity, and subsequently EI, which is found to be relatively unknown in most entrepreneurial intentions studies.

The predominant intention models, which are widely used to study entrepreneurship, are Ajzen's theory of planned behaviour (TPB) and Shapero's model of the entrepreneurial event (Shapero, 1982; Ajzen, 1987; Nabi & Holden, 2008). The former claims that intentions are dependent on perceived levels of personal attractiveness, subjective social norms, and perceived feasibility. The theory is recognized as a very influential, powerful and popular conceptual model to study human behaviour as it traces to one's belief factors (Maes, Leroy & Sels, 2014), and has been widely used as the underpinning theory to understand both EI and entrepreneurial activities (Kolvereid & Isaken, 2006; Souitaris, Zerbinati & Al-Laham, 2007; Verheul, Thurik, Grilo & van der Zwan, 2012; Maes et al., 2014; Kautonen, Gelderen & Fink, 2015). The latter, in turn, argues that EI hinges upon the perception of feasibility, personal desirability, and a propensity to act. Therefore, it is surmised that potential EI antecedents include the role of personal characteristics, abilities, experiences (Bird, 1988), personal feasibility, social desirability (Shapero, 1975), and propensity to act (Shapero & Sokol, 1982; Krueger, 1993). The relative explanatory capacities of these two models are contrasted and they are found to be inter-related. As such, they become valuable tools to study subjects pertaining to entrepreneurship (Krueger et al., 2000).

In line with prior studies, the present study utilizes TPB (Ajzen, 2002), which advocates the relevance of belief factors, attitude, subjective norms (SN) and perceived behavioural control (PBC) to determine EI and to reconsider its practical implications in the Malaysian context. Two internal constructs, namely perceived barriers and perceived support, are incorporated into the study as the antecedents of attitude and SN respectively. It is believed that the inclusion of these two constructs in TPB model would address the rising concern on the lack of empirical evidence that articulates the effect of antecedent constructs in predicting EI (Maes et al., 2014). Such modelling is practically meaningful since Malaysians, especially university students, have had some forms of beliefs about the importance of entrepreneurship. In addition, the model will also explain if perceived barriers inhibit attitude towards entrepreneurship as well as whether compliance propensity to be entrepreneurial is influenced by perceived support. Accordingly, proper initiatives or strategies could be developed to address the perennial conundrum surrounding entrepreneurship in the country.

## **2. Literature Review**

### **2.1 Entrepreneurial Intention**

EI is commonly perceived as the action of an individual's attitudes towards the outcomes of the resulting actions and his self-efficacy, perception of desirability and feasibility to act upon opportunities (Shapero & Sokol, 1982; Peterman & Kennedy, 2003; Douglas & Fitzsimmons, 2008).

It involves conviction, steely ambition and an ability to be independent. Since such attributes are behavioural in nature, most literature on EI examines behavioural factors that influence such intention. While it is widely regarded as an area that has been extensively researched (Graham & McKenzie, 1995; Kolvereid, 1996a, Nabi & Holden, 2008; Ismail, Khalid, Othman, Jusoff, Abdul Rahman, Kassim & Sheikh Zain, 2009), some scholars (Iakovlev, Kolvereid & Stephan, 2011) argue that there remains a paucity of research on EI, particularly in developing countries such that issues surrounding entrepreneurship in these countries remain unresolved.

The vital role played by EI in eventual venture creation has been examined in depth (Shapero, 1975; Shapero & Sokol, 1982; Bird, 1988; Krueger, 1993; Krueger et al., 2000; Tkachev & Kolvereid, 1996; Kolvereid, 1996b). Socio-psychological models are often adopted to study EI and investigate the associated attitude and determinants (Krueger, 2007). Such models are useful to explain the correlations between personality factors and EI. Moreover, they are used to research planned and intentional behaviour in entrepreneurship (Krueger et al. 2000; Armitage & Conner 2001). Therefore, the understanding of EI is crucial as such intention commences an entrepreneurial journey and ushers in the actual business creation (Kolvereid & Isaksen 2006).

