A STUDY ON ENTREPRENEURSHIP INCLINATION OF UNDERGRADUATE STUDENTS: A SPECIAL REFERENCE TO INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

ABSTRACT

The Malaysian government has taken great efforts to transform the country's economy into a knowledge-based economy and entrepreneurship has been identified as one of the key elements to the development of the knowledge economy. Many grants and incentives have been allocated by the government to propagate the importance of graduates to become entrepreneurs and less dependent on employers. This paper studies the inclination of students from five faculties, at International Islamic University Malaysia (IIUM) namely Laws, Engineering, Architecture, Pharmacy and Medicine on entrepreneurship. A quantitative research methodology is adopted to identify the level of interest and willingness of the students to learn entrepreneurial skills and to be involved in business once they graduate.

The result shows that there is no significant difference in entrepreneurial intention among the students in these professional programs. The outcome of regression analyses identified four factors that contribute towards entrepreneurial intention, namely; attitude, subjective norms, Faculty and its courses influence, and entrepreneurship learning propensity. Non-business students at IIUM perceived positive attitude towards achievement, risk, and independence as vital factors that lead them to choose entrepreneurship as their career path.

Keyword: Entrepreneurship, Entrepreneurial Intention, Professional Program

INTRODUCTION

Entrepreneurship stimulates the economic development through the formation of new ventures (Liñán, Rodriguez-Cohard, and Rueda-Cantuche, 2005) which enable more job opportunities to be created. As a result, entrepreneurship helps to improve economic efficiencies as well as promotes market innovation (Refaat, 2009). Globalization has intensified the economic competitiveness among countries and slowly transforms the nation towards knowledge economy (Zakaria, Yusoff, and Madun, 2011). The transformation to knowledge economy is in need for Higher Education Institutions (HEIs) to propagate the entrepreneurship education for the development of entrepreneurial attitudes and skills among youths (Keat, Selvarajah, and Meyer, 2011; Zakaria, et al., 2011). The study by Chan, Selvadurai, and Hamid, (2009) found that the Malaysian youths who choose entrepreneurial path are inclined to survive from unemployment during the economic crisis.

In Malaysia, although there are various entrepreneurship programmes designed by the Ministry of Higher Education (MOHE) to encourage the participation of students in entrepreneurship, yet in 2008, only about 10,000 graduates out of 874,100 were reported to have annually joined the programmes (Yasin, Mahmood, and Jaafar, 2011). Various studies have been

conducted to identify the factors that influence the inclination of students towards entrepreneurship. Intention is found to be the best predictor of entrepreneurial behavior. It helps researchers predict the attitude of a person's action upon a specific behavior like starting a business (Ajzen, 1991; Bagozzi, Baumgartner, and Yi, 1989; N. F. Krueger, Reilly, and Carsrud, 2000). This is due to the fact that intention 'capture the motivational factors that influence a behavior' (Ajzen, 1991, p.181). In fact, only with intention, will behavior be influenced by attitude (Bagozzi, et al., 1989). In other words, the more a person wants to do something, the more effort and willingness will be channeled towards the intended behavior.

Besides intention, non-motivational elements such as opportunities and resources (e.g., money, time, skills, etc) are also claimed to enable a person to successfully execute a behavior (Ajzen, 1991; Refaat, 2009). Moreover, the propensity to engage in entrepreneurship may also due to the excitement from working in a risky job and the ability to have an authority over decision making (Refaat, 2009). Therefore, given various factors that could influence the entrepreneurial intention, this paper serves to identify the factors that may influence the inclination of law students in IIUM towards entrepreneurship as well as their willingness to learn entrepreneurial skills by applying the Theory of Planned Behavior (TPB) model.

