

The Impact of Entrepreneurial Alertness on Entrepreneurial Intention among University Students in Malaysia: Theory of Planned Behaviour

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Abstract: This study uses Ajzen's theory of planned behaviour to predict entrepreneurial intention among 160 students in Malaysia. The purpose is to investigate the effects of its antecedents, particularly when applied to students from family business background. A new construct was also introduced to the model in examining the role of perceived behavioural control as a mediator between alertness and intention. Results indicate a strong explanatory power in this model as well as confirming a strong support on its applicability in the entrepreneurship field. The significant effects of family business background were also validated. In addition, the role of the mediator of perceived behavioural control was tested and confirmed suggesting the importance of the state of entrepreneurial alertness to intention.

Key words: Entrepreneurial intention, family business background, entrepreneurial alertness, mediator, TPB

INTRODUCTION

It has been widely recognised that entrepreneurial activities are a major contributor to any country for its economic drive contributing to growth and employment. In addition, entrepreneurial innovation on delivering value added products or services fulfilling market needs is also a crucial activity that is filled by an entrepreneur. Hence, it is undeniable that entrepreneurship plays an important role to the makeup of a country. In a recent Global Entrepreneurship Monitor (GEM) released in 2014, it was reported that Malaysia's TEA rate is 5% compared to Asian region's average of 10%. In an effort to boost the entrepreneurial rate, the government has taken various initiatives to improve start-up rates and particularly to improve awareness among university students on entrepreneurship.

There are numerous research on entrepreneurial intention being conducted but most were conducted in a non-Malaysian setting (Iakovleva *et al.*, 2011; Carr and Sequeira, 2006; Linan and Chen, 2009). Though there are local studies on entrepreneurial intention, most have concentrated on personality traits and demographic factors (Yusof *et al.*, 2007; Ismail *et al.*, 2009). Few have attempted to examine other variables beyond personality leading to a limited understanding of the influence of other variables particularly the behavioural motives of the

individual. This study attempts to breach the gap in our understanding of the entrepreneurial process with regards to students from business family background. In addition, the variable of entrepreneurial alertness is being introduced for the first time to examine its effect on entrepreneurial intention. To better understand the process of new venture creation, entrepreneurship research has focused on the entrepreneurial intention as a proxy for the venture creation instead due largely to the difficulties in observing the actual creation of new ventures.

Within psychological studies, entrepreneurial intention has been proved to be a reliable indicator of a certain planned behaviour. This is particularly so when the behaviour which we are trying to observe is rare, difficult to observe and it involves unpredictable time lags such as the actual starting up of a new business venture. As the students are regarded as the nation's future builder, understanding the entrepreneurial intentions of students will increase our knowledge on the indication of entrepreneurial trends of the future. The study of student's intention at university level is important as the decision of future career choice is set at that stage. There are numerous studies being conducted on the entrepreneurial process itself. However, there is a noticeable lack of attention on the substantially large group of individuals who are high potentials to embark on

the entrepreneurial journey. This study attempts to empirically establish the importance of cognitive variable in understanding the motivations behind the intention to be an entrepreneur.

Literature review: For an individual to decide to be an entrepreneur, the decision is a conscious thought followed by intentional behaviour. Hence, a clear understanding of how the decision is arrived at is an important task. The decision arriving at the final conclusion is a progression that often leads to a long development towards venture creation. The intention for new venture creation is a necessary precursor to performing entrepreneurial behaviours and thus it is considered as the single best predictor of behaviour (Ajzen, 1991). Particularly, the study of intention is pivotal when the behaviour that needs to be observed is rare, hard to observe or that it involves an unpredictable long period of time lapse. As it is difficult to observe the behaviour of new business creation, the intention to creation of new venture may offer critical insights to better understanding of the motivations of individuals aspiring to be an entrepreneur. As intention predicts behaviour, certain attitudes predict intention. The intention for entrepreneurial behaviour could be motivated by factors such as values, needs habits, wants and beliefs.