### **2.2 Entrepreneurial Intention among Students**

Numerous studies determining EI have used university or college students as sampling objects (Krueger, 1993; Krueger & Brazeal, 1994; Douglas & Fitzsimmons, 2008; Ismail et al., 2009). Kolvereid (1996) conducted a study to investigate the EI among business students in Norway and found the three structural constructs of TPB to be significant predictors of EI. Autio, Keeley, Klofsten and Ulfstedt (1997), on the other hand, conducted a cross regional study on business students' entrepreneurial intention and discovered that autonomy is a significant predictor of business students' EI in Finland, France and Sweden while conviction is a significant antecedent of business students' EI in Finland, Thailand and the United States.

In studying EI among engineering and medical students in Russia, Tkachev and Kolvereid (1999) learned that all three elements of TPB are predictors of EI. Latter study conducted on EI suggests that effectiveness in taught entrepreneurship programs could as well determine EI among students (Peterman & Kennedy, 2003; Souitaris et al., 2007). As such, it is important to examine the cognitive process that leads to EI so as to understand the development of entrepreneurship. Clear understanding of intent and orientation of entrepreneurship has to be determined to explicate why certain individuals venture into businesses because this will broaden the knowledge of how university students, who are the potential entrepreneurs, are and should be developed in the first place.

### **2.3 Research Model and Hypotheses Formulation**

Ajzen's (1991; 2002) TPB explains the effect of attitude, SN and PBC on behavioural intention, and the effect of salient beliefs as antecedents. It has been extensively used in explaining individuals' intention to perform particular behaviours (Autio et al., 2001; Gelderen et al., 2008; Gird & Bagrain, 2008; Krueger & Brazeal, 1994). Planned behaviours such as the commencement of a business venture are intentional and could thus be predicted by intention to perform the planned behaviour (Ajzen, 1991). Attitude towards performing the behaviour, SN and PBC are more than often found to be valid predictors of intention and the actual behaviour. Numerous studies have been conducted to empirically test specific parts of the theory using eventual business setup as the behaviour (Kolvereid, 1996a; Krueger et al., 2000; Luthje & Franke, 2003). It is found that attitude, which is largely described as a learned predisposition to respond, is the most driving factor of becoming an entrepreneur. SN refers to the compliance propensity to what important people such as family members, close friends and role models think about one's prospective decision to be entrepreneurial, in addition to personal willingness to listen to them (Krueger et al., 2000). Finally, PBC denotes the perceived ability to be an entrepreneur (Kolvereid, 1996a).

The extended version of TPB by Azjen (2002), as shown in Figure 1, articulates that there are three indicator level constructs that can be associated with the structural predicting constructs of the theory. Specifically, Azjen (2002) postulates that behavioural belief – an individual belief about consequences of a particular behaviour, is associated with attitude.

Secondly, normative belief – an individual's perception of social normative pressures on whether one should or should not perform such behaviour, is associated with social norms. Lastly, the third indicator level constructs, the control belief – an individuals' belief about the presence of factors that may facilitate or hinder the performance of behaviour, is associated with PBC. The addition of these three salient belief factors enhances the explanation of behavioural intention and the eventual behaviour.

#### *Intention*

Entrepreneurship or the entrepreneurial event can be best predicted by intention towards it. It relates to how much effort an individual will invest and expend to perform a particular behaviour (Ajzen & Driver, 1992). It is accepted within the depth of psychological literature that intention is the best predictor of planned behaviour, especially when such a behaviour is rare and involves an unpredictable amount of time (Bird, 1988; Katz & Gartner, 1988; Krueger & Brazeal, 1994). Entrepreneurship is an ideal example of such an intentional, planned behaviour among university students. Researchers have studied at length on the influence of EI, using employment choice models, where career intention is deemed an antecedent of behaviour (Krueger & Carsrud, 1993; Kolvereid, 1996b). Intention is determined by attitudes, which is then affected by external exogenous factors such as situational variables and an individual's character traits (Ajzen, 1991; Krueger et al., 2000). Therefore, it is imperative to comprehend the determinants and antecedents of EI in order to ascertain the reasons for an entrepreneurial behaviour.

#### *Attitude*

Strong attitude individuals with attitudinal tendencies towards financial reward, sense of accomplishment, independence, competitiveness and agents of change are deemed to be prospective entrepreneurs (Douglas & Fitzsimmons, 2005). A basic personality characteristic, like the need for achievement, can influence an individual's EI (McClelland, 1961, 1971). In a breakthrough study, McClelland identified and singled out individuals with high desire for achievement as having a similarly strong desire to be successful in life. Such individuals give high regard towards personal responsibility and enjoy measured risk-taking. They are also highly motivated towards seeing the fruits of the decisions they made. They are usually more self-confident and often request feedback on their progress to ensure their goals remain intact (McClelland, 1965).

