

FACTORS AFFECTING ENTREPRENEURIAL INTENTION AMONG MALAYSIAN UNIVERSITY STUDENTS

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Abstract - Entrepreneurship is regarded as one of the key economic development strategies to advance a country's economic growth and to sustain its competitiveness in facing the increasing trends of globalization. This study aims to explore the factors that affect students' intentions to be an entrepreneur. Furthermore, it also aims to examine the moderating effects of entrepreneurship education in enhancing entrepreneurial intentions among Malaysian university students. Findings of this study note a positive significant effect on the relationship between innovativeness, risk-taking propensity, family background, and a supportive environment. Findings also note a negative and significant effect in the relationship between entrepreneurship barrier and students' intentions to be an entrepreneur. Moreover, in terms of the moderating effects of entrepreneurship education, this study finds significant support for the moderation effect of entrepreneurship program in the relationship between supportive environment and entrepreneurial intention. In addition, findings of this study also note that service quality of entrepreneurship education moderates the relationship between entrepreneurship barrier and intention. Therefore, this study provides empirical evidence of the factors that influence entrepreneurial intention and the moderating role of entrepreneurship education. Findings of this study also provide a clear indication to academicians and academic policy makers about the effectiveness of the current entrepreneurial education designed and practiced by public universities in Malaysia.

JEL classification codes: A23, L26, I25

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INTRODUCTION

Entrepreneurship has established its position as the most powerful economic force over the last decades (Kuratko, 2005). Many countries are realizing the significance of entrepreneurship and embracing it as a means to enhance employment and economic development (Ali, Tajddini, Rehman, Ali, & Ahmed, 2010; Othman, Othman, & Ismail, 2012). In addition, there are several existing agreements concerning the importance of promoting entrepreneurship to "stimulate economic development, create wealth, and generate employment in Malaysia and other developing economies" (Ahmad & Xavier, 2012). More importantly, entrepreneurship has been viewed as the "panacea to the unemployment problem" (Ahmad, 2013). In other words, entrepreneurship is perceived as a solution to the unemployment rate.

Upon realizing the importance of entrepreneurship education, the development of entrepreneurship, in both concept and activity, is becoming more important in Malaysia. This is proven by the number and variety of supporting mechanisms and policies instituted by the government for entrepreneurs (Ariff & Abubakar, 2002; Mohamed, Rezai, Shamsudin, & Mahmud, 2012; Sandhu, 2010). Higher Education Entrepreneurship Development Policy is the current policy concerning entrepreneurship education that was launched by the Ministry of Education (MOE). Following that, the Strategic Plan on Entrepreneurship Development in Higher Education (2013-2015) was launched to empower the implementation of entrepreneurial education in the Malaysian Higher Education as well as to ensure that the aim of the Higher Education Entrepreneurship Development Policy is achieved.

However, despite the initiatives and efforts taken by the government and higher education institutions to teach entrepreneurship, the choice to participate in business after graduation is still low among graduates (Ministry of Higher Education, 2013). According to the report from the Global Entrepreneurship Monitor (2015), Malaysia is ranked 50th among 54 countries in terms of choosing entrepreneurship as a career choice. Moreover, Malaysia is still among the countries that obtain a low score at 39.3% compared to other Asian countries that have higher scores such as Philippines (74.8%), Indonesia (74.4%), Taiwan (74.0%), Vietnam (73.3%), and Thailand (71.5%). In addition,

the Graduate Tracer Study conducted by the Ministry of Higher Education in 2014 also shows that only 2% graduates participate in entrepreneurial ventures after six months of graduation. These numbers are less favourable considering the efforts taken by the government to promote entrepreneurship across the country.