The Theory of Planned Behaviour (TPB) was derived in concept from the Theory of Reasoned Action (TRA) which was used to forecast voluntary behaviours and facilitate in recognising the individual's own psychological factors. Intention has been argued as the best predictor by attitude. Theory of planned behaviour has been a more popular theoretical model as the understanding and prediction of intention is based on personal as well as social factors. This provides a better rounded explanatory power compared to previous intention models. The basic assumption of the concept is that humans normally behave in a reasonable manner in which surrounding information and consequences of the actions are considered. The theory of planned behaviour model has been used in various studies of human intentions to behave in a certain manner (i.e., technology adoption, health-related behaviours, consumer adoption etc.) and certainly it has also been applied to the setting, of entrepreneurship studies. However, the relationship between family business background and student's entrepreneurial intention using theory of planned behaviour has not been widely studied.

Family businesses are regarded as one of the largest form of business ownership (Anderson and Reeb, 2003). As such, there is a high level of interest in the area of

family business and its various effects. Most of the studies on family businesses have centred on the issues of succession. Few have considered the effect of family business on its next generation and their entrepreneurial intention or inclination towards businesses (Carr and Sequeira, 2007). As a member of the family which is involved in business, the members are exposed to business workings and are familiar with the demands required to run a successful business. Thus, individuals with prior family business experience assimilate the entrepreneurial experiences they have into the attitudes and behaviours they hold towards entrepreneurship.

Entrepreneurial intention refers to the plan or the individual's willingness to set up a new venture. It is the stage that precedes the actual behaviour and thus is a good predictor for entrepreneurship (Quan, 2012). This study adopts the Theory of Planned Behaviour (TPB) as the model in predicting the entrepreneurial intention of students in a university setting. Theory of Planned Behaviour proposes that the intention for entrepreneurial activities is supported by three antecedents; personal attitudes toward the outcome of the behaviour perceived behavioural control and perceived social norm. One of the key characteristics that is crucial to an entrepreneur is the entrepreneurial "alertness" to information and opportunities surrounding the individual. Alertness is a concept of a process which helps individuals be more aware of the changes and shifts of opportunities or possibilities overlooked by others (Kirzner, 1997). When an individual is able to spot opportunities missed by others and acts upon it, the seed of an idea takes place leading entrepreneurial start-ups.

Theory of planned behaviour has been employed in the studies of entrepreneurial intention where intentions are influenced by attitude towards entrepreneurship, subjective norms and perceived behavioural control. These antecedents are in turn, influenced by factors such as personal background, motives, family background (Kuttim *et al.*, 2014). Individuals with family background that is in business environment would be more likely to view self-employment as a favourable option as they have a role model in their parents who are entrepreneurs themselves. It has been reported by some entrepreneurs that oftentimes from a young age they had to carry responsibility with positions within the family business. This conscious move by the parents acts as a mean to pass on values, skills and confidence that is necessary for the individual to own their businesses in the future (Carr and Sequeira, 2007). It is proposed that individuals that have a background of family businesses would have different experiences, different point of views and hence it can be expected that there are differences between them

and the general population. This was supported in the study by Carr and Sequeira (2007) where prior family business exposure was found to be significantly related to entrepreneurial intent in a large sample of adult population from a big South-West US city. Through these personal experiences behavioural skills needed for the entrepreneurial journey, the study posits:

- H₁: past exposure to family business background are positively related to entrepreneurial intent

Entrepreneurial alertness: Kirzner (1997) has defined entrepreneurial alertness as an individual's ability in being able to identify opportunities which were overlooked by others. The alertness skill refers to the special capability of making judgements from the information change or shifts in the environment and realising the possibility of business opportunities with potential of profits (Tang *et al.*, 2012). Entrepreneurial alertness is an ability and development of schemata that made possible for an individual to interpret and organise information within various domain of knowledge and that are related to areas of opportunity development (Gaglio and Katz, 2001). Personality characteristics and the environment combined to create conditions which will foster higher levels of entrepreneurial alertness. With heightened level of alertness, there is an increased likelihood of opportunities for new business venture being recognised.

In turn, with correct identification of potential business opportunities, the intention to start a new business venture will also increase. Hence, the concept of entrepreneurial alertness had been studied mostly within the area of opportunity recognition which supports our knowledge about the manner in which new ideas are generated and pursued. Regardless of the promise of the entrepreneurial alertness construct, it continues to be relatively understudied due in part to the difficulties of measurement. This study applies the construct of alertness into theory of planned behaviour to examine the effect it has on entrepreneurial intention. This is a departure from traditional research area of opportunity recognition that alertness is commonly associated with.