A study conducted by Terpstra, Rozell and Robinson (1993) assert that the need for achievement includes firstly, the desire to be successful within one's personal capacity, secondly, the tendency to undertake measured risks, and thirdly, the desire for instant and concrete feedback. Lee (1997) further conceptualizes the need for achievement as the sole factor that drives an individual to face challenges and to be successful. In a separate study, the differences between those with high and low motivation are looked into, and the results conclude that individuals with a high need for achievement have a low acceptance of failure (Scapinello, 1989). A corresponding low need for achievement is linked to low competence, low expectations, low inspiration, a negative orientation towards failure, and a tendency towards blaming oneself (Nathawat et al, 1997). In light of the relevance of attitude in predicting EI, the following hypothesis is established:

*H<sub>1</sub>: the stronger the attitude towards entrepreneurship is, the higher the level of entrepreneurial intention will be.*

#### *Subjective Norm*

Generally speaking, SN refers to the perceived social pressure from significant others to perform or not to perform a particular behaviour. Direct family members and close friends are usually people who are most significant to an individual, and they have an influence over the intention level of whether the individual should perform a behaviour, including starting a business as an entrepreneur. Moreover, social network is found to have an impact on desired career paths and the likelihood of successful entrepreneurial endeavour. The study of entrepreneurship has increasingly reflected the general understanding that entrepreneurs and new organizations must engage in networks to survive and thrive (Huggins, 2000). Networks represent a means for entrepreneurs to reduce risks and costs and improve access to knowledge, ideas and capital (Zimmer, 1986). They are made up of formal and informal connections between actors and offer entrepreneurs' access to much-needed resources for business success and eventual market reward (Kristiansen & Ryen, 2002). The number and strength of the connections and its extensions and diversity determine the quality of social networks (Granovetter, 1973; Aldrich & Martinez, 2001).

In a collective and conservative Asian society like Malaysia, the impact of social networks as SN towards EI cannot be underestimated; and it is believed to have more significant implication than that of the western societies. Given the backdrop of the quest for entrepreneurship in Malaysia, university students are likely to be influenced not only at a micro (individual) level, but also at a macro (society) level. This has been to a certain extent overlooked by Malaysian literature on EI. Hence, the following hypothesis is formulated:

*H<sub>2</sub>: Subjective norm is positively associated with entrepreneurial intention such that when one experiences positive social norm, the intention to be entrepreneurial will be higher.*

#### *Perceived Behavioural Control*

PBC refers to elements that may either facilitate or impede the performance of behaviour. Since its introduction, numerous studies have been conducted to better understand the relationship between PBC and behavioural intention (Boyd & Vozikis, 1994; De Noble, Jung & Erlich, 1999; Kristiansen & Indarti, 2004; Douglas & Fitzsimmons, 2008). With specific reference to entrepreneurship, it reveals the perceived ease or difficulty to set up a new business venture or to engage in any entrepreneurial activities (Li, Wu & Wu, 2008). It ties in with self-efficacy which refers to an individual's perception towards his own ability to perform a task (Bandura & Walters, 1977), thus highlighting its importance to the shaping of intention (Ryan, 1970). Self-efficacy also affects an individual's belief and conduct to achieve his goals (Cromie, 2000). This underpins the foundation for human motivation towards achieving goals. Individuals who believe that they can get the desired results from his actions will be highly incentivised to act and persevere amidst difficulties (Pajares, 2002). In other words, the perceived control or ability to perform is not based on what is available in the external environment, rather it is based on their internal belief to create or exploit opportunity, confront obstacles and achieve the objectives.