Accordingly, since entrepreneurial intention has proven to be a primary predictor (Krueger, Reilly, & Carsrud, 2000) and one of the biggest predictors of entrepreneurial behaviour (Molaei, Reza Zali, Hasan Mobaraki, & Yadollahi Farsi, 2014), exploring the causes behind students' entrepreneurial intentions should be given special consideration (Gelard & Saleh, 2011). In addition, although there is a substantial amount of research on entrepreneurship education (Holmgren & From, 2005), there is limited and contradictory empirical research (Collins, Hannon, & Smith, 2004; Gurel, Altinay, & Daniele, 2010; Thompson, Jones-Evans, & Kwong, 2010; Wu & Wu, 2008) on its effects. In fact, the effects are also poorly understood (Rodrigues, Dinis, do Paço, Ferreira, & Raposo, 2012). Other than that, most available literatures also concentrate on investigating the direct effect of entrepreneurship education on entrepreneurial intention while disregarding its possible moderating effect (Ilhan Ertuna & Gurel, 2011). This study fills the gap by considering the moderating effect of today's entrepreneurship education. Therefore, this study intends to examine the factors that influence entrepreneurial intentions and the moderating effects of entrepreneurship education.

LITERATURE REVIEW

Factors Influencing Entrepreneurial Intention

Five factors that influence entrepreneurial intention will be further discussed below. These factors include innovativeness, risk-taking propensity, family background, supportive environment, and entrepreneurship barrier.

Innovativeness

According to Robinson, Stimpson, Huefner, and Hunt (1991), innovativeness is related to 'perceiving and acting on business activities in new and unique ways'. Innovativeness is also associated with the entrepreneur's ability to produce solutions in new situations that is achieved through training and experience (Littunen, 2000). Innovative behaviour is an important provider to an effective organization (Woodman, Sawyer, & Griffin, 1993). Innovative performance is embedded in innovative behaviour that is demonstrated by employees in organizations in order to generate new process, products or to enhance administration processes (Amo & Kolvereid, 2005). In other words, innovation performance can also be described as the ability to produce and exploit ideas to generate and execute new things or enhance old ideas into new dynamic ways when managing business ventures. Santandreu-Mascarell, Garzon, and Knorr (2013) revealed one way entrepreneurs contribute to economic development is through innovation that involves the growth of new products, new processes, new supply sources, new markets exploitation, and the development of new ways to organize business. In addition, there is another important feature of innovator's competence, which is to know whether markets are ready for commercializing their innovative solutions (Elenurm, 2012). Thus, innovativeness can be presumably associated with entrepreneurial intention.

Risk-Taking Propensity

Another influencing factor that is no less important is the risk-taking propensity. Risk-taking is the earliest identified entrepreneurial characteristic (Hyrsky & Tuunanen, 1999). According to Kuip and Verheul (2003), risk-taking propensity refers to the acceptance of risk when involving an activity with a less than 100 percent possibility of success. Risk propensity can also be defined as an individual's tendency to take or avoid risks (Leko-Simit & Horvat, 2006; Tang & Tang, 2007). Tang and Tang (2007) further argued that risk bearing is a vital element of entrepreneurship. This is because a person is not certain whether the preferred products can be formed, consumers' needs can be met, or profits can be generated before a new product or service is presented. Entrepreneurship would not be the same attractive subject as it is today without risk-taking. Furthermore, risk-taking propensity can also be referred to as the propensity of an individual to demonstrate risk-taking or risk-avoidance when faced with situations that involve risks (Gurol & Atsan, 2006). Risk-taking propensity could be theorized excellently as an individual orientation towards taking advantage in any decision-making situation (Landqvist & Stalhandske, 2011). Several literatures have demonstrated that entrepreneurs, in general, are considered having a greater risk-taking propensity than any other groups (Cromie, 2000; Thomas & Mueller, 2000). Gurol and Atsan (2006) argued that the difference between entrepreneurs and professional managers in business activities is that the entrepreneurs personally take the

risks of profits and losses. This also includes the risks of financial well-being, career opportunities, family relations, emotional state as well as psychic well-being (Brockhaus, 1980; Littunen, 2000).

Family Background

The third factor or determinant that influences students' entrepreneurial intention is family background. Several literatures have also discussed the impact of family background on students' entrepreneurial intentions. The logic is students who come from families that practice business are more likely to follow the footsteps of starting up businesses. According to Birley and Westhead (1994), having role models is a significant factor in having the intention to start a business. The reason could be that self-employed parents can be appropriate mentors and advisors to their children who are thinking of starting their own businesses (Matthews & Moser, 1995). According to Matlay (2008), a study among graduate students in UK's HEIs found that most of the respondents admitted to being influenced by their families as well as outsiders in deciding their career choices. This is also supported by Harris and Gibson (2008) who found that students with family business experience had developed strong entrepreneurial attitudes. A later study by Peng, Lu, and Kang (2013) also confirmed that families have an impact on an individual's entrepreneurial intentions in terms of role modelling perspective and considered parents to play an important role in children's entrepreneurial career.