In a study by Tang *et al.* (2012), entrepreneurial alertness was proposed in conceptualisation as an information processing approach which incorporates perspectives from economics, behavioural and cognitive. Entrepreneurial alertness comprises of three dimensions: information accumulation, information transformation and lastly information selection. Information accumulation dimension refers to how an individual seeks new information and how it is accumulated for later use. Information transformation is the ability to perceive and

interpret the environment. This dimension explains how an individual cognitively responds to information obtained whether to discount it or to transform it to accommodate existing stock of knowledge. Lastly, information selection refers to the unique ability of certain individuals of sensing profitable opportunities overlooked by others. Particularly, this dimension explains why particular individuals are able to filter unnecessary information while utilising and manipulating the other parts in identifying business opportunities.

Recent studies have advanced the arguments for alertness as a critical factor established from cognitive capabilities and processes, e.g., experiences, prior knowledge, information processing skills and social interaction (Ardichvili *et al.*, 2003; Baron, 2006; Gaglio and Katz, 2001; Shane, 2000; Tang *et al.*, 2012). Prior research has also identified factors particular to individual nature such as exercises and training, social networks, etc., as certain determinants that are linked to entrepreneurial alertness (Tang *et al.*, 2012). The concept of entrepreneurial alertness is a dynamic schema. It represents an individual's beliefs and knowledge of how the physical and social world works. Information received are being processed and reasoning for a specific event are being offered. Hence, according to Kirzner's arguments, an alert individual stand to possess a more accurate mental model. In a study by Kaish and Gilad (1991), the finding in regard to alert entrepreneurs reinforced previous studies that entrepreneurs who possess alertness are avid information gatherer and is an opportunistic learner. Following the reasoning from past studies, it can be argued that an individual who is alert to the changes of environment and is able to discern certain business opportunities overlooked by others will display a higher entrepreneurial intention.

One of the crucial components of starting a new venture is idea generation. A feasible business idea born from possible exploitation of opportunities is a necessary precursor to new venture start up and even to the thought or intention of starting up. By being alert and able to sense opportunities and market gaps, the individual would possess the right mental model similar to entrepreneurs. Coupled with heightened sense of alertness, the intention to embark on the entrepreneurial journey to further develop and exploit their ideas is higher. Hence, the study posits that:

- H₂: the entrepreneurial alertness is positively associated with entrepreneurial intention

Antecedents to entrepreneurial intention: Entrepreneurial intention can be described as the preliminary actions

taken by an individual before he formally starts a new venture (Carr and Sequeira, 2007). According to Ajzen (1991), intention is directly influenced by three antecedents; attitude, subjective norm and perceived behavioural control. Firstly, the attitude refers to the degree which an individual holds about being an entrepreneur as a result of a positive or negative evaluation. Attitudes are influenced by a set of behavioural beliefs which links the behaviour to various outcomes and other attributes. Included in attitude is the affective consideration as well as the evaluative considerations too (Linan and Chen, 2009). Secondly, subjective norm is determined by perceived social pressure to perform entrepreneurial behaviours. It discusses specifically of the perception of certain individuals who act as influencer on whether they support the decision of becoming an entrepreneur. Subjective norms are made up from two components; normative belief and the motivation for the individual to comply with the beliefs. Normative belief refers to the perceived probability that the important point of referent approves or rejects a given behaviour. This, in turn, sets the norm of how the individual should behave. On the other hand, motivation to comply refers to the willingness of the individual to conform to the norms or expectations of significant others.

Depending on the social environment, a strong subjective norm can act as a force driving entrepreneurship intentions. Lastly, the perceived behavioural control is defined as the perception of how difficult it is to be an entrepreneur. This construct is similar in concept to self-efficacy as proposed by Bandura (1977) and the concept of feasibility in Shapero and Sokol. This antecedent includes the belief and ability as well as the perception that he or she is able to influence the behaviour (Ajzen, 1991).