Bandura's social theory further states that an individual's level of motivation and his resulting actions are based more on his beliefs than on what may or may not be objectively true. Given a strong perception of self-efficacy, an individual can be greatly influenced on acting on an intention and will utilise available knowledge and skills towards the particular behaviour or goal. His resulting behaviour will correspond to his perceptions and beliefs about his own capability to perform the behaviour, instead of external resources to assist him to perform. Accordingly, the following hypothesis is developed:

*H<sub>3</sub>: Perceived behavioural control is positively associated with entrepreneurial intention such that when perceived behavioural control is high, the intention to be entrepreneurial will also be high.*

#### *Perceived Support and Perceived Barriers*

In developing economies such as Malaysia, the access to capital is a typical barrier to potential entrepreneurs. Empirical studies have claimed that the lack of access to financial resources is deemed the primary barrier for many potential entrepreneurs (Marsden, 1992, Steel, 1994, Meier & Pilgrim, 1994). Such access may come in the form of gifts or friendly loans from close social networks or via sources of credit from financial institutions. Moreover, the availability of business information is also crucial. A study in India found that an individual's eagerness to seek information related to his business is a key characteristic of being a successful entrepreneur (Singh & Krishna, 1994). Information seeking may be measured by the number of times contact has been made with multiple sources of the business information. In another study in Indonesia, it is determined that access to up-to-date business information is indispensable to the setup and continued growth of an organisation (Kristiansen, 2002). Examples of such information include market intelligence, technological solutions, product design, and governmental rules. Hence, access to information is relevant to the belief about being successful, and thus pertinent to EI in the context of the present study. It is worth noting that Kristiansen, in a latter study, found that the availability of the information is dependent on personal characteristics and social networks (Kristiansen, 2003), implicating that availability of resources or constraint imposed by external environment is still very much dependent on personal and behavioural factors.

When an individual perceives elements in a business environment to be favourable and facilitating, he may be more willing to engage in entrepreneurship; this is known as perceived support (Ismail et al., 2009). Perceived barriers, in turn, are described as a reluctance to work hard and commit time (Henderson & Robertson, 1999), a shortage of financial support (Lane, 2002), a lack of ideas, an aversion to risk and a nagging fear of failure (Henderson & Robertson, 1999; Lane, 2002).

Both belief factors have to be viewed collectively because a perceived lack of support can be construed as a perceived barrier. Notwithstanding the role of contextual elements that affect EI, such as cultural and social variables, access to resources, physical infrastructure and economic and political conditions (Kristiansen, 2001, 2002), it is essentially what the individuals perceive and interpret the environmental factors around him that shape their beliefs and subsequent behavioural outcomes (Anderson, 2000).

Given the abovementioned, it is postulated that both perceived barriers and perceived support serve as salient belief factors of attitude and SN respectively, and important antecedents of EI in the TPB model as shown in Figure 2. Hence, the belief about how easy or difficult to be entrepreneurial will shape intention to perform such behaviour. Accordingly, the perception of the difficulties to be entrepreneurial in the Malaysian context is conceptualized as perceived barriers such that the limited access to CapitaLand information would be the impeders that form one's attitude towards entrepreneurship. Hence, the following hypothesis is developed:

*H<sub>4</sub>: Perceived barriers are negatively associated with attitude such that when barriers to be entrepreneurial are perceived high, favourable attitude towards entrepreneurship will reduce.*

In the same vein, normative belief denotes one's perception of social norm pressures on whether he or she should or should not comply and perform the behaviour. In this context, perceived support is conceptualized as normative belief which affects SN of an individual towards entrepreneurship. Hence, positive social networks as well as facilitating conditions in business environment are believed to have positive impact on SN and subsequently EI. The following hypothesis is developed accordingly:

*H<sub>5</sub>: Perceived support is positively associated with subjective norms such that when support to be entrepreneurial is perceived high, subjective norm towards entrepreneurship will also be high.*

### **3. Research Method**

#### **3.1 Sample, Measures and Data Collection Procedure**

University students were used as the sample respondent for the present study. A non-probability sampling method was used to select the target respondent since the total population of the students in Malaysia is not available and there is no way to provide every student equal chance to be sampled. Specifically, a judgmental sampling approach was used in which a set of respondent criteria was set to ensure students sampled were full-time Malaysian undergraduate students. G-power analysis was used to determine the sample size which held adequate statistical power to explain the relationships in the model. By running *a priori* power analysis using medium effect size with a significance level of 0.05 and probability of rejecting the null hypothesis at 95% with 3 predictors, the ideal sample size required for this study was 119.

