

**PERSONAL ATTRIBUTES, FAMILY INFLUENCES,
ENTREPRENEURSHIP EDUCATION AND ENTREPRENEURSHIP
INCLINATION AMONG UNIVERSITY STUDENTS**

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This paper investigates the factors associated with entrepreneurial inclination among undergraduate students in Malaysian universities. Among others, the influences of personal attributes, family and peer, and entrepreneurship education on the students' inclination towards entrepreneurship are examined. Self-administered questionnaires were distributed to accounting students at three public universities in Klang Valley. About 178 questionnaires were completed and were found to be usable for the purpose of the study. Hierarchical multiple regression analysis and t-tests were employed to analyse the data. Generally, the results of the study indicate that the respondents have a positive inclination towards entrepreneurship. The hierarchical regression results show that personal characteristics, family influence, entrepreneurial education have positive and significant influence on the students' intention to be entrepreneurs when the variables are added into the equation. However, gender is not an important factor in influencing the students to choose entrepreneurship as their future career pathway.

Keywords: entrepreneur, entrepreneurship education, role of university, family influence, hierarchical regression

INTRODUCTION

Entrepreneurship is a vital cog in the economic performance of nations around the globe (Arifatul Husna et al., 2010) as it has the capacity to create adequate jobs opportunities that reduce employment rates (Kulasagaran, 2010). Entrepreneurship activities also contribute towards the revitalisation of the economy of developed countries and act as the engine of economic progress and job creation in developing countries (Yusof, Sandhu and Jain, 2007).

Quite naturally, then Malaysia, as a fast developing country in this region has placed importance on entrepreneurship and identified it as one of the long term strategies that is capable of reducing the rate of unemployment (Mazura and Norasmah, 2011). Employment statistics indicated that new graduates were

facing problems to secure employment despite having the necessary qualifications (Puspadevi, 2011; *MITI Weekly Bulletin*, 2013). One reason attributed to this was the fact that these graduates were looking for employment opportunities from the government and private sectors (Yusof, Sandhu and Jain, 2007).

Based on this observation, the government, thus, decided to give attention to entrepreneurial programs in the Ninth Malaysian Plan (2006–2010). However, the programs did not yield the desired results and unemployment rates were still high. For instance, statistics from 2009 indicated that 30% of 170,000 graduates in the previous three years were still unemployed (News Image Bank [NiB], 2009). Puspadevi's study in 2011 also found that there was an increase of jobless graduates from 65,500 to 71,600 in the first quarter of 2011. Keat, Selvarajah and Meyer (2011) argue that in today's competitive job environment, job opportunities are inevitably limited and thus one must compete to secure a job as supply of jobs are limited. Thus, entrepreneurship becomes an important avenue to create more jobs in the market.

In line with the aim of creating more entrepreneurs, the government has initiated various measures to encourage Malaysians to get involved in entrepreneurship. In its 2012 annual budget, the government allocated RM100 millions for soft loans, to help entrepreneurs purchase machines, raw materials and other basic materials to start businesses. In addition, entrepreneurship programs are also organised by the Ministry of Higher Education to expose our youth and graduates to the concept of entrepreneurship, to nurture their awareness and interests and to help them to discover opportunities in the business world. The Ministry of Education has also taken initiatives to encourage Malaysian students and to get involved in entrepreneurship activities. Among others, entrepreneurship subjects and courses related to entrepreneurship have been introduced in primary and secondary schools, as well as at university level. At universities, undergraduates are exposed to an entrepreneurship courses that provides them with the opportunity to plan and prepare budgets, organise business activities, manage problems during the execution of the activities and revise the plans if necessary. This course is introduced in all public universities in Malaysia, and most of the universities make it compulsory for the students to enrol for the course before they graduate.

Despite all these initiatives, it is noted that Malaysian youths have not really picked up the culture of entrepreneurship and thus more needs to be done. Statistics show that only 2.4% of Malaysian graduates become entrepreneurs upon graduation (Azlan, 2009). The number of graduates who attend entrepreneurship programs organised by various ministries is also not very encouraging. It was reported that, out of 170,000 graduates produced yearly, only about 10,000 graduates attend entrepreneurship-related programs organised by the Ministry of Higher Education each year (News Image Bank [NiB], 2009). This indicates that there is a gap between the government's expectation and the

actual level of graduates' involvement in entrepreneurship. Hence, this study is conducted to investigate Malaysian graduates' perspectives on entrepreneurship activities and examine the factors that influence their intention to be entrepreneurs. This is based on the claim that entrepreneurship intention can be used to predict their future involvement to venture into business, which will provide invaluable information for the government to draw out new guidelines and start new initiatives.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The term entrepreneurship has different kinds of interpretations in existing literature as different scholars have defined the term based on their own contexts and perceptions. In Chell, Haworth and Brearley (1991) there is no universally accepted definition for entrepreneurship, which has originated from a French verb that is pronounced as "entreprendre" (Kirby, 2004).

Some of the more recent definitions posit that entrepreneurship refers to one's own business and involves broad concepts such as work attitude that emphasises self-reliance, initiative, innovativeness and risk-taking (Bruyat and Julien, 2001). Entrepreneurship also leads to the enhancement of skills to serve consumers and is viewed as a process of innovation, which creates new ventures (Kuratko and Hodgetts, 2004). Timmons (1989) defines entrepreneurship as the ability to create and build something from practically nothing, which includes initiating, doing, achieving and building an enterprise.