LITERATURE REVIEW

Entrepreneurship has changed the economic landscape from agriculture based economy to industrial based economy and now moving into technology based economy. During the Industrial Revolution in England around the 1970's, an entrepreneur is one who acts as the risk taker, opportunist, and innovator that transforms resources into goods and services (Kuratko, 2009). Other characteristics that signify the notion of 'entrepreneurship' are creativity, self-determination, sound judgments in decision making as well as in organizing resources (Teixeira, 2008). Teixira (2008) in her article, 'Entrepreneurial potential in chemistry and pharmacy: Results from a large survey' has identified potential entrepreneur as a person who develops and does business for profit and growth. According to Muofhe and du Toit (2011), entrepreneurship is a process of engaging and exploiting opportunities. Therefore, it can be concluded that entrepreneurship is about innovation and value-creation

Cunningham and Lischeron (1991) have a more structured view on what identifies an entrepreneur. The definition of entrepreneur has been classified into six major schools of thought as listed below:

1) The 'great person school' view → an entrepreneur is a person who inherently possesses characteristics of intuition, vigor, energy, persistence, and self-esteem.

2) The 'classical school' → an entrepreneur is identified with high level of innovation, creativity, and discovery.

3) The ‘management school’ → an entrepreneur is the organizer, owner, manager, and the one who is willing to accept risk.

4) The leadership school views → an entrepreneur is deemed as a motivator, director, and a leader. He/she have flexible leadership style.

5) The intrapreneurship school → an entrepreneur that has skills in recognizing opportunities to create, market, and expand business within the complex organization.

6) Psychological characteristics school of entrepreneurship → an entrepreneur is the one who possesses entrepreneurial values, attitudes, and needs (need for achievement). Among the main psychological features reported in literature review are locus of control, need for achievement, tolerance of ambiguity, propensity to take risk, innovativeness, and self-confidence. (Koh, 1996)

In this study, theory of planned behavior (TPB) was applied to measure entrepreneurial intention as it has been demonstrated in past studies as a practical and consistent model used in a wide range of discipline such as; sociology, psychology, information technology, health, and many more (A. H. M. Ariff, Bidin, Sharif, and Ahmad, 2010; Autio, et al., 2001; N. F. Krueger, et al., 2000; Souitaris, Zerbinati, and Al-Laham, 2007). Autio et al. (2001) acknowledged the appropriate usage of TPB model in entrepreneurial behavior study as it includes the consideration of situation where a person has imperfect ‘volitional control’ and imperfect control over the process of new business venture. More than that, the compatibility of this theory has been proven when used in measuring the factors that influence various perspectives of entrepreneurial intention (Armitage & Conner, 2001; Ferreira, Raposo, Rodrigues, Dinis, and Paco, 2012; Haus, Steinmetz, Isodor, and Kabst, 2013; J. N. F. Krueger and Carsrud, 1993).

Theory of planned behavior (TPB) was invented by Icek Ajzen in 1991. This theory was inspired by the theory of reasoned action (Ajzen, 1991). Entrepreneurial intent was described by the TPB model using three underlying factors; attitude towards behavior, subjective norm, and perceived behavioral control. Unlike the theory of reasoned action, the TPB model take into consideration opportunities and/or resources such as skills, time and money to engage in any specific action which were viewed as the ‘individual’s control over the behavior’ or ‘perceived behavioral control’ (Nishimura and Tristán, 2011). The combination of intention and opportunities as well as resources would enable an individual to perform the intended behaviour successfully (Nishimura and Tristán, 2011).

The theory suggests that intention is a motivational factor that could help researchers to predict the attitude of a person to act upon specific behavior like starting a business (Ajzen, 1991; Bagozzi, et al., 1989; N. F. Krueger, et al., 2000). Intention will indicate how strong the willingness of a person to perform the behavior (Ajzen, 1991). Fitzsimmons & Douglas (2011) contended that, entrepreneurial intention refers to a person’s intention of launching a business in the future. For Liñán, Rodriguez-Cohard, & Rueda-Cantuche (2005), entrepreneurial intention

could also include the entrepreneurial behaviour that is attempted by an individual to perform it. In the TPB model, Ajzen(1991) have suggested three factors that help to predict intention with high level of accuracy, namely; attitudes toward the behaviour, subjective norms, and perceived behavioral control.