Supportive Environment

Another factor that influences entrepreneurial intention is a supportive environment. Gnyawali and Fogel (1994) grouped environmental conditions into five dimensions: government policies and procedures, socioeconomic conditions, entrepreneurial and business skills, financial support to businesses, and non-financial support to businesses. They further argued that the government could enhance entrepreneurship through assistance programmes such as offering tax and other incentives, keeping rules and regulations at a minimum as well as to provide a conducive entrepreneurial environment. Another study by Fogel (2001) also supported this by suggesting that the government should offer tax incentives and other special programmes in order to improve the entrepreneurial process. Moreover, Franke and Luthje (2004) also claimed that environmental factors can facilitate or inhibit entrepreneurial activities thus affecting the alleged benefit percentage of a new venture creation. They may have an important role in forming entrepreneurial intentions among students.

Entrepreneurship Barrier

Lastly, there is yet another factor that may influence entrepreneurial intention namely entrepreneurship barrier. As stated by Luthje and Franke (2003), a student's entrepreneurial intention is not only directly affected by perceived entrepreneurship support but also entrepreneurship barrier factors. Barriers to entrepreneurship includes "difficulties in obtaining institutional support for aspiring entrepreneurs, receiving family support, securing financing from lenders, building a relationship with suppliers and a solid customer base" (Shinnar, Giacomini, & Janssen, 2012). Schwarz, Wdowiak, Almer-Jarz, and Breitenacker (2009) explained that when students realize a hostile environment for business founders such as credit conditions as being too restrictive, they are less likely to become entrepreneurs irrespective of their attitude toward self-employment. Moreover, Sandhu, Fahmi Sidique, and Riaz (2011) argued that barriers faced by budding entrepreneurs from developing countries might differ from those in developed countries. This is because developed countries may have more institutional support and an education system that is more advanced thus reducing potential barriers. This is supported by Ahmad and Xavier (2012) who claimed that the researches on entrepreneurial environment were mostly based on developed countries, and their conclusion may not always be applicable within the Malaysian context and perspective. Thus, the entrepreneurial surroundings faced by budding entrepreneurs from developing countries may differ from those in developed countries since, Malaysia has distinct economic, cultural, values, educational, political, and social environments.

The Moderating Role of Entrepreneurship Education

Apart from the determinants that influence entrepreneurial intention as discussed above, entrepreneurship education is yet another variable that should be included in entrepreneurial intention models as an exposure item (Peterman & Kennedy, 2003). The possibility of a moderating effect is consistent with the tradition of support for the contingency theory that an 'influencing factor' moderates a proposed relationship. In this study, entrepreneurship education is the moderating variable. It can change the relationship between entrepreneurial traits and entrepreneurial intention.

Therefore, investigating the effects of moderators is also required in order to better understand the relationship between entrepreneurial traits and intention.

Entrepreneurship Program

Entrepreneurship education covers various audiences, objectives, contents, and pedagogical methods (Fayolle & Gaylli, 2008). In terms of contents of entrepreneurship according to Jones and English (2000), what is taught on entrepreneurship varies among universities. However, they have chosen an overview provided by Brown (2000) as an excellent overview of the developing nature of curriculum within entrepreneurship education. Brown (2000) cited several authors in describing the components of an effective curriculum but the most interesting one is presented by Kourilsky (1995) who divided curriculum components into three groups: opportunity recognition, the marshalling and commitment of resources, and the creation of an operating business organization. Furthermore, in order to provide an entrepreneurial environment to the students, universities must be able to formulate or design and develop a curriculum that would fulfil the students and industries' demands. Moreover, as the students are exposed to entrepreneurial courses, it would definitely influence their inclination towards entrepreneurship (Ooi, Selvarajah, & Meyer, 2011). Therefore, curriculum and programmes that are relevant to potential tendency towards entrepreneurship should be carried out to achieve the objective of acculturating entrepreneurship among students (Mahajar, 2012).