As discussed in the previous section, entrepreneurship is considered as the main driver of economic growth in most countries (Muhammad, Akhbar and Dalzied, 2011) and is a permanent concern in most countries since new and small firms are the major contributors to new jobs in the country (Mazura and Norasmah, 2011). Thus, a study on the inclination of students' intention to be entrepreneurs is very important to promote entrepreneurship at the national level, especially to encourage fresh graduates and youth to get involved in this field and make it their career.

Previous studies that had examined students' intention to be entrepreneurs mainly focused on demographic factors such as age, gender, education level and family background (Keat, Selvarajah and Meyer, 2011). Others examined students' intention to become entrepreneurs in relation to perceived behaviour control, perceived support and perceived barriers (Ahmad Yasruddin, Nik Abdul Aziz and Nik Azyyati, 2011), theory of planned behaviour and entrepreneurship (Gelderen et al., 2008; Arifatul Husna et al., 2010), importance of entrepreneurship education (Mazura and Norasmah, 2011; Kirby, 2004), and entrepreneurship barriers and entrepreneurship inclination (Sandhu, Sidique and Riaz, 2011).

Based on the findings of previous studies that claim demographic characteristics (such as gender, perceived skills and ability and personal learning style) and family background to be important variables that influence the students' inclination towards entrepreneurship (Keat, Selvarajah and Meyer, 2011), this study will also use these variables.

Demographic and Personal Attributes

A study by Aziah, Abdul Ghani and Ahmad Tajuddin (2010) indicates that there is a significant difference between a male and female undergraduates' perception towards various aspects of entrepreneurship and they find that the mean value of female's perception is higher than that of males. However, men are said to have more self-confidence in business than women (Wilson, Marlino and Kickul, 2007; Maimunah, 1996). The main difference between male and female involvement in entrepreneurship can be noted in terms of entrepreneurial self-efficacy and managerial skills (Wilson, Marlino and Kickul, 2007). There have also been claims that females show more interest in entrepreneurship education to enhance their skills, face challenges in their careers and build networks with local businessmen compared to males (Aziah, Abdul Ghani and Ahmad Tajuddin, 2010).

On the whole, studies indicate that the number of women who own businesses is increasing rapidly in Africa, Asia, Eastern Europe and Latin America (Jalbert, 2000) and the majority of the 6.7 million privately held companies in the USA are women owned businesses (Wilson, Marlino and Kickul, 2007). In Malaysia, there has also been an increase of women entrepreneurs in the past two decades due to economic recession and increased rate of unemployment in the mid-1980s (Maimunah, 1996). Thus, it is hypothesised that:

H₁: Gender has positive influence on students' entrepreneurial inclination

Personal skills, attributes and behaviour may also influence and determine whether one can become a successful entrepreneur in the future (Kirby, 2004). High self-confidence and good personal skills are among the important factors that influence success in entrepreneurship (Hamidi, Wennberg and Berglund, 2008). Kolveried (1996) notes that a high level of self-confidence is positively related to a higher intention to become self-employed.

In terms of behavioural traits, students who have participated in learning networks are better aware of their abilities to exploit business opportunities (Bergh, Thorgren and Wincent, 2011) and thus, are expected to be more interested in business. Besides, management and technology skills which can be learnt in entrepreneurship courses have also influenced students' intention to

choose entrepreneurship as future careers (Love, Lim and Akehurst, 2006). Thus, it is hypothesised that:

H₂: Students' perceived personal skills, attributes and abilities have a positive influence on students' entrepreneurial inclination.

Learners who are independent are also known to have shown a higher intention to become entrepreneurs because they are better able to recognise opportunities to start businesses, to venture in new projects and obtain capital through debts and other financing (Kirby, 2004). In addition, it has been noted that students who like to work independently have a greater inclination to become entrepreneurs as entrepreneurship activities requires problem-solving in real world situations that these students are capable of solving (Hynes, Costin Birdthistle, 2011).

Furthermore, an independent learning approach would provide the guidance for business planning, development and market identification to set up or run a business (Temtime, Chinyoka and Shunda, 2004). Consequently, students' intention to become entrepreneurs is greater because it provides exposure in marketing, finance and human resource management and a greater understanding of business management (Colff, 2004). Thus, it is hypothesised that:

H₃: Students' personal independent learning approaches have a positive influence on students' entrepreneurial inclination.

Family and Peers' Influence and Image of Entrepreneurs

There is wide documentation that family businesses normally begin from an individual member of the family who develops the business and later involves the other family members (Davis, 1996). Thus, family influence is an important factor that provides the background experience and motivation for students to lead entrepreneurial activities (Bagheri and Pihie, 2010). This claim is supported by Anderson, Jack and Drakopoulou (2005) who agrees that social relations and networks play an important role to develop good entrepreneurs. In a related study, Robson and Bennet (2000) posit that families and friends act as the preferred source of advice for small-medium enterprise owners. Basically, new graduate entrepreneurs rely on informal sources such as family members, colleagues and social networks as well as universities (Greene and Saridakis, 2007) for support and guidance in business.

Furthermore, family or peer businesses are also known to inspire fresh graduates by providing a supportive environment which gives them information and resources to start a business after they graduate (Bagheri and Pihie, 2010).