A quantitative approach using self-administered questionnaire was adopted such that questionnaire copies were distributed to university students with the help of academicians and students at the end of their respective lectures. At the end of the survey period, a total of 257 usable responses were collected. Items in the questionnaire were measured using 7-point Likert scale ranging from 1 (strongly disagree to a given statement) to 7 (strongly agree to a given statement), except for items pertaining to demographic background. Items measuring key constructs of the study were derived from previous established measurement scale. Data were then analysed using partial least squares structural equation modelling (PLS-SEM). The software of Smart PLS 3.0 was utilized to perform the analysis (Ringle, Wende & Becker, 2015). Table 1 shows the results of frequency analysis on respondent demographic characteristics. The frequency count of male and female respondents and ethnic groups suggests the sample is a good reflection of the actual student population distribution at Malaysian universities. Although businesses students are assumed to take entrepreneurial subjects, an independent t-test results show that there is no significant difference of EI between business and non-business students.

#### **3.2 Data Analyses**

PLS-SEM is selected over the conventional covariance-based SEM method of analysis for several reasons. Firstly, PLS-SEM focuses on predictive analysis. Specifically, PLS-SEM emphasizes on maximizing the variance of endogenous variables explained by endogenous variables (Barosso, Carrión & Roldán, 2010; Hair, Hult, Ringle & Sarstedt, 2016). The predictive focus of the belief factors (perceived barriers and perceived support) is appropriate to meet the objectives of the study. Secondly, PLS-SEM has a relaxed assumption on data distribution, thus permitting the analysis of data distribution which is not extremely skewed or leptokurtic. Additionally, it is particularly useful to aid the studies which are discovery-oriented (Wold, 1985).

This is in-line with the present study because the assessment of the effect of perceived barriers and perceived support on attitude and SN respectively are exploratory in nature. It is important to note that there is no significant difference in results produced by covariance-based structural equation modelling and PLS-SEM. Hence, PLS-SEM can be a good proxy for CB-SEM (Hair et al., 2016) when most of the requirements for analysis using CB-SEM are not met.

#### 4. Findings

##### 4.1 Assessment of Measurement Model

In assessing a reflective measurement model, three analyses are required, namely assessment of construct reliability, convergent validity as well as discriminant validity. Construct reliability is assessed using composite reliability (CR) (Roldán & Sánchez- Franco, 2012). As shown in Table 2, the composite reliability of all the constructs exceed the threshold value of 0.7 (Nunally & Bernstein, 1994), indicating that the measures used to operationalize the constructs under study have high internal consistency. Similarly, all constructs demonstrate good convergent validity. The average variance extracted (AVE) values for each of the constructs ranging from 0.56 to 0.80 are larger than the threshold value of 0.50, indicating that the measures are capable of explaining more than 50% of the constructs' variances.

Discriminant validity, on the other hand, is evaluated using the Fornell-Larcker criterion and the heterotrait-monotrait (HTMT) ratio (Henseler, Ringle & Sarstedt, 2015). As illustrated in Tables 3a and 3b, discriminant validity is established using the Fornell-Larcker criterion such that the square roots of AVE are greater than the off-diagonal elements in the corresponding row and column (Fornell & Larcker, 1981). The HTMT ratio is also calculated given its high level of accuracy in detecting discriminant validity problems for reflective measures (Henseler et al., 2015). The results suggest that discriminant validity is established at HTMT<sub>.85</sub> which means the values for inter-construct ratio are below 0.85 and that the confidence intervals do not contain the value of 1.0 (Henseler et al., 2015).

##### 4.2 Assessment of Structural Model

Prior to assessing the structural model, the model is examined to address co linearity issues. The variance inflation factor (VIF) values for each construct range from 1.000 to 1.902, which are substantially lower than the offending value of 5.0 (Hair et al., 2014) and 3.3. (Diamantopoulos & Siguaw, 2006), as shown in Figure 4. The results indicate that co linearity is not a concern in the present study. To assess the structural model, a 5000 bootstrap re-sampling of the data is performed. Table 5 depicts the output of the assessment which includes results for path coefficient assessment. Attitude towards entrepreneurship is found to be positively and significantly related to EI ( $\beta=.389$ ,  $p < .01$ ). SN ( $\beta=.280$ ,  $p < .01$ ) and PBC ( $\beta=.239$ ,  $p < .01$ ) are also found to be positively and significantly associated with EI. As such, the first three hypotheses are supported.