Attitudes are referred to as a general positive feeling towards an object as a result of its evaluation (Ajzen and Fishbein, 2000). When an individual holds a certain belief towards an object, the person would automatically acquire a certain attitude towards the object. The individual's perception of his ability to perform specific task increases the likelihood of the attitude converting to intention and subsequently to behaviour (Ajzen, 1991). There are several factors that may influence the attitude towards entrepreneurial intention such as willingness to take risks, locus of control and need for independence. This in part may be due to an individual's needs for a sense of security and the desire to control the risk one faces. Individuals who possess the sense of autonomy which refers to a person's desirability to be their own boss by making their own decision and hence a sense of independence will lead to higher possibility of business

start-up. In the study by Kolvereid (1996), attitude was found to have a direct and significant effect on entrepreneurial intentions.

There have been numerous empirical studies being conducted using Theory of Planned Behaviour. However, they have shown conflicting results concerning the importance of the motivational factors in predicting entrepreneurial intention. Several studies have found the significant impact of subjective norms on intentions (Kolvereid, 1996; Kolvereid and Isaksen, 2006). On the other hand, there are other studies that do not support this finding (Autio *et al.*, 2001). Such differences in results have been suggested to be due to differences in measurements of subjective norms (Linan and Chen, 2009). Through the establishment of encouraging results of direct relationship between subjective norm and intention, there is still some disagreement with some proposing the existence of indirect effect of social norm on intention working through attitude or perceived behavioural control.

Perceived behavioural control can be referred as the trust at an individual possessed that they have the skills and abilities to perform a certain behaviour (Ajzen, 1991). The common measures for perceived behavioural control are self-efficacy and locus of control. In particular, this study will focus on the dimension of self-efficacy as an internal factor. Self-efficacy dictates the ease of performing the actual behaviour and it refers to the belief that one can successfully execute the behaviour required to produce a certain outcome (Bandura, 2001). High levels of self-efficacy reinforce persistent efforts to achieve goals even in the face of great stressful conditions and failures. In the environment of new business creation, self-efficacy is an advantage to budding entrepreneurs in their drive to achieve the goals. Past studies have found that entrepreneurs and founders with particularly pronounced perception of strong skills, willpower and strong commitment to objectives maintain a sense of task focus. These individuals are able to persist in face of failure and attribute the failure to lack of personal effort. Thus it would be expected that individuals with high levels of self-efficacy would lead to higher entrepreneurial intention.

The empirical results from the entrepreneurship studies have broadly confirmed the prediction power of the Theory of Planned Behaviour. Many studies have established the relationship between attitudes, subjective norms and perceived behavioural control to intention towards being an entrepreneur (Luthe and Frank, 2003; Souitaris *et al.*, 2007). On the other hand, studies from Linan and Chen (2009) and Moriano *et al.* (2011) showed no significant differences in attitudes and self-efficacy in their prediction power of intention. Hence, there is an

anomaly of results on the predictive power of antecedents of entrepreneurial intention across studies in different countries. To confirm and test the results linking the antecedents to entrepreneurial intention, this study proposes that:

- H₃: the higher the attitude, the stronger the student's entrepreneurial intention
- H₄: the higher the subjective norm, the stronger the student's entrepreneurial intention
- H₅: the higher the perceived behavioural control, the stronger the student's entrepreneurial intention

From the recent entrepreneurship research, it was suggested that perceived behavioural control may be the most important antecedent to entrepreneurial intent as it explains most of the variance on intention. Individuals with high self-efficacy displays persistent efforts to achieve goals particularly even when faced with stress and failures. There have been several studies that have found high levels of self-efficacy to be the foundation of most individual performance (Bandura *et al.*, 1999, 1977). Entrepreneurial alertness is a cognitive skill that enables an individual in searching, processing and evaluates the possibilities of opportunities based on the information around it. Individuals with a developed sense of schemata are always alert to new information and are able to recognise more opportunities compared to an individual who is low on alertness.

High level of entrepreneurial alertness is an individual who possesses the special ability to spot opportunity and process information. This study hypothesises that, individuals who are alert fuels their sense of self-efficacy as alertness is a continuous mental exercise that improves with practice and time. The more alert an individual is the higher the belief that one can accomplish his goal as it may be perceived that decision making based on available information is the best alternative and hence the confidence with the evaluation. Therefore, the study offers the following hypothesis:

- H₆: perceived behavioural control will mediate the relationship between entrepreneurial alertness and entrepreneurial intention

Figure 1 therefore, provides a summary of the model this study is using. It is equivalent to the model described by Ajzen. In particular, entrepreneurial alertness has been added to test for its effect on perceived behavioural control. Demographic and human capital variables have also been included for study.