For instance, parents play an important role in developing students' entrepreneurial self-efficacy by encouraging them to get involved in businesses which develops their entrepreneurial intention (Bagheri and Pihie, 2010). Similarly, friends who are involved in entrepreneurship also play important roles and act as role models (Keat, Selvarajah and Meyer, 2011) for others who need advice, and even capital to start businesses (Schaper and Volery, 2004). Therefore, peer influence may also affect the graduates' decision to become entrepreneurs (Nanda and Sorensen, 2006). Thus, it is hypothesised that:

H₄: Family involvements in business have a positive influence on students' entrepreneurial inclination.

H₅: Family and peers have a positive influence on students' entrepreneurial inclination.

In addition, the image of entrepreneurship can also influence students' inclination towards entrepreneurship (Bergh, Thorgren and Wincent, 2011). A success story of an entrepreneur would be able to motivate and increase the intention of a student to become an entrepreneur (Love, Lim and Akehurst, 2006). Such successful stories will encourage students to have positive views about entrepreneurship and will raise their desire to become role models for others in the future (Sriram, Mersha and Herron, 2007). Thus, it is hypothesised that:

H₆: Image of successful entrepreneurs has a positive influence on students' entrepreneurial inclination.

Entrepreneurship Education and University's Role

Prior studies indicate that entrepreneurship education may help graduates to be successful entrepreneurs (Pickernell et al., 2011). Entrepreneurship education can encourage students to set up their own businesses (Kirby, 2004), by providing them with business management skills to integrate experience, skills and knowledge to start new ventures (Mazura and Norasmah, 2011). Entrepreneurship courses also raise awareness by providing students with general information about entrepreneurship that makes students to think of entrepreneurship as a career (Kirby, 2004). The programs usually provide opportunities for students to learn from real life practical experiences (Hynes, Costin and Birdthistle, 2011) and inspire the students to change their mind sets (Hamidi, Wennberg and Berglund, 2008). They are also known to motivate students to assess the possibilities of starting new businesses (Delmar and Davidson, 2000) and thus, provide them with a higher intention to start their own business in the future (Hamidi, Wennberg and Berglund, 2008).

Thus, it can be seen that the main focus of entrepreneurship education is to provide a basic knowledge of entrepreneurship (Greene and Saridakis, 2007). Students gain new and much-needed skills to interact with the marketplace as they are provided a chance to integrate creativity and skills during their course (Hamidi, Wennberg and Berglund, 2008). Hence, these programs should increase their interest to become entrepreneurs (Mazura and Norasmah, 2011) because it increases their business knowledge such as human resource management, business failure signs and causes, general management, advantage on business planning and innovative problem solving (Love, Lim and Akehurst, 2006). In addition, they also encourage understanding and skills development such as strategy development and implementation, and managerial decision making (Hynes, Costin and Birdthistle, 2011). Thus, it is hypothesised that:

H₇: Entrepreneurship curriculum and contents have positive influence on students' entrepreneurial inclination.

It is further claimed that schools and universities should play an active role in promoting entrepreneurship education since they are the most ideal setting to shape an entrepreneurial culture among students (Mahlberg, 1996). Thus, universities should take the lead in promoting entrepreneurship when students are taught the way to think and behave like entrepreneurs (Bygrave, 2004). Universities must create an entrepreneurially supportive environment, which could encourage entrepreneurial activities to be carried out among university students (Roffe, 1999). This is supported by Gnyawali and Fogel (1994) who state that universities should contribute in nurturing an entrepreneurial environment as university teaching environments are the most influential factors that affect students' perceptions towards entrepreneurial career (Autio et al., 1997). Universities must present a positive image on entrepreneurship as a career option to draw students' attention to entrepreneurship courses (Keat, Selvarajah and Meyer, 2011). Although individuals may have the relevant entrepreneurial knowledge and skills, they might not venture into the field if universities do not promote the positive image of entrepreneurship (Alberti and Sciascia, 2004). Therefore, universities must play an important role in influencing students to get involved in entrepreneurship (Keat, Selvarajah and Meyer, 2011). Thus, it is hypothesised that:

H₈: Entrepreneurially supportive environments in the university have a positive influence on students' entrepreneurial inclination.

RESEARCH METHOD

This study uses a quantitative approach rather than qualitative approach because it attempts to seek empirical support for the hypotheses which are developed from previous literature (Zikmund et al., 2010). The data collected and the results from the study will predict the relationship between the variables that are hypothesised (Higgins, 2009).

Data used in this study were collected using primary source (questionnaire). The questionnaire used in this research was adapted from earlier studies, by Keat, Selvarajah and Meyer (2011), Arifatul Husna et al. (2010), Aziah, Abdul Ghani and Ahmad Tajuddin (2010) and Sandhu, Sidique and Riaz (2011). Questionnaires were distributed to accounting students in three public universities in the Klang Valley. The respondents are accounting students from three public universities in Malaysia, namely, Universiti Putra Malaysia, Universiti Kebangsaan Malaysia and Universiti Malaya. The accounting students answering the questionnaire must be those who have taken the entrepreneurship course. About 600 questionnaires (200 to each university) were distributed to the respondents in all the three universities. However, only 178 questionnaires were returned and were used for the study. The questionnaire consists of three parts. Part A attempts to solicit the respondent's intention to be an entrepreneur, Part B tries to obtain information about the factors that influence the respondent's intention to be an entrepreneur, and Part C seeks information on the respondent's socio-demographic data.

The data were checked for reliability, validity, normality, and multicollinearity. Hierarchical multiple regression analysis and independent *t*-tests were used to analyse the data.