Service Quality

Apart from that, there is substantial debate about the best way to define service quality in higher education (Becket & Brookes, 2006). This is because many researchers have defined quality in education differently. However, it is undeniable that academic institutions need to continuously innovate, expand their structure, and find new ways of servicing their customers more effectively. If an education provider aims to catch the attention of consumers and acquire a maintainable competitive benefit, it must not only be concerned with return on investment and market share but also with understanding customer satisfaction and perceptions of services quality offered and received (Jain, Sinha, & Sahney, 2011). Hence, cooperation between the academic institution and the students should be beneficial to both parties. According to Voss, Gruber, and Szmigin (2007), students want lecturers to be knowledgeable, enthusiastic, approachable, and friendly. This is because it is found that the quality of the lecturer and the student support systems is the most influential factor in the provision of quality education. They further mentioned that students are satisfied if the lecturers know their subjects well, are well organized, and attractive enough to listen. Thus, new undergraduate students may have higher expectations from the universities, but if higher educational organizations have a good understanding of such students' expectations, they could strive to achieve the expectations and turn them into reality.

RESEARCH METHODOLOGY

Research Design

This study used a cross sectional design and quantitative approach where a survey has been conducted to examine the factors that influence entrepreneurial intention as well as the moderating role of entrepreneurship education. 375 students from 8 Malaysian universities who are in their final year of Business studies were the respondents. A set of questionnaire was used as the research instrument and were distributed to the respondents. The students took approximately 20 minutes to finish the questionnaire.

Research Instrument

The questionnaire was designed using simple and unbiased wordings so that the respondents can easily understand the questions and provide answers based on their own perception. Questions were adapted from earlier studies with minor modifications where needed. Details of each section, what it measured and from whom the questions in the study were adapted are discussed below. The five-point Likert scale of 1 to 5 points (strongly disagree, disagree, neutral, agree, and strongly agree) was used for all the variables. Questions that are used to measure Innovativeness and Risk-Taking Propensity were adapted from Chye Koh (1996). As for Family Background, the measures were adapted from Rengiah (2013) and Malebana (2013). For Supportive Environment, all measures were adapted from

Ahmad and Xavier (2012). Questions to measure the final independent variable, Entrepreneurship Barrier, were adapted from Pruett et al. (2009). All questions for Entrepreneurial Intention were adapted from Linan and Chen (2009) and Malebana (2013). Questions to measure Entrepreneurship Program were adapted from Jaafar and Rashid Abdul Aziz (2008) and the measures for Service Quality were adapted from Abdullah (2006).

Data Analysis Method

PLS-SEM is a causal modeling approach aimed at maximizing the explained variance of the dependent latent constructs (Hair, Ringle, & Sarstedt, 2011). Due to the exploratory nature of this study, together with the relatively low sample size and non-normal data, this study used the variance based structural equation modeling, i.e., partial least squares (PLS) estimation with the primary objective of maximising the explanation of variance in the structural equation model's dependent constructs. The findings of this analysis were reported as recommended by Hair, Ringle and Sarstedt (2013) for PLS modeling. These include the (a) indicator reliability (e.g., standardized indicator loadings 0.70; in exploratory studies, loadings of 0.40 are acceptable); (b) internal consistency reliability (Cronbach's alpha and composite reliability – CR should exceed 0.70); (c) convergent validity (AVE \geq 0.50); (d) discriminant validity (Fornell-Larcker criterion results and/or cross loadings); (e) r^2 (acceptable level depends on the research context); (f) effect size or f^2 (0.02, 0.15, 0.35 for weak, moderate, strong effects); (g) path coefficient estimates; and (h) predictive relevance Q^2 and q^2 ($Q^2 > 0$ is indicative of predictive relevance; q^2 : 0.02, 0.15, 0.35 for weak, moderate, and strong degree of predictive relevance of each effect). In testing the moderating effect, the findings that were analyzed are as follows: (a) path coefficient estimates, (b) significance level ($p < 0.05$), (c) changes in r^2 , and (d) effect size or f^2 (0.02, 0.15, and 0.35 for weak, moderate, strong effects).