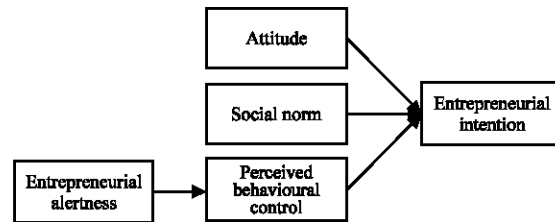


Fig. 1: Entrepreneurial intention model

MATERIALS AND METHODS

The sample was composed of 3rd year undergraduates from private institute of higher learning within Klang valley in Malaysia. The students are selected for this study as they are at a critical stage in life deciding on their future career path. Samples of students are very common within the entrepreneurship literature (Autio *et al.*, 2001; Linan and Chen, 2009). The study design used in this study is a cross-sectional study. To collect the data, an online questionnaire and self-administered questionnaire was employed. The students were approached to anonymously complete the questionnaire either through online referrals through friends or through a self-administered questionnaire distributed. In total, 160 respondents returned the questionnaire. The sample consists of 160 students where 50.6% were men and 49.4% were women.

The majority of the students was of the age between 21-23 years old (40%) and is from the background of business discipline (58.8%). The rest of the respondents are from the social sciences discipline (9.45) and others (31.9%). Of the respondents collected, a majority of 61.2% or 98 respondents indicated that they do not have an entrepreneurial family background while the remainder 62 respondents (38.8%) indicated that they come from an entrepreneurial family background.

Measures: The majority of the items utilised in this study were based on previously published research. The entrepreneurial intention was measured using four items adapted from where their study have chosen pure intention measures rather than a mixture of self-prediction, intention and interest measures (Linan and Chen, 2009). The construct is operationalized as the measure of intention of undergraduate to become an entrepreneur. Entrepreneurial intention is being measured through a Likert scale with 5 point scale where 1 = "strongly disagree" and 5 = "strongly agree". The Cronbach's alpha for this 6 item measure is 0.894. The other two construct of attitude and perceived behavioural control are also adopted from the study of Linan and

Chen (2009). Like entrepreneurial intention, the construct is measured through 5 points Likert scale with each having 5 and 6 questions, respectively. Attitude has measured using an attitude scale as well as a belief-based measure as well. Though both has been utilised, Azjen (1991) argues that beliefs are antecedents to attitudes and attitudes would better explain changes in intentions. This was supported by a study from Kolvereid and Isaksen (2006) where attitude and belief-based measures were incorporated in a linear regression. The result shows attitude as a significant predictor with better explanatory power than beliefs. This study has chosen an aggregate measure of attitude and its Cronbach's alpha for the 5 item measure was 0.884. In earlier studies, perceived behavioural control was determined by particular self-efficacies and control beliefs (Kolvereid and Isaksen, 2006; Kolvereid, 1996). According to Azjen (1991), it is argued that control beliefs are precursors of a combined evaluation of perceived behavioural control. Hence self-efficacies and control beliefs are recognised as an antecedent of the general perceived behavioural control. Hence, the study utilises both as an aggregate measure for perceived behavioural control. The 6 item measure showed a Cronbach alpha of 0.884.

Azjen (1991) observed that social norm is basically a measure of what do people think. This study has adopted the measures from Kolvereid (1996) using the 5 point Likert scale consisting of 3 items. Subjective norm is measured through belief-based item such as "My lecturers think that I should pursue a career as an entrepreneur" and "My friends see entrepreneurship as a logical choice". The construct also captures the views of three groups of "reference people", i.e., family, friends and lecturers. The Cronbach's alpha for the 3 item measures was 0.647.

The construct "Alertness" captured in the form of search and scanning, association and connection and lastly evaluation and judgement. All the alertness construct were measured with multiple items anchored on 5 points Likert scale with the range of 1 (strongly disagree) to 5 (strongly agree). These 13 items were taken from the study by Tang *et al.* (2012). The search and scanning dimension contain items which focus on receiving information. This dimension is made up of 6 items such as "I have frequent interaction with others to acquire new information" and "I always keep an eye out for new business ideas when looking for information". To put pieces of information together is the dimension of association and connection. This dimension contains 4 items. Examples of items are "I often make novel connections and perceive new or emergent relationships between various pieces of information" and "I often think out of the box and creatively". The final dimension of the

construct is referred to as evaluation and judgment. This dimension concerns with assessment of opportunities with new pieces of information.