RESULTS AND DISCUSSIONS

Profile of Respondents

Table 1 presents the demographic characteristics of the respondents in the study. Out of 178 respondents, about 32% of the respondents are males and 68% are females. These statistics reflect the fact that there are more female students in the three universities compared to males. As most of the students enrol for the entrepreneurship course at the later stage of their accounting program, the majority of the respondents (76%) are between the ages of 23–25 years old. In terms of race, 44% of the respondents are Malays, 52% are Chinese and 4% are Indians.

About 44% of the respondents are accounting students from Universiti Putra Malaysia, close to 28% from Universiti Kebangsaan Malaysia and about 29% from Universiti Malaya. All of them have taken entrepreneurship courses

and about 65% of them got A+, 26% obtained A–, 6% scored B+ and the balance got B. Close to majority (47%) of the respondents' family member(s) is (are) involved in businesses.

Table 1: Demographic characteristics

		N	Percentage %
Gender	Male	56	31.5
	Female	120	68.5
	Total	178	100
Age	21–22	39	21.9
	23–25	135	75.8
	Above 26	4	2.2
	Total	178	100
Race	Malay	79	44.4
	Chinese	92	51.7
	Indian	7	3.9
	Total	178	100
University	UPM	78	43.8
	UKM	49	27.5
	UM	51	28.7
	Total	178	100
Grade for entrepreneurship course	A+	115	64.6
	A–	47	26.4
	B+	10	5.6
	B	6	3.4
	Total	178	100
Family member(s) involve in business(es)?	Yes	84	47.2
	No	94	52.8
	Total	178	100

Table 2 shows the mean values and frequency values (in percentage) of the items that represent the entrepreneurship intention of the students. High mean values (>3.5) were obtained for the items indicate that majority of the respondents have high inclination to become entrepreneurs. The percentage of respondents who answered Strongly Agree (SA) and Agree (A) was also more than 55% for all the items and suggest that the respondents have a positive inclination towards entrepreneurship.

Table 2: Entrepreneurial inclination

Items	Mean	% SA and A
Seriously considered entrepreneurship as highly desirable career option	3.84	73.6
My vision is to become an entrepreneur	3.80	75.3
Have the planning to open a new business	3.75	69.6
Would like someday to start own business	3.92	76.9
Would like to start a business after 5 years of graduation	3.54	55.1

Reliability and Validity Tests

The reliability level of the data indicates that the Cronbach's alpha is 0.75, and acceptable as it is more than the threshold value of 0.70 (Pallant, 2001: 85). The value of Kaiser-Meyer-Olkin for the data is 0.74 which indicates that factor analysis model is appropriate as the value is greater than 0.5 (Field, 2005).

Normality and Multicollinearity

Table 3 reports the descriptive statistics of the variables used in the study. Overall, the data appear to be normally distributed as the skewness and kurtosis values are between ± 3.00 (Kline, 2005: 50).

Table 3: Descriptive statistics

	Minimum	Maximum	Mean	Std. deviation	Skewness	Kurtosis
ISTE	1.57	5.00	3.7087	.63514	-.494	.759
GEN	0	1	.69	.466	-.805	-1.367
PSA	1.75	5.00	3.8399	.61150	-.614	.849
PILA	2.18	4.73	3.4275	.43191	.111	.208
FIB	.00	1.00	.4719	.50062	.113	-2.010
FPI	1.78	4.67	3.4813	.54263	-.472	.395
IOE	2.43	5.00	3.8355	.45034	-.097	.897
ECC	2.71	4.94	3.8761	.44796	-.249	-.228
UNIR	1.50	5.00	3.5609	.54853	-.587	1.442

Variable definition:

ISTE = Student's intention to be an entrepreneur; GEN = Gender (Dummy); PSA= Perceived skill and ability; PILA = Personal Independent learning Approach; FIB = Family involvement in business (dummy); FPI = Family and peers' influence; IOE = Image of entrepreneur; ECC = Entrepreneurial curriculum and content; UNIR = University's role.

Table 4 presents the pairwise correlation coefficient of all the variables used in the study. The results indicate that there is no multicollinearity problem, as the correlations are below the threshold value of 0.8 (Gujarati, 2003: 359). Except for gender (GEN), the relationship between the dependent variable (ISTE) and the independent variables are significant. The personal attributes such as perceived personal skills, attributes and ability (PSA) and personal independent learning style (PILA) have positive inclination towards entrepreneurship. Family members' involvements in business and the good image of entrepreneurs also influence the students' to become entrepreneurs. Entrepreneurship education and the role of universities also appear to have a positive and significant relationship in influencing the students to become entrepreneurs.

Table 4: Correlation matrix

Variable	ISTE	GEN	PSA	PILA	FIB	FPI	IOE	ECC	UNIR
ISTE	1.00								
GEN	-.330	1.00							
PSA	.368***	.040	1.00						
PILA	.305***	-.043	.234**	1.00					
FIB	.181***	.059	.068	.197***	1.00				
FPI	.124*	-.004	.255**	.279***	.093*	1.00			
IOE	.413***	-.010	.269**	.287***	.085*	.249***	1.00		
ECC	.426***	-.080	.355**	.339***	.132**	-.166**	.436***	1.00	
UNIR	.337***	-.013	.470**	.281***	0.059	.325***	.307***	.321***	1.00

Notes: *** significant at 1% level; ** significant at 5% level; * significant at 10% level.