SUMMARY OF FINDINGS

Demographic Characteristics

A complete data was collected from 375 final year students in Malaysian universities. As presented in Table 1, among the total of 375 respondents, 310 of the respondents or 82.7% are females while the other 65 respondents or 17.3% are males. Most of the respondents are 23-24 years old with 243 respondents or 64.8%, followed by 97 or 25.9% of the respondents who are 21-22 years old and 31 or 8.3% who are 25 years old and above. Only 4 or 1.1% of the respondents are at the age of 20 and below. Most of the respondents are Malays with 304 respondents or 81.1%. This is followed by 43 or 11.5% of the respondents who are Chinese. There are also 20 respondents or 5.3% who are from other ethnic groups such as Iban and Kadazan. Only 8 or 2.1% of the respondents are from the Indian ethnicity. Most of the respondents are from the Business course with 299 respondents or 79.7% while there are 63 or 16.8% who are from the Entrepreneurship course. The other 13 or 3.5% respondents are from the Commerce course.

TABLE 1: PROFILE OF THE RESPONDENTS

	n	%		n	%
<i>Gender</i>			<i>Age</i>		
Male	65	17.3	20 Years Old and Below	4	1.1
Female	310	82.7	21-22 years	97	25.9
Total	375	100.0	23-24 years	243	64.8
			25 Years Old and Above	31	8.3
<i>Ethnicity</i>			Total	375	100.0
Malay	304	81.1			
Chinese	43	11.5	<i>Field Of Study</i>		
Indian	8	2.1	Business	299	79.7
Others	20	5.3	Entrepreneurship	63	16.8
Total	375	100.0	Commerce	13	3.5
			Total	375	100.0

Reliability and Validity Analysis

Table 2 shows the criteria used to evaluate the reliability of the items used in this study. These criteria include Cronbach's alpha, composite reliability, and Average Variance Extracted (AVE). In terms of Cronbach's alpha, except for Innovativeness and Risk-Taking Propensity, the values for variables such as Family Background, Supportive Environment, Entrepreneurship Barrier, Entrepreneurship Program, Service Quality, Entrepreneurship Education as well as Entrepreneurial Intention are more than 0.7, which means all the items used are reliable. Traditionally, Cronbach's alpha may be used as a conservative measure of internal consistency reliability. However, according to Hair et al. (2013), it is more appropriate to apply a different measure of internal consistency reliability referred to as composite reliability. The cut-off value for composite reliability is 0.7 (Hair et al., 2011). All the items show a greater value than 0.7 in terms of the composite reliability, representing reliable items. In terms of Average Variance Extracted (AVE), the value should be higher than 0.50, and as noted in Table 2, all the AVE values for the constructs are higher than 0.50, which indicates acceptable convergent validity.

TABLE 2. RELIABILITY AND VALIDITY ANALYSIS

Variables	No. Of Items	Mean	Standard Deviation	Cronbach's Alpha	Composite Reliability	AVE
Innovativeness	3	3.7244	0.53619	0.590	0.781	0.545
Risk-Taking Propensity	3	3.6356	0.68246	0.650	0.811	0.588
Family Background	5	3.3963	0.79146	0.806	0.864	0.563
Supportive Environment	8	3.5083	0.65596	0.890	0.913	0.568
Entrepreneurship Barrier	5	3.5083	0.75112	0.822	0.868	0.571
Entrepreneurship Program	4	4.0553	0.58824	0.865	0.909	0.715
Service Quality	5	4.0731	0.57385	0.860	0.899	0.641
Entrepreneurship Education	9	4.0652	0.51935	0.892	0.913	0.538
Entrepreneurial Intention	8	3.8737	0.63849	0.902	0.922	0.601

Indicators are also checked for discriminant validity and considered reliable when outer (component) loadings are higher than 0.7 and a construct's loading should be higher than all of its cross-loadings. Component loading with a value of 0.5 is also acceptable if the AVE value is higher than 0.5. As presented in Table 2, all the indicator loadings are higher than 0.7, except for Innovativeness Item 3, Family Background Item 5, Supportive Environment Items 1, 2 and 3, Entrepreneurship Barrier Item 1, as well as Entrepreneurial Intention Items 7 and 8; they are higher than 0.5, thus assumed reliable. In addition, all the items with standardized loadings of less than 0.7 are kept for further analysis based on Chin's (1998) work that suggested that indicators with a loading higher than 0.5 need not be dropped. Looking at the cross-loadings in Table 3, all the indicators' loadings are higher than the entire cross-loadings, confirming discriminant validity.