Items in this dimension include "I have a gut feeling for potential opportunities" and "I have an extraordinary ability to smell profitable opportunities". The evaluation and judgment construct contains 6 items within. The Cronbach's alpha for the entrepreneurial alertness was 0.852.

A total of 5 demographic variables were included to reduce confounding effects due to respondent's differences in demographic characteristics. The respondents represented 3 main ethnic groups in Malaysia (Malay, Chinese and Indian). As the majority of the respondents were of Chinese decent, ethnicity of Chinese decent was constructed with a dummy variable (0 = Chinese; 1 = non-Chinese). Gender was measured with a dummy variable (0 female, 1 = male). Gender is considered to be a well studied individual characteristic that are argued to have a significant influence on entrepreneurial activities. Age was measured with five categories (1 = below 20 years old, 2 = 21-23 years old, 3 = 24-26 years old and 4 = 27 years old and above). Education in business related programs and background was also measured using dummy variable (0 = business student, 1 = non-business student). The entrepreneurial family background of the students was also assessed by asking if any of the parents have owned or is currently running their own business. The item is captured and recorded as a dummy variable (0 = 'No', 1 = 'Yes').

RESULTS AND DISCUSSION

Table 1 report on the mean, standard deviations and correlations of all variables. The hierarchical regression analysis was employed to examine the research hypothesis. The demographic variables were first introduced into the regression as a block of variables and this is followed by respective independent variables. The control variables of gender, age, ethnicity, course of study and entrepreneurial family background were regressed on entrepreneurial intention (Model 3).

This approach of analysis allowed for a clear estimate of the additional contribution of the independent variable on the dependent variable after accounting for the control variables. The entrepreneurial intention was entered as the dependent variable. The collinearity between the predictor variables was also checked for any serious problem of significant multicollinearity. The VIFs (variance inflation factor) of the variables indicated a reading from 1.03-2.64. This result indicates that collinearity was not an issue for the variables.

Table 1: Means, standard deviation and correlations

Variables	Mean	SD	1	2	3	4	5	6	7	8	9
Gender											
Age	-	-	0.09	-	-	-	-	-	-	-	-
Race	-	-	0.02	0.43**	-	-	-	-	-	-	-
Education	-	-	-0.07	0.21**	0.22**	-	-	-	-	-	-
Family business	-	-0.12	-0.12	-0.13	-0.04	-	-	-	-	-	-
E. Alertness	3.02	0.91	0.11	-0.07	0.13	-0.08	0.55**	-	-	-	-
Attitude	3.10	0.78	0.01	-0.18*	0.20**	0.01	0.44**	0.61**	-	-	-
Subjective norm	2.99	0.81	0.04	0.13	0.21**	0.09	0.64**	0.69**	0.55**	-	-
PBC	3.28	0.51	-0.17*	-0.05	0.06	-0.06	0.44**	0.51**	0.35**	0.49**	-
E. Intention	3.08	0.82	0.07	0.00	0.12	-0.04	0.58**	0.81**	0.64**	0.82**	0.56**

*Correlation is significant at the 0.05 level (2-tailed); **Correlation is significant at the 0.01 level (2-tailed)

Table 2: Results of regression analysis predicting perceived behavioural control and entrepreneurial intention

Variables	Perceived behavioural control		Entrepreneurial intention		
	Model 1	Model 2	Model 3	Model 4	Model 5
Gender	0.03	-0.03	0.00	0.09	0.03
Age	-0.04	0.00	-0.13	-0.08	0.04
Ethnicity	0.20*	0.17*	0.17*	0.12	-0.07
Education	0.01	0.04	-0.09	-0.04	-0.03
Family business	0.63**	0.51**	0.59**	0.40**	-0.05
Entrepreneurial alertness	-	0.26**	0.39**	0.13*	-
Attitude	-	-	-	-	0.35**
Subjective norm	-	-	-	-	0.16*
PBC	-	-	-	-	0.48**
R ²	0.66	0.70	0.36	0.47	0.81
ΔR ²	0.44	0.49	0.36	0.11	0.34
Adjusted R ²	0.42	0.47	0.34	0.45	0.80
F	24.23**	24.55**	17.55**	23.00**	73.41**
ΔF	24.23**	15.08**	17.55*	32.37**	92.07**