Variable definition:

ISTE = Student's intention to be an entrepreneur; GEN = Gender (Dummy); PSA= Perceived skill and ability; PILA = Personal Independent learning Approach; FIB = Family involvement in business (dummy); FPI = Family and peers' influence; IOE = Image of entrepreneur; ECC = Entrepreneurial curriculum and content; UNIR = University's role.

Hierarchical Multiple Regression Analysis

Table 5 presents the regression results of the study. Hierarchical multiple regressions are designed to test the hypotheses where three steps are involved. Demographic and personal attributes are controlled in the first step. The results in

Column 2 of Table 5 (Model 1) indicate that the value of the R-squared and adjusted R- Squared are 0.187 and 0.173 respectively with the F value of 13.380 ($p < 0.000$). After that in the second step, the family influences and image of entrepreneurs are included, and the results in Column 3 of Table 5 (Model 2) indicate a significant change in the R-squared value of 0.122, with the new R-squared and adjusted R- Squared of 0.309 and 0.285 respectively. These results indicate that family and peers as well as the image of entrepreneurs play a meaningful role in explaining the students' inclination towards entrepreneurship. In the last step, the effect of entrepreneurship education and the role of the university are examined. The results in Column 4 of Table 5 (Model 3) show a significant change of R-squared by 0.041, and report the R squared value and adjusted R-squared value of 0.350 and 0.319 respectively. These results appear to highlight the importance of entrepreneurship education and the role of the university to motivate and influence the students' intention to be entrepreneurs.

Gender (GEN) is one of the demographic and personal attribute that is examined in this study. In all the three models shown in Table 5, gender is not a significant factor in its relationship with students' intention to be entrepreneurs. Thus Hypothesis H₁ is not supported. The independent t-tests run to examine the relationship between gender and all the independent variables also indicate an insignificant relationship. The results appear to suggest that the gender of a Malaysian student is not an important factor to determine whether he or she would venture into a business.

Other variables that were examined are personal skills, attributes and ability (PSA) and personal independent learning approach (PILA). Both variables are highly significant in all the three models in Table 5. Thus Hypothesis H₂ and H₃ are supported. Personal skills and the ability of a student play a role in determining his/her success in business, and may influence him/her to start a business. The result indicates that the perceived skills and ability of the respondents is positively significant in influencing students' intention to be entrepreneurs. This finding is consistent with an earlier study by Arifatul Husna et al. (2010). Detail investigation of the data indicates that 82% of the respondents who want to start a business after graduating perceived that they have creativity skills to attract customers. And 72% of these students believe that they have the necessary social networking skills to help them start businesses.

Other important criteria that the respondents think as important are communication and problem solving skills. About 77% and 66% of those who want to start business after graduating think that their ability to solve problems and persuasion skills will help them in their business operations. In relation to personal independent learning approach, about 75% of the respondents prefer to pursue their own ideas while about 61% prefer to use their own independent learning approach in carrying out entrepreneurship activities.

Table 5: Results of hierarchical multiple regression

Variables	Model 1	Model 2	Model 3
INTERCEPT	1.326*** (3.273)	0.694 (1.520)	0.217 (0.458)
GEN	-0.049 (-0.530)	-0.057 (-0.656)	-0.033 (-0.385)
PSA	0.328*** (4.488)	0.293*** (4.142)	0.195** (2.569)
PILA	0.337*** (3.260)	0.255** (2.484)	0.182* (1.774)
FIB		0.152* (1.844)	0.141* (1.742)
FPI		0.221*** (2.756)	0.241*** (3.035)
IOE		0.457*** (4.712)	0.347*** (3.436)
ECC			0.260** (2.473)
UNIR			0.162* (1.877)
R-squared	0.187	0.309	0.350
Adj R-squared	0.173	0.285	0.319
R squared change	0.187	0.122	0.041
F-Statistics	13.380	12.746	11.367
P-value	0.000000	0.000000	0.000000

Notes: *** significant at 1% level; ** significant at 5% level; * significant at 10% level.

Variable definition:

ISTE = Student's intention to be an entrepreneur; GEN = Gender (Dummy); PSA= Perceived skill and ability; PILA = Personal Independent learning Approach; FIB = Family involvement in business (dummy); FPI = Family and peers' influence; IOE = Image of entrepreneur; ECC = Entrepreneurial curriculum and content; UNIR = University's role.

In the second model, family and peers' influence and image of entrepreneurship are included to examine the impact of these variables on the dependent variable. All the three variables, family involvement in business (FIB), family and peers' influence (FPI) and image of entrepreneur (IOE) are significant and positively related to students' inclination towards entrepreneurship. Thus, hypothesis H₄, H₅ and H₆ are supported. As displayed in Table 1, about 47% of the respondents' family members are involved in businesses. The results in Table 5 suggest that FIB has influenced the students to be more interested in entrepreneurship. This finding supports an earlier study by Keat, Selvarajah and Meyer (2011) who find that mothers' who are self-employed significantly

influence their children's inclination towards entrepreneurship. Detailed investigation of the data indicates that 82% of the respondents whose family own a business want to start a business too. In order to confirm that, independent t-tests were run to test the family involvement in business on the students' intention to be entrepreneurs. The results indicate that students whose family has a business hold a high perception of entrepreneurship image and they have a significantly higher mean score for inclination towards entrepreneurship compared to those without family business. In addition, this result is also consistent with another variable FPI which also indicate a positive and significant relationship with the students' intention to be entrepreneurs at 1% level of confidence.