In a similar vein, it is found that both belief factors are associated with its respective constructs in the model. Although there is an association between perceived barriers and attitude, the association is found to be positive ( $\beta=.225$ ,  $p < .01$ ), thus indicating that the fourth hypothesis, which postulates inverse relationship between perceived barriers and attitude, is not supported. Lastly, the results show that there is positive relationship between perceived support and SN ( $\beta=.327$ ,  $p < .01$ ), hence the fifth hypothesis is supported. Overall, attitude, SN and PBC explain 57% variances of EI. At the indicator level, perceived barriers explain 4% of variances of attitude while perceived support explains 10% of variances of SN.

The effect size ( $f^2$ ) is examined to determine the substantive effect of perceived barriers on attitude, the effect of perceived support on SN and the effect of attitude, SN and PBC on EI as shown in Table 5. Cohen's (1988) computation of effect size is used in which 0.02, 0.15, 0.35 represent small, medium and large effects respectively. Attitude is found to have medium substantive effect on EI (0.242), followed by SN (0.096) and PBC (0.075). Moreover, perceived barrier is found to have small substantive effect on attitude (0.045) whereas perceived support is found to have a considerable medium substantive effect on SN (0.112). To assess the predictive relevance ( $Q^2$ ) of the model, the cross-validated redundancy approach using the blindfolding procedure with an omission distance of 7 is deployed. The predictive relevance value of EI, 0.417, which is larger than 0, indicates that the model has predictive relevance with regard to reflective endogenous construct (Hair et al, 2014). Lastly, the model fit for the research model is assessed by assessing the standardized root mean square residual (SRMR) as also shown in Table 5.

The SRMR is an absolute measure of fit and is defined as the standardized difference between the observed correlation matrix and the predicted correlation matrix (Henseler et al, 2014b) and it is the only measures of fit available in Smart PLS 3.0. According to Hu and Bentler (1999), SRMR value less than 0.08 indicates that the model has a good fit. The SRMR value for the research model in the present study is 0.047, suggesting that the research model has a considerably good fit.

## **5. Discussion And Conclusion**

The purpose of this study is to investigate the impact of belief and behavioural factors on student's EI. Using TPB (Ajzen, 1991) as the underlying basis, student's attitude, SN and PBC are constructed as behavioural factors to explain or predict EI. Moreover, perceived barriers and perceived support are constructed as belief factors and antecedents of attitude and SN respectively to enhance the explanation of EI in the model. The results of the study suggest that both belief and behavioural factors are significant predictors of EI of Malaysian university students. Specifically, attitude is found to carry the most effect on EI compared to SN and PBC. This underscores the importance of cultivating the right attitude towards entrepreneurship among Malaysian university students by providing them the appropriate knowledge and experience about entrepreneurship. When the students have favourable attitude, they would most likely demonstrate EI even if SN and PBC only contribute little to the said intention.

While perceived support is positively related to SN, perceived barriers are not found to be inversely related to attitude as postulated in the hypothesis. It is well accepted that any form of support, especially that from the significant others, would generate in the student's positive belief which in turn brings about positive impact on attitude towards entrepreneurship. Malaysian university students in general show a slight agreement on perceived barriers related to the availability of finance and information. However, such perception does not really impede their EI. This infers that university students largely believe that the resources available for them to be entrepreneurial and successful are enough to overcome the perceived barriers. Such phenomena could be due to the various financial schemes and developmental programs provided by the universities to equip them to be entrepreneurial regardless of challenges. However, it is intriguing that these efforts do not seem to be translated into desirable outcomes as they do not produce entrepreneurs and new businesses which Malaysian government is hoping or aiming for. Hence, it can be surmised that in spite of showing favourable attitude towards entrepreneurship and substantial EI, most Malaysian university students do not really aim to be entrepreneurs. Most of them resort to looking for jobs and working to secure their lives and futures. In light of this, it becomes mandatory to look into the very cause of the low number of entrepreneurs by scrutinizing whether the university students really know what it takes to be entrepreneurial and whether they are actually given platforms to be exposed to genuine entrepreneurial experience.