Structural Model

Assessment of the model is based on the ability to predict the endogenous constructs. The path coefficients between Innovativeness, Risk-Taking Propensity, Family Background and Supportive Environment with Entrepreneurial Intention are positive and statistically significant at the chosen 5% level of significance. The path coefficient between Entrepreneurship Barrier has a negative effect on Entrepreneurial Intention, but the effect is statistically significant at the chosen 5% level of significance. In terms of effect sizes (f^2), all variables seem to have small effects on Entrepreneurial Intention.

TABLE 3. OUTER MODEL LOADINGS AND CROSS-LOADINGS

	INV	RT	FB	SE	EB	EP	SQ	EI
<i>Innovativeness (INV)</i>								
Item 1	0.771	0.297	0.225	0.174	-0.036	0.289	0.210	0.340
Item 2	0.797	0.411	0.182	0.241	0.050	0.332	0.280	0.312
Item 3	0.637	0.372	0.191	0.127	0.029	0.228	0.256	0.209

<i>Risk-Taking Propensity (RT)</i>								
Item 1	0.402	<i>0.790</i>	0.193	0.119	-0.113	0.187	0.234	0.327
Item 2	0.367	<i>0.760</i>	0.141	0.053	-0.046	0.186	0.166	0.280
Item 3	0.324	<i>0.749</i>	0.215	0.138	-0.005	0.273	0.214	0.299
<i>Family Background (FB)</i>								
Item 1	0.233	0.255	<i>0.835</i>	0.241	0.016	0.174	0.255	0.308
Item 2	0.226	0.146	<i>0.824</i>	0.334	-0.008	0.198	0.204	0.281
Item 3	0.166	0.176	<i>0.734</i>	0.277	-0.007	0.150	0.220	0.212
Item 4	0.235	0.173	<i>0.749</i>	0.251	0.058	0.122	0.127	0.176
Item 5	0.138	0.134	<i>0.584</i>	0.183	0.051	0.094	0.124	0.166
<i>Supportive Environment (SE)</i>								
Item 1	0.205	0.189	0.276	<i>0.684</i>	0.006	0.325	0.306	0.230
Item 2	0.214	0.126	0.193	<i>0.680</i>	0.041	0.343	0.296	0.197
Item 3	0.204	0.079	0.196	<i>0.674</i>	0.026	0.301	0.273	0.152
Item 4	0.245	0.110	0.264	<i>0.747</i>	-0.001	0.354	0.275	0.251
Item 5	0.197	0.074	0.277	<i>0.816</i>	0.110	0.345	0.331	0.213
Item 6	0.162	0.060	0.300	<i>0.821</i>	0.130	0.352	0.375	0.216
Item 7	0.136	0.063	0.322	<i>0.821</i>	0.107	0.328	0.296	0.191
Item 8	0.112	0.061	0.230	<i>0.766</i>	0.158	0.395	0.315	0.227
<i>Entrepreneurship Barrier (EB)</i>								
Item 1	0.024	-0.057	0.039	0.125	<i>0.602</i>	0.095	0.109	-0.010
Item 2	-0.010	-0.090	-0.014	0.057	<i>0.768</i>	0.024	0.052	-0.090
Item 3	0.023	-0.069	-0.035	0.121	<i>0.825</i>	0.033	0.083	-0.084
Item 4	0.056	0.020	0.021	0.025	<i>0.770</i>	-0.012	-0.007	-0.058
Item 5	-0.005	-0.065	0.089	0.074	<i>0.792</i>	-0.084	-0.027	-0.099
<i>Entrepreneurship Program (EP)</i>								
Item 1	0.281	0.224	0.166	0.403	0.029	<i>0.855</i>	0.528	0.381
Item 2	0.273	0.197	0.154	0.405	0.005	<i>0.883</i>	0.509	0.367
Item 3	0.353	0.227	0.165	0.397	-0.026	<i>0.889</i>	0.496	0.416
Item 4	0.411	0.306	0.209	0.345	-0.051	<i>0.748</i>	0.483	0.563
<i>Service Quality (SQ)</i>								
Item 5	0.234	0.203	0.154	0.313	0.083	0.525	<i>0.782</i>	0.340
Item 6	0.255	0.191	0.156	0.285	0.029	0.460	<i>0.772</i>	0.275
Item 7	0.257	0.237	0.177	0.357	0.043	0.456	<i>0.810</i>	0.236
Item 8	0.311	0.229	0.276	0.380	-0.003	0.505	<i>0.844</i>	0.354
Item 9	0.260	0.216	0.269	0.312	-0.007	0.437	<i>0.792</i>	0.312
<i>Entrepreneurial Intention (EI)</i>								
Item 1	0.314	0.289	0.311	0.288	-0.098	0.420	0.370	<i>0.812</i>
Item 2	0.315	0.310	0.288	0.282	-0.097	0.446	0.361	<i>0.852</i>
Item 3	0.370	0.364	0.254	0.255	-0.126	0.471	0.311	<i>0.869</i>
Item 4	0.332	0.347	0.248	0.211	-0.163	0.444	0.321	<i>0.860</i>
Item 5	0.356	0.369	0.326	0.213	-0.064	0.368	0.279	<i>0.827</i>
Item 6	0.280	0.259	0.241	0.214	-0.047	0.309	0.184	<i>0.728</i>
Item 7	0.160	0.277	0.095	0.169	0.037	0.282	0.231	<i>0.572</i>
Item 8	0.303	0.219	0.141	0.128	-0.033	0.361	0.263	<i>0.624</i>