Results in Table 5 also indicate that image of entrepreneur is positively significant in influencing the students' intention to be entrepreneurs at 1% level of confidence. An earlier study by Keat, Selvarajah and Meyer (2011) also finds a positive relationship between the variables but it is not significant. Close to 80% of the respondents agree and strongly agree that entrepreneurship is an honourable profession and help to create jobs to stimulate the economy of the country. Most of them (83%) respect people who are involved in entrepreneurship and 94% of them admire those who succeed in their businesses.

Another two variables are included in the third model. The variables are entrepreneurial curriculum and content (ECC), and the role of the university (UNIR). The data in Column 4 of Table 5 indicate that both variables are positively significant in influencing the students' intention to be entrepreneurs. Thus, hypothesis H₇ and H₈ are supported. Entrepreneurial curriculum and content appear to positively influence the students' intention to be entrepreneurs. This finding is consistent with an earlier study by Hamidi, Wennberg and Berglund (2008), and Keat, Selvarajah and Meyer (2011). This result is also reflected in the students' responses to the questionnaires. Close to 78% of the respondents agree and strongly agree that the entrepreneurship courses offered by the universities develop their entrepreneurship knowledge and skills. They agree and strongly agree that their interest towards entrepreneurship has increased after attending the courses (65%) as they provide a new and different experience (75%). Most of the respondents (87%) like the activities as they learn by doing activities that are close to real-world situations. Apart from that, the activities conducted also help them to improve their presentation and communication skills (75% agree and strongly agree).

Another variable, the role of the university (UNIR) is also important to motivate the students to choose entrepreneurship as their career choice as indicated in Table 5. The role of the university is positively significant in influencing students' intention to be entrepreneurs at a 5% level of confidence. This finding is consistent with an earlier study by Keat, Selvarajah and Meyer (2011). Close to 70% of the respondents agree and strongly agree that the university is an ideal place to learn about starting a business. However, only 52%

of the respondents think that their universities' infrastructure are in place to support the entrepreneurship activities and more than majority of them (70%) think that more entrepreneurship and educational program should be in place to help them start a business. This indicates that universities must further enhance the infrastructure and the resources that can help the students to run their entrepreneurship activities in the campus, as well as organise more entrepreneurship talks and programs.

CONCLUSION

The main purpose of this study is to examine the factors that influence the accounting students' intention to be entrepreneurs. The results of the study indicate that personal characteristics, family influence, entrepreneurial curriculum and content and university's role significantly influence the students' intention to be entrepreneurs. The significant influence is shown when the variables are added into the equation in the hierarchical multiple regression models. However, gender is not an important factor in influencing the students to choose entrepreneurship as their future career choice. The results appear to suggest that gender of a Malaysian student is not an important factor to determine whether he or she would venture into a business.

As the samples are students, the findings from this study are particularly relevant to entrepreneurship education. The entrepreneurship course offered can be an appropriate avenue to expose and develop the students' intention to be entrepreneurs. This is where the university should play its role to motivate the students by providing the necessary training and courses to instil more positive attitude of the students towards entrepreneurship. The results from this study would provide information to the universities, curriculum developers and the related ministries in improving the present curriculum and delivery systems. Proper support system and infrastructure as well as the development of managerial competencies must be available and further improved. In addition, this study will also contribute to the current entrepreneurship literature particularly in Malaysia settings.

Future studies should investigate these students' entrepreneurial intention with their subsequent behaviour, where the same cohorts of students are examined. This longitudinal study could investigate whether their inclination/intention as shown in the results of this study would materialise or not. In-depth interviews on why they pursue or not pursue this career can also be conducted.