*p<0.05; **p<0.01

This study used hierarchical regression analysis to test the hypothesis. Table 2 reports the results. In model 3 of Table 2, the control variables, gender, age, ethnicity, education and family business background was first entered into the regression. Of the variables, only ethnicity ($\beta = 0.17$, $p<0.01$) and family business background ($\beta = 0.59$, $p<0.01$) showed significant relationships with entrepreneurial intention. The finding supports hypothesis 1 indicating that past exposure to family business background is significantly associated with entrepreneurial intention. The Model 3 indicated a 36% of total variance explained by the variables. In Model 4, entrepreneurial alertness was entered into the regression and was significant to entrepreneurial intention ($\beta = 0.39$, $p<0.01$). When entrepreneurial alertness was included into the model explained and significant variances increased by 0.11-0.47 (R^2). The regression coefficient corresponding to entrepreneurial alertness was positive and significant at 0.01. Hence, hypothesis 2 which states that entrepreneurial alertness is positively associated with entrepreneurial intention is confirmed. Finally, model 5 incorporate the effects of attitude, subjective norms and perceived behavioural control were significant to entrepreneurial intention. The regression coefficient for the variables were 0.35 ($p<0.01$),

0.16 ($p<0.05$) and 0.48 ($p<0.01$), respectively. There was an improvement of the explanation of the dependent variable of the model by 0.34.

Total variance explained was 0.81 and therefore, hypothesis 3-5 are supported. The high R^2 reading indicates a strong explanatory power of the model. The results showed that perceived behavioural control had the highest regression coefficient ($\beta = 0.48$) among all and was indicated as the most important variable for predicting the entrepreneurial intention. The variable attitude ($\beta = 0.35$) was found to be the second most important antecedent to entrepreneurial intention while social norm ($\beta = 0.16$) is the lowest among the three. However, it is a significant relationship to entrepreneurial intention.

Following the procedure outlined in Baron and Kenny (1986) to analyse for mediation effect, the set of regressions was entered with entrepreneurial alertness as a predictor to perceived behavioural control. This is followed by regressions on the main effect along with mediating effect on entrepreneurial intentions. The results show that perceived behavioural control is a partial mediator of the relationship between entrepreneurial alertness and entrepreneurial intention. As shown in Model 4, entrepreneurial alertness is significantly

related to the dependent variable as established earlier. In addition, Model 2 shows entrepreneurial being significantly related ($\beta = 0.26$, $p < 0.01$) to the mediator which is perceived behavioural control. Following the Baron and Kenny (1986)'s approach, the independent variable is shown to be significantly related to both the dependent and mediator. Next, the relationship between the mediator and dependent variable is confirmed where in Model 5, perceived behavioural control is shown to be significantly related to entrepreneurial alertness. However, the presence of perceived behavioural control reduces the size of alertness to entrepreneurial intention though it remains a significant relationship. The effect of alertness was reduced from 0.39 ($p < 0.01$) to 0.13 ($p < 0.05$). Though it is still significant, the effect has reduced significantly and the significant level has also dropped as well. As such, H_6 is supported where perceived behavioural control partially mediates the relationship between entrepreneurial alertness and entrepreneurial intention.

CONCLUSION

As discussed in the earlier sections, the purpose of this study is to explore the factors influencing student's entrepreneurial intention through the theory of planned behaviour. Two particular factors of interest are the family business background and the entrepreneurial alertness being introduced to examine its effect on intention. In the initial regression analysis, family business background was found to be significantly related to entrepreneurial intention and H_1 was supported. However, the strength and the significance of its influence on intention dropped gradually when the main Theory of planned behaviour variables were introduced into the regression. The newly introduced variable, entrepreneurial alertness was also found to be significantly related to entrepreneurial intention. It is argued that individuals who possess the alertness skills will be able to spot more business opportunities. With clear opportunities being identified, the probability of embarking on the entrepreneurial journey increases. On H_3 H_5 which are the main antecedent to entrepreneurial intention in theory of planned behaviour, support was also found in the result of analysis. All three antecedents were significantly related to intention with perceived behavioural control showing the strongest effect followed by attitude. Not surprisingly, subjective norm was shown to be the weakest factor. A significant relationship between attitude and intention is consistent with previous studies (Tkachev and Kolvereid, 1999) indicating that students carry a favourable attitude towards being an entrepreneur.