Note 1. INV = Innovativeness; RT = Risk-Taking Propensity; FB = Family Background; SE = Supportive Environment; EB = Entrepreneurship Barrier; EP = Entrepreneurship Program; SQ = Service Quality; EI = Entrepreneurial Intention.

Note 2. Italic values are indicators' loadings

TABLE 4. PATH COEFFICIENTS

	Coefficient	T value	P value	f ²	Significance Level
INV -> EI	0.210	4.383	0.000	0.045	Significant
RT -> EI	0.230	4.055	0.000	0.055	Significant
FB -> EI	0.155	2.568	0.011	0.028	Significant
SE -> EI	0.160	3.121	0.002	0.030	Significant
EB -> EI	-0.111	1.986	0.048	0.017	Significant

Note 1. INV = Innovativeness; RT = Risk-Taking Propensity; FB = Family Background; SE = Supportive Environment; EB = Entrepreneurship Barrier; EI = Entrepreneurial Intention.

Table 5 shows the R² and Q² values for the endogenous variable in this study, which is Entrepreneurial Intention. In terms of R², the value that explains variance in the endogenous variable is considered moderate and is acceptable in this study. The predictive measure of Stone-Geisser's Q² is another assessment to assess the model's predictive relevance. A Q² value higher than zero indicates that the path model's accuracy is acceptable (Hair et al., 2013), and based on Table 5, the Q² value is definitely more than zero for Entrepreneurial Intention.

TABLE 5. RESULTS OF R² AND Q² VALUES

	R ² Value	Q ² Value
Entrepreneurial Intention	0.281	0.163

TABLE 6. RESULTS FOR ENTREPRENEURSHIP PROGRAM AS A MODERATOR

	Coefficient	P value	R2	F2	Significance Level
INV -> EI	-0.124	0.078	-	-	Not Significant
RT -> EI	-0.128	0.239	-	-	Not Significant
FB -> EI	-0.108	0.235	-	-	Not Significant
SE -> EI	-0.079	0.027	0.396	0.190	Significant
EB -> EI	0.101	0.327	-	-	Not Significant

Note 1. INV = Innovativeness; RT = Risk-Taking Propensity; FB = Family Background; SE = Supportive Environment; EB = Entrepreneurship Barrier; EI = Entrepreneurial Intention.