A few practical implications can be drawn from the present study. Towards the universities and the relevant agencies which conduct entrepreneurial training or programs, it is recommended that there has to be a clear distinction between entrepreneurship education taught by academics and entrepreneurial programs with a practical approach towards implementation. It is suggested that academics need to work with actual entrepreneurs so as to inculcate the university student's not only appropriate knowledge about entrepreneurship but also actual entrepreneurial experience. Such combined effort would not only enhance their favourable attitude and intention towards entrepreneurship, it will also transform such intention into actual behaviour in the near future.

In addition, government and financial institutions should promote creativity and innovation by extending more resources towards communicating the available financial options to university students. It is crucial that they plant the seeds of entrepreneurial spirit not only through messages but also by means of financial assistance schemes and options so that university students find it rewarding to think outside the box and do beyond what is required, should they one day decide to venture into new businesses. NGOs that tend to focus on social entrepreneurship to find solutions to social problems can play their parts in nurturing universities students' EI as well. They can cultivate students' EI by the notion of being able to set up business venture to cure societal ills. Through engaging students in campuses, NGOs are able to communicate various options towards social entrepreneurship and its success stories thereof. The present study is limited in a sense that it does not look into the effectiveness of entrepreneurial education and programs which are highlighted in the latter part. When assessing EI, it is necessary to look beyond behavioural relationships in a static manner.



The fact that the country suffers from low number of new business creation and yet university students have substantial EI and favourable attitude towards entrepreneurship shows that EI and entrepreneurship among Malaysian university students is an intricate matter. Despite its shortcomings, the study achieves an important milestone by intensifying the call for more in-depth studies to explore and investigate the link between EI and entrepreneurial behaviour, and the impact of entrepreneurial education and programs on university students in the process to bring forth future entrepreneurs. It is implicated that such education and programs have to be complemented with instruction and guidance from proven entrepreneurs so as to provide students genuine entrepreneurial experience.

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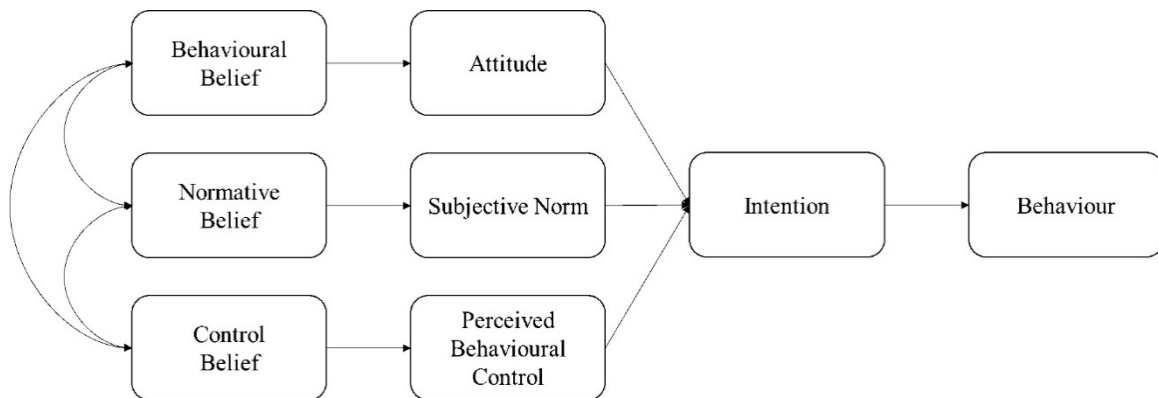
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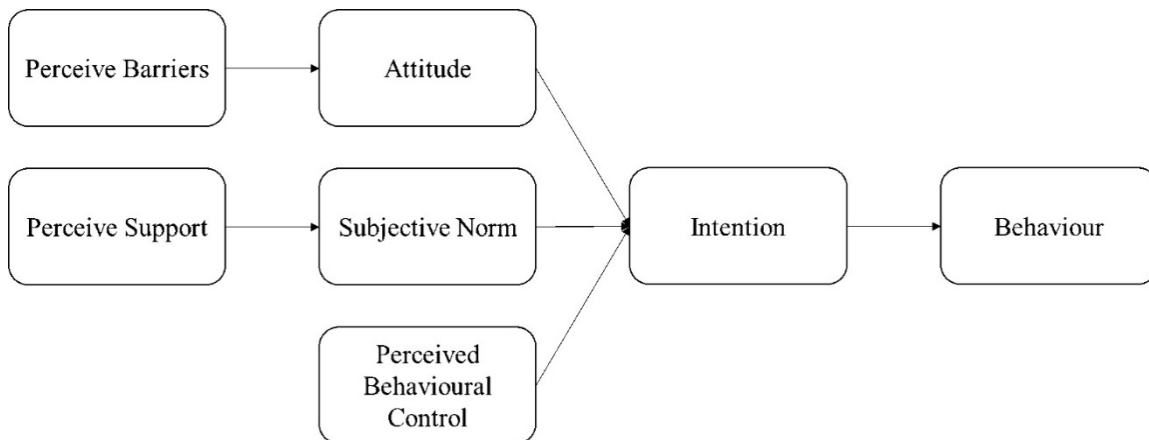
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**Figure 1: Theory of Planned Behaviour Model (Ajzen, 2002)**