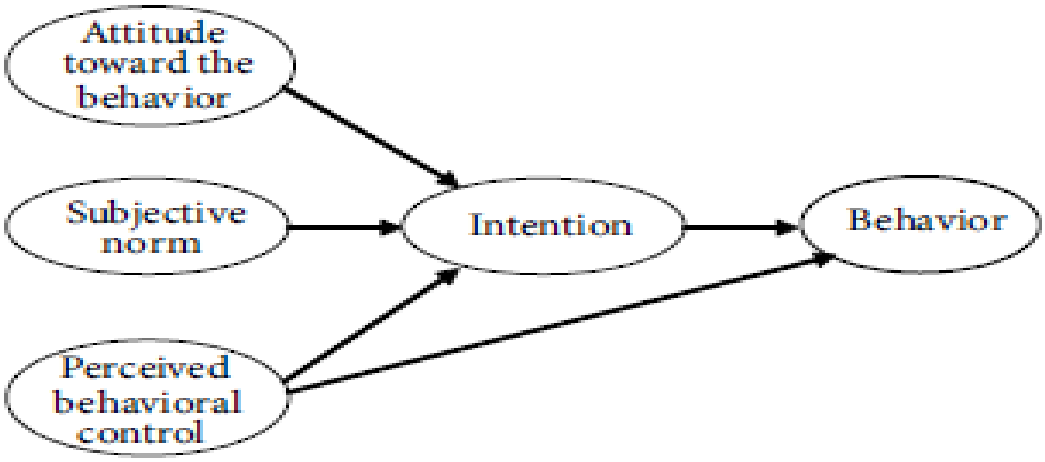

Figure 1: Theory of Planned Behavior

One way to look at the tendency of a person to engage in entrepreneurship is through measuring his/her intention (Liñán, et al., 2005). Intention refers to a state of mind in which a person gathers all their interest, attention, experience, and action towards specific goal, or method of behaving or towards a specific object (Boyd and Vozikis, 1994). On the other hand, the attitudes of an individual will determine his/her behavior as it will drive the intention to execute an action (Ajzen, 1991; Liñán, et al., 2005). In the TPB model, attitude was measured based on three elements; attitude towards achievement, risk, and independence. Besides attitude, the subjective norms also contribute towards the entrepreneurship inclination. Subjective norms refer to the 'perceptions of what important people in respondents' lives think about performing a particular behavior' (N. F. Krueger, et al., 2000, p. 417). It measures how the influence of family members, friends, colleagues, mentor who the respondents consider as "role model" affect the respondent's decision making (N. F. Krueger, et al., 2000). Ajzen (1991) asserted that behavioral achievement relies on two things; the intention and the ability to perform the behavior (perceived behavioral control). Among the other variables that may affect the entrepreneurial intention are; entrepreneurship learning propensity, gender, family business background, working experience, involvement in entrepreneurial programs, etc.

METHODOLOGY

In this study, a descriptive research design was used to gather data from 123 students in professional programs in International Islamic University Malaysia (IIUM). They are the representatives from Ahmad Ibrahim Kuliyyah of Laws (AIKOL), Kulliyyah of Engineering (ENGIN), Kulliyyah of Architecture and Environmental Design (AED), Kulliyyah of Pharmacy

(PHARMACY), and Kulliyyah of Medicine (MEDIC). The sample represented about 4% (n=123) of total population of 3086 students in Semester 1 2012/13. The highest population came from Engineering students (N=1442, 47%), followed by Law (N=645, 21%), Architecture (N=555, 18%), Medicine (N=237, 8%) and Pharmacy (N=207, 7%). The survey was conducted from December 2012 to February 2013 using systematic random sampling. The summary of demographic characteristics of IIUM students can be viewed in the table 1 below.