REFERENCES

- Ahmad Yasruddin Md Yasin, Nik Abdul Aziz Nik Mahmood and Nik Azyyati Nik Jaafar. 2011. Students' entrepreneurial inclination at a Malaysian polytechnic. *Journal International Education Studies* 4(2): 198–207.
- Alberti, F. and S. Sciascia. 2004. Entrepreneurship education: Note on an ongoing debate. Paper presented at 14th Annual International Entrepreneurship Conference, University of Napoli Federico, Italy. 4–7 July.
- Anderson, A., S. Jack and S. Drakopoulou. 2005. The role of family members in entrepreneurial networks: Beyond the boundaries of family firms. *Family Business Review* 18(2): 135–154.
- Arifatul Husna Mohd Arif, Zainol Bidin, Zakiyah Sharif and Adura Ahmad. 2010. Predicting entrepreneurial intention among Malay university accounting students in Malaysia. *Universiti Tun Abdul Razak e-Journal* 6(1): 1–10. http://ejournal.unirazak.edu.my/articles/Predicting_Entrepreneur_p1v6n1Jan10.pdf July24 (accessed November 2011).
- Autio, E., R. H. Keeley, M. Klofsten and T. Ulfstedt. 1997. Entrepreneurial intent among students: Testing an intent model in Asia, Scandinavia and USA. Paper presented at Frontiers of Entrepreneurship Research 17. Babson College/Kauffman Entrepreneurship Research Conference, Centre for Entrepreneurial Studies, Babson College, Wellesley. 4–8 August.
- Aziah Ismail, Abdul Ghani Kanesan Abdullah and Ahmad Tajuddin Othman. 2010. Acceptance of entrepreneurship culture module at the Malaysian institutes of higher learning: A gender perspective. *Research Journal of International Studies* 15: 46–54.
- Azlan Abu Bakar. 2009. Getting more grads to become entrepreneurs. http://www.nib.com.my/archives/text/view/2230486?pos=1&hide_header=1&resultset=nstpec3www/crossearch/search.Php%3A_1320125423%3Aresultset/ (accessed November 2009).
- Bagheri, A. and Z. A. L. Pihie. 2010. Role of family leadership development of university students. *World Applied Science Journal* 11(4): 434–442.
- Bergh, P., S. Thorgren and J. Wincent. 2011. Entrepreneurs learning together: The importance of building trust for learning and exploiting business opportunities. *International Entrepreneurship Management Journal* 7: 17–37.
- Bruyat, C. and P. A. Julien. 2001. Defining the field of research in entrepreneurship. *Journal of Business Venturing* 16(2): 165–80.
- Bygrave, W. D. Z. 2004. *The portable MBA in entrepreneurship. The entrepreneurial process*. New Jersey: John Wiley & Sons, Inc.
- Chell, E., J. Haworth and S. Brearley. 1991. *The entrepreneurial personality: Concepts, cases and categories*. Routledge: London.
- Colff, L. V. D. 2004. A new paradigm for business education: The role of the business educators and business school. *Management Decision* 42(3/4): 497–507.
- Davis, J. 1996. *From generation to generation: Life cycles of family business*. Boston: Harvard Business School Press.
- Delmar, F. and P. Davidson. 2000. Where do they come from? Prevalence and Characteristics of Nascent Entrepreneurs. *Entrepreneurship and Regional Development* 2: 1–23.

- Field, A. 2005. Research method II: Factors analysis on SPSS. In *Discovering statistics using SPSS*, ed. A. Field, 1–14. London: Sage.
- Gelderen, M., M. Brand, M. Praag, W. Bodewes, E. Poutsma and A. Gils. 2008. Explaining entrepreneurial intention by means of the theory of planned behaviour. *Career Development International* 13(6): 538–559.
- Gnyawali, D. R. and D. S. Fogel. 1994. Environments for entrepreneurship development: Key dimensions and research implications. *Journal Entrepreneurship Theory and Practice* 18(4): 43–62.
- Greene, F. J. and G. Saridakis. 2007. Understanding the factors influencing graduate entrepreneurship, research report 007/2007. National Council for Graduate Entrepreneurship (NCGE), March. <http://www.ncge.com/> (accessed December 2013).
- Gujarati, D. N. 2003. *Basic econometrics*. Singapore: McGraw Hill.
- Hamidi, D. Y., K. Wennberg, and H. Berglund. 2008. Creativity in entrepreneurship education. *Journal of Small Business and Enterprise Development* 15(2): 304–320.
- Higgins, G. E. 2009. Quantitative versus qualitative methods: Understanding why quantitative methods are predominant in criminology and criminal justice. *Journal of Theoretical and Philosophical Criminology* 1(1): 23–37.
- Hynes, B., Y. Costin, and N. Birdthistle. 2011. Practice-based learning in entrepreneurship education. *Higher Education, Skills and Work-based Learning* 1(1): 16–28.
- Jalbert, S. E. 2000. *Women entrepreneurs in the global economy*. Washington, DC: Centre for International Private Enterprise.
- Keat, O. Y., C. Selvarajah and D. Meyer. 2011. Inclination towards entrepreneurship among university students: An empirical study of Malaysian university students. *International Journal of Business and Social Science* 2(4): 206–220.
- Kirby, D. A. 2004. Entrepreneurship education: Can business schools meet the challenge? *Education + Training* 46(8/9): 510–519.
- Kline, R. B. 2005. *Principles and practice of structural equation modelling*. New York: The Guilford Press.
- Kolveried, L. 1996. Organizational employment versus self-employment: Reason for career choice intention. *Journal Entrepreneurship: Theory and Practice* 20(3): 411–432.
- Kulasagaran, P. 2010. Building on business and soft skills. <http://thestar.com.my/Education/story.asp?sec=education&file=/2010/12/5/education/7366750/> (accessed December 2010).
- Kuratko, D. F. and R. M. Hodgetts. 2004. *Entrepreneurship: Theory, process and practice*. Sydney: Thomson South-Western.
- Love, N. F., L. Lim and G. Akehurst. 2006. Guest editorial: Female and ethnic minority entrepreneurship. *Entrepreneurship Management Journal* 2: 429–439.
- Mahlberg, T. 1996. Evaluating secondary school and college level entrepreneurial education – pilot testing questionnaire. Paper presented at International Entrepreneurship Education and Training Conference, Arnhem/University of Nijmegen, The Netherlands. 23–26 June.
- Maimunah Ismail. 1996. Gender needs analysis of women entrepreneur. *Pertanika Journal Social Science & Humanity* 9(1): 1–9.