**Figure 2: Research Model of the Study**

**Table 1: Descriptive Statistics of the Respondents**

Variable	Frequency	Percent	Total
<b>Gender</b>			
Male	99	38.52	38.52
Female	158	61.48	100.00
<b>Ethnic Group</b>			
Malay	122	47.47	47.47
Chinese	56	21.79	69.26
Indian	18	7.00	76.26
Others	61	23.74	100.00
<b>Education Background</b>			
Business	133	51.75	51.75
Non-business	124	48.25	100.00

**Table 2: Assessment of Convergent Validity**

Constructs	Items	Outer Loadings	AVE	CR	Convergent Validity
Attitude	ATT1	0.837	0.704	0.877	Yes
	ATT2	0.831			
	ATT3	0.849			
Intention	INT1	0.837	0.748	0.899	Yes
	INT2	0.890			
	INT3	0.868			
Perceived Barrier	PB1	0.853	0.507	0.744	Yes
	PB2	0.769			
	PB3	0.450			
Perceived Behavioural Control	PBC1	0.858	0.787	0.917	Yes
	PBC2	0.905			
	PBC3	0.898			
Perceived Support	PS1	0.790	0.563	0.793	Yes
	PS2	0.662			
	PS3	0.792			
Subjective Norms	SN1	0.873	0.804	0.925	Yes
	SN2	0.915			
	SN3	0.901			

**Table 3a: Fornell & Larcker Criterion**

	ATT	INT	PB	PBC	PS	SN
ATT	<b>0.839</b>					
INT	0.646	<b>0.865</b>				
PB	0.207	0.275	<b>0.712</b>			
PBC	0.465	0.597	0.362	<b>0.887</b>		
PS	0.158	0.225	0.247	0.317	<b>0.750</b>	
SN	0.527	0.636	0.295	0.637	0.317	<b>0.896</b>

Note: Diagonal elements shaded and highlighted in bold represent the square root of AVE. Off diagonal elements are simple bivariate correlations between the constructs.

**Table 3b: Heterotrait-Monotrait Ratio (HTMT)**

	ATT	INT	PB	PBC	PS	SN
ATT						
INT	0.795					
PB	0.295	0.361				
PBC	0.562	0.698	0.460			
PS	0.224	0.325	0.472	0.442		
SN	0.631	0.740	0.377	0.728	0.425	

Criteria: Discriminant validity is established at  $HTMT_{0.85}$

**Table 4: Multicollinearity assessment**

	SN	ATT	INT
PS	1.000		
PB		1.000	
PBC			1.753
SN			1.902
ATT			1.442

**Table 5: Assessment of Path co-efficient**

	Direct Effect ( $\beta$ )	Standard Error	T Statistics	LL 95% CI	UL 95% CI
ATT -> INT	0.387	0.060	6.493**	0.289	0.487
PB -> ATT	0.207	0.064	3.234**	0.126	0.328
PBC -> INT	0.237	0.062	3.827**	0.134	0.340
PS -> SN	0.317	0.062	5.098**	0.223	0.428
SN -> INT	0.281	0.077	3.636**	0.151	0.407

Note: LL = Lower limit; UL = Upper Limit; CI = Confidence Interval.

\*\*  $p < .01$

**Table 5: Structural Model Assessment**

	$R^2$	$Q^2$	SRMR	Effect Size $f^2$		
				ATT	SN	INT
ATT	0.043	0.027	0.047			
INT	0.570	0.417		PB 0.045		
SN	0.100	0.076			0.112	
						PBC 0.075
						SN 0.096
						ATT 0.242