{Insert Table 1 here}

The data was analyzed using SPSS version 18.0. A reliability test was conducted to indicate the internal consistency of each item in the questionnaire. Based on the reliability test, it was found that the Cronbach's alpha coefficient for the items is within the range of 0.767 to 0.960. The inclination of non-business students was examined using Independent t-test. From this test, the entrepreneurial intention of non-business students from five different Kulliyyah were tested and evaluated. Besides t-test, in order to explore the relationship of variables, correlation coefficient and multiple regression analysis were used to analyze the data. The purpose of correlation coefficient is to identify the strength and direction of the relationship between the two variables (Pallant, 2005). Other than that, multiple regression analysis was applied to explore the marginal influence on dependent variable (entrepreneurial intention, EI) by several independent variables. The independent variables consist of attitude (ATT), subjective norms (SN), perceived behavioral control (PB), Kulliyyah and its courses influence (KCI), and entrepreneurship learning propensity (ELP). Multiple regression analysis identifies how much of each independent variable contribute towards explaining the variance of the dependent variable relatively (Pallant, 2005). Besides, it helped the researcher to assess the significance of individual independent variables in explaining the dependent variable (Pallant, 2005). The entrepreneurial inclination has been analyzed using Multiple regression analysis by various researchers, to name a few; Davidsson (1995), Krueger et al.(2000), Gelderen et al. (2008), Ariff (2010), Goksel (2011).

The Multiple Regression Analysis was applied to evaluate the relationship between entrepreneurial intention and five independent variables; attitude (ATT), subjective norms (SN), perceived behavioral control (PBC), Kulliyyah and course influence (KCI), and entrepreneurship learning propensity (ELP). Prior to the regression analysis, all the components of independent variables were tested for possible multicollinearity, outliers, normality, and homoscedasticity problems, yet no serious problem were detected.

The total sample of study is 123, yet in the analysis, the sample varies from 117 to 121 in the multiple regression output due to the adoption of 'exclude cases listwise' option in running the SPSS. According to Pallant (2005), the 'exclude cases listwise' option only includes cases (sample) if all the data in the chosen variables are complete. The case (sample) which has missing information even for single data will totally be excluded from the analyses (Pallant, 2005).

The following model shows the regression equation for all possible explanatory variables for entrepreneurial intention. The selection of variables is based on backward elimination method. The details of the variable in the regression equation can be found in table 4 below.

$$EI = \beta_0 + \beta_1 ATT + \beta_2 SN + \beta_3 PBC + \beta_4 KCI + \beta_5 ELP + \beta_6 GENDER + \beta_7 AGE + \beta_8 KULL + \beta_9 FBB + \beta_{10} EE + \beta_{11} EPI + \varepsilon$$

Initially, the multiple regression analyses were performed to all possible explanatory variables for entrepreneurial intention as shown in the first model. The maximum model generated 0.675 adjusted R squared, yet the regression coefficient for all variables were found to be insignificant except for the four variables of ATT, SN, KCI, and ELP. Then, due to its insignificance and the sign problem, the variables are removed one by one and retested again.

Based on the seven models below, the third model was chosen to be the best. This is due to the fact that the third model have the highest adjusted R squared (0.661). This suggests that, the model explains 66.1 percent of the variance in entrepreneurial intention. Moreover, all variables in the third model were found significant in explaining the entrepreneurial intention. Even though the PBC is an important variable in the theory of planned behavior and which was found significant in the past studies (Ajzen, 1991; Autio, et al., 2001; Haus, et al., 2013; Liñán, et al., 2005), yet it has to be omitted from this study as the result shows that it is not significant and have a sign problem. Thus, by referring to table 2, it shows that the third model is the best among the seven models.

{Insert Table 2 here}

Based on the third model in table 2, it shows that four variables; attitude ($r=0.750$, $\rho<0.0005$), subjective norms ($r=0.601$, $\rho<0.0005$), Kulliyyah and its courses influence ($r=0.158$, $\rho<0.05$), and entrepreneurship learning propensity($r= 0.744$, $\rho<0.0005$) are significantly correlated with entrepreneurial intention. The results suggest that the entrepreneurial intention of non-business students is higher for those who have positive attitude towards achievement, risk, and independence (H2). Moreover, the more students perceive the role models such as family, friends, and society as supportive, the more inclined they are to be an entrepreneur after they have graduated (H3). In addition, the higher the inclination of non-business students to learn entrepreneurship, the higher their entrepreneurial intention to be self employed (H6).