The construct for social norm has always been problematic with inconsistent results. Its strength of its effect in intention declined when all other antecedents are entered into the regression. This was also consistent with previous studies which had shown similar results (Linan and Chen, 2009).

The explanation for the result is due in part to rapid changes in the social landscape where individual internal factor such as attitude and self-efficacy plays a greater influence on their intention to be an entrepreneur.

Perceived behavioural control was also supported to be a significant determinant on entrepreneurial intention. It is an interesting result that perceived behavioural control is shown to be the strongest effect as most studies have support attitude as the strongest variable (Carr and Sequiera, 2007; Kuttim *et al.*, 2014). The answer lies perhaps in the differences in culture. The economic climate in Malaysia has been strong with steady growth (GDP growth rate 4.7% in 2013) and low unemployment of 3.1% in 2013. In an era of plentiful jobs, the alternative of an entrepreneur may be dampened with expectations of high paying salaried jobs rather than self-employment. As the sample of study are students whom predominantly are in their early twenties, they have a higher tolerance for risk taking and feels that they are more capable of handling starting a new venture if they have the necessary skills. Hence, the perceived behavioural control will be a stronger predictor of intention. Lastly, confirmation was established on the mediating effects of perceived behavioural control between entrepreneurial alertness and intention. The results have shown perceived behavioural control to be a partial mediation effect. The finding confirms the study by Ajzen and Fishbein (2002)'s argument on the residual effects of an individual's past behaviour as a powerful force especially when the individuals are uncertain in relation to their motivation. Individuals who possess a higher level of alertness are better able to process information and identify a business opportunity. With high alertness to information, this increases the confidence of the individual towards achieving goals and hence entrepreneurial alertness worked though perceived behavioural control leading to higher intention. Based on the findings of this study, strong support for the Theory of Planned Behaviour model can be claimed. The applicability of theory of planned behaviour to entrepreneurial studies have been widely tested and supported by most. This study confirms the applicability of theory of planned behaviour in the Malaysian sample. Generally, the results have been shown to be satisfactory with all hypothesis being supported with entrepreneurial alertness working through perceived behavioural control onto intention.

LIMITATIONS

As this study addresses the attitudes and intentions but not the actual behaviour, it obviously does not stand for the certainty of the behaviour but is only an intention. In addition, as the study was designed with self-reporting method, there is a concern that it is open to self-report biases especially on the perceived behavioural control construct as respondents may overstate their ability in achieving their goals. One limitation of the study may due to the nature of generalizability. Hence, further studies have to be conducted to verify on the generalizability of this finding in other locations and samples.

SUGGESTIONS

Based on this study, some of the initial findings suggests the transmission of parental values and beliefs onto the children in their development in congruence with efficacy belief that shape entrepreneurial intention. Further studies are to be carried out to explore how prior family business background specifically affects the intention. Next, this study also found a significant effect of entrepreneurial alertness on intention through perceived behavioural control. This finding has implication for emerging studies on entrepreneurial alertness where traditionally, the construct of alertness have been applied mostly in the studies of opportunity recognition. With the introduction of alertness into this study, it is an attempt to present the schema model to the entrepreneurial intention studies.

IMPLICATIONS

The theoretical implication of the study relates to evidence that shows the consistency of the theory of planned behaviour model in explaining entrepreneurial intention in various contexts. This suggests that theory of planned behaviour is useful not only to predict entrepreneurial intention but perhaps can be applied to other entrepreneurship studies such as intention to growth and intention to innovate.

Policy makers have attempted to boost the entrepreneurial rate in hope of further boosting the economy. It should be emphasised that such initiatives will only affect entrepreneurial rate if it affects the self-efficacy, attitude and social norm of the young people in starting their own new ventures. As this study found perceived behavioural control to be the strongest predictor of intention, policy makers are advised to develop strategies and to promote entrepreneurship education at all levels of schools. One contribution which

this study made is the inclusion of students who are considering the future career choice at a pivotal moment in life. Particularly, these young adults with family business background. Previously, family business research has concentrated on business succession and the challenges of it.

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