- Mazura Mansor and Norasmah Othman. 2011. Consulting-based entrepreneurship education in Malaysian higher education institutions. *International Conference on Social Science and Humanity* 5: 163–167.
- MITI Weekly Bulletin. 2013. Unemployment rate comparison with selected ASEAN Countries 2003 to 2013. January.
- Muhammad, A., S. Akbar and M. Dalzied. 2011. The journey to develop educated entrepreneurs: Prospects and problems of Afghan business. *Education + Training* 53(5): 433–447.
- Nanda, R. and J. B. Sorensen. 2006. Peer effects and entrepreneurship. http://www.doku.iab.de/veranstaltungen/2006/CAFE_2006_A3_Soerensen.pdf/ (accessed August 2006).
- News Image Bank (NiB). 2009. Fewer unemployed graduates expected. http://www.nib.com.my/archives/page/view/17802048?pos=15&hide_header=1&resultset=nstpec%3Awww/crosssearch/search.php%3A_1320128835%3Aresultset/ (accessed 22 July 2009).
- Pallant, J. 2001. *SPSS survival manual: A step by step guide to data analysis using SPSS for windows (Version 10)*. Chicago: Allen & Unwin.
- Pickernell, D., G. Packham, P. Jones, C. Miller, and B. Thomas. 2011. Graduate entrepreneurs are different: They access more resources? *International Journal of Entrepreneurial Behaviour & Research* 17(2): 183–202.
- Puspadevi, S. 2011. Fresh graduates should equip themselves with knowledge to stand out. <http://thestar.com.my/metro/story.asp?file=/2011/8/18/central/9279061&sec=central/> (accessed August 2011).
- Robson, P. and R. Bennett. 2000. SME growth: The relationship with business advice and external collaboration. *Small Business Economics* 15(3): 193–208.
- Roffe, I. 1999. Transforming graduates, transforming small firms. *Education + Training* 41(4): 194–201.
- Sandhu, M. S., S. F. Sidique and S. Riaz. 2011. Entrepreneurship barriers and entrepreneurial inclination among Malaysian postgraduate students. *International Journal of Entrepreneurial Behaviour & Research* 17(4): 428–449.
- Schaper, M. and T. Volery. 2004. *Entrepreneurship and small business: A Pacific Rim perspective*. Milton, Queensland: John Wiley and Sons Australia Ltd.
- Sriram, V., T. Mersha and L. Herron. 2007. Drivers of urban entrepreneurship: An integrative model. *International Journal of Entrepreneurial Behaviour & Research* 13(4): 235–251.
- Temtime, Z. T., S. V. Chinyoka and N. Shunda. 2004. A decision tree approach for integrating small business assistance schemes. *Journal of Management Development* 23(6): 563–578
- Timmons, J. A. 1989. *The entrepreneurial mind*. Andover, MA: Brick House Publishing.
- Wilson, F., D. Marlino and J. Kickul. 2007. Our entrepreneurial future: Examining the diverse attitudes and motivations of teens across gender and ethnic identity. *Journal of Developmental Entrepreneurship* 9(3): 177–198.
- Yusof, M., M. S. Sandhu and K. K. Jain. 2007. Relationship between psychological characteristics and entrepreneurial inclination: A case study of students at UNITAR. *Journal of Asia Entrepreneurship and Sustainability* 3(2): 1–16.
- Zikmund, W. G., B. J. Babin, J. C. Carr and M. Griffin. 2010. *Business research methods*. Singapore: South-Western Cengage Learning.

According to [31], entrepreneurship education gives students experience and build their self-efficacy thus influencing their entrepreneurial intention. According to [32] and [33], personal characteristics influences peoples'™ entrepreneurial intention. Its affect the way people recognise opportunities, analyse and evaluate the market.Â Skill and knowledge gained from entrepreneurship education 24. Entrepreneurial Intention. Mean 3.12 2.55 3.55. Entrepreneurial Attitudes among Potential Entrepreneurs. an entrepreneur mainly depended on personal attraction towards entrepreneurship, perceived social norms and perceived feasibility (self-efficacy). Achievement motivation and self image have likewise emerged as major contributory factors (Pillis & Reardon, 2007). Moreover, demographic variables like parental profession, academic qualifications of parents, their attitude towards entrepreneurship and the university environment have received considerable attention (from Gurol & Atson, 2006, and Zampetakis & Moustakis, 2006). Schroeder and Ro... The link between universities and entrepreneurship results in a relationship known as entrepreneurial universities. Entrepreneurial education in universities has come a long way since the first entrepreneurship course was held by Professor Mace at Harvard. Hofer and Potter (2011) confirmed in their study the purpose of university entrepreneurial education. They divided this purpose into two types: the first, contributing to the creation of entrepreneurial attitudes and the second, inducing new firms is as vital as developing the skills needed to successfully grow a business. Entrepreneurship education on campus teaches good business management and financial management is obtained through lectures in Accounting.Â Also, entrepreneurship education has an impact to entrepreneur skill of university graduates (Vaziri et al., 2014). The purpose of this study is to provide models and an overview of online business development campus students while studying.Â The analysis of relationship pattern among variables aimed to know the direct or indirect influence between variables, namely entrepreneurship education as the exogenous variable and Financial Literacy (X2) and Entrepreneurship Skill (X3) as the endogenous variable by using model path analysis. Findings. Entrepreneurship promotes job creation, increase of competitiveness and new forms of economic development and growth of countries or regions. The research aims to understand how it has influenced the intention and entrepreneurial skills of the trainees of the project Apreender 3.0. It is important to examine how various factors, including entrepreneurship education, family background, prior experience/vocational training and propensity to take the risks, will condition the entrepreneurial intention of the respondents of this study. Based on these variables, we formulated four hypotheses. For this empirical analysis of research hypotheses, we used primary data in a form of a sample of 150 responses, collected through the online survey application.