While the three variables above confirm the expected sign of the hypotheses, the KCI results revealed the opposite. It shows that the Kulliyyah of Law, Engineering, Architecture, Pharmacy, and Medicine as well as the courses of these Kulliyyah have negative influence on entrepreneurial intention of non-business students. This is rational as these Kulliyyah may focus only to equip the students with the necessary skills that are related to its field per se.

Among the four significant variables, the strongest effect is attitude. Attitudes play a major role in determining the inclination of non-business students in IIUM towards

entrepreneurship. Unlike the past studies, the perceived behavioral control have no significant influence in entrepreneurial intention of non-business IIUM students.

CONCLUSION

In this paper, the inclination of IIUM students in professional programs towards entrepreneurship was examined. The result shows that there is no significant difference in entrepreneurial intention among the students in Faculty of Laws, Engineering, Architecture, Pharmacy and Medicine. The outcome of regression analyses identified four factors that contribute towards entrepreneurial intention, namely; attitude, subjective norms, Kulliyyah and its courses influence, and entrepreneurship learning propensity. Non-business students in IIUM perceived that positive attitude towards achievement, risk, and independence as vital factor that leads them to choose entrepreneurship as career path. The students are found to be more entrepreneurially inclined when they have the support from family, friends, and society. Moreover, the students are found to be more inclined towards becoming an entrepreneur when they have the interest to learn entrepreneurship. In terms of the contribution of Kulliyyah towards entrepreneurship, the study shows that the Kulliyyah as well as the courses of these Kulliyyah have negative influence on entrepreneurial intention of non-business students. It indicates that subjects or courses in non-business Kulliyyah as well as the Kulliyyah administrative contribute towards the lower inclination of non-business students towards entrepreneurship.

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Table 1: Profile of Respondents

No.	Item	Characteristics	Sample	Population
1	Gender	Male	60 (49%)	1621 (53%)
		Female	63 (51%)	1465 (47%)
2	Nationality	Local	118 (96%)	2848 (92%)
		International	5 (4%)	238 (8%)
		Missing	-	
3	Level of study	Third year	55 (45%)	1403 (45%)
		Fourth year	61 (50%)	1571 (51%)
		Fifth year	5 (4%)	112 (4%)
		Missing	2 (2%)	-
4	Kulliyyah	AIKOL	36 (29%)	645 (21%)
		ENGIN	54 (44%)	1442 (47%)
		AED	17 (14%)	555 (18%)
		PHARMACY	9 (7%)	207 (7%)
		MEDIC	7 (6%)	237 (8%)
		Missing	-	-
5	Marital status	Single	113 (92%)	
		Married	10 (8%)	
		Missing	-	
6	Family business background	Involved	73 (59%)	
		Not Involved	50 (41%)	
		Missing	-	
7	Entrepreneurial experience(s)	Yes	69 (56%)	
		No	54 (44%)	
		Missing	-	

8	Involvement in entrepreneurship programmes	Involved	35 (28.5%)
		Not Involved	88 (71.5%)
		Missing	-

Table 2: Multiple regression output

Dependent Variable: Entrepreneurial Intention							
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**
Constant	0.691	0.596	0.598	1.180	0.257	0.206	0.874
ATT	0.521***	0.497***	0.476***	0.662***	0.459***	0.398***	0.678***
SN	0.141*	0.148**	0.139**	0.228***	0.095	0.062	0.191***
PBC	-0.002	-0.045			-0.110		-0.132*
KCI	-0.205***	-0.198***	-0.210***	-0.251***			
ELP	0.376***	0.372***	0.373***		0.435***	0.447***	
GENDER	-0.071						
AGE	-0.008						
KULL	-0.022						
FBB	0.016						
EE	-0.108						
EPI	0.082						
R^2 adjusted	0.657	0.659	0.661	0.623	0.632	0.628	0.572
N	117	118	118	120	119	119	121

Notes: ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

ATT=Attitude towards entrepreneurship; SN=Subjective norms; PBC=Perceived behavioral control; KCI=Kulliyyah and Courses influence; ELP=Entrepreneurship learning propensity; GENDER=gender; AGE=age; KULL=Kulliyyah; FBB=family business background; EE=entrepreneurial experience; EPI=entrepreneurship programs involvement.