Moderation

Moderation occurs when the moderator (an independent variable or construct) changes the strength or even the direction of a relationship between two constructs in a model (Hair et al., 2014). In presenting the moderation analysis in this study, the PLS product indicator approach (Chin, Marcolin & Newsted, 2003) was applied to detect the moderating effects of the Entrepreneurship Program of Entrepreneurship Education and Service Quality of Entrepreneurship Education. Table 6 shows the obtained path coefficients and P values when testing the moderating effects of Entrepreneurship Program of Entrepreneurship Education on the relationship between Innovativeness, Risk-Taking Propensity, Family Background, Supportive Environment, and Entrepreneurship Barrier with Entrepreneurial Intention. As presented in the table, the estimated path coefficients and the P values for interaction paths of INV -> EI, RT -> EI, FB -> EI, and EB -> EI are not significant at the chosen 5% level of significance. On the other hand, the estimated standardized path coefficient for the interaction path of SE -> EI is -0.079 and P value of 0.0271 are significant at the chosen 5% level of significance. In addition, the R2 value of 0.396 is higher than the R2 of the main effect mode, which is 0.281. The effect size is also calculated. The result shows that the effect size of the moderating effect is a moderate effect (f² = 0.190). Therefore, this study accepts that the entrepreneurship program in entrepreneurship education moderates the relationship between supportive environment and entrepreneurial intention.

TABLE 7. RESULTS FOR SERVICE QUALITY AS A MODERATOR

	Coefficient	P value	R2	F2	Significance Level
INV -> EI	-0.109	0.377	-	-	Not Significant
RT -> EI	-0.123	0.285	-	-	Not Significant
FB -> EI	0.097	0.497	-	-	Not Significant
SE -> EI	0.117	0.289	-	-	Not Significant
EB -> EI	0.148	0.001	0.336	0.083	Significant

Note 1. INV = Innovativeness; RT = Risk-Taking Propensity; FB = Family Background; SE = Supportive Environment; EB = Entrepreneurship Barrier; EI = Entrepreneurial Intention

Table 7 shows the obtained path coefficients and P values when testing the moderating effects of Service Quality of Entrepreneurship Education on the relationship between Innovativeness, Risk Taking Propensity, Family Background, Supportive Environment and Entrepreneurship Barrier with Entrepreneurial Intention. As presented in the table, the estimated path coefficients and the P values for interaction paths of INV -> EI, RT -> EI, FB -> EI, and SE -> EI are not significant at the chosen 5% level of significance. On the other hand, the estimated standardized path coefficient for the interaction path of EB -> EI is 0.148 and P value of 0.001 are significant at the chosen 5% level of significance. In addition, the R2 value of 0.336 is higher than the R2 of the main effect mode, which is 0.281. The effect size is also calculated. The result shows that the effect size of the moderating effect is a weak effect (F2 = 0.083). Consequently, this study accepts that the service quality in entrepreneurship education moderates the relationship between entrepreneurship barrier and entrepreneurial intention.

DISCUSSION

Findings of this study note a positive significant effect on the relationship between Innovativeness and Risk-Taking Propensity with Entrepreneurial Intention. These results are consistent with a previous study by Koh (1996) but contradict a study done by Dinis, do Paço, Ferreira, Raposo, and Gouveia Rodrigues (2013). In addition, findings of this study also note a significant positive effect between family background and entrepreneurial intention. This result supports the study done by Matthews and Moser (1995). Moreover, this study also finds a positive significant relationship between supportive environment and intention, which provides support for a previous study done by Luthje and Franke (2003) and Linan (2008). Findings also note a negative and significant effect in the relationship between entrepreneurship barrier and students' intentions to be an entrepreneur, which is consistent with previous studies done by Luthje and Franke (2003) and Sandhu et al., (2011).

Furthermore, in terms of the moderating effects of entrepreneurship education, this study finds no significant support on the moderation of entrepreneurship program on the relationship between Innovativeness, Risk-Taking Propensity, Family Background, and Entrepreneurship Barrier with Entrepreneurial Intention. However, findings of this study note that the entrepreneurship program in entrepreneurship education moderates the relationship between supportive environment and entrepreneurial intention. This could be explained by suggesting that students who undergo entrepreneurship programs in their universities may improve their knowledge on the entrepreneurship programs and policies instituted by the government to produce graduates who want to be entrepreneurs. Moreover, this study also finds no significant support on the moderation of service quality of entrepreneurship education on the relationship between innovativeness, risk-taking propensity, family background, and supportive environment with entrepreneurial intention. However, findings of this study note that the service quality of entrepreneurship education moderates the relationship between entrepreneurship barrier and entrepreneurial intention. This could be explained by suggesting that students who perceive lack of experience and lack of social capital as barriers for them to start a business would be more motivated to pursue their career in entrepreneurship if their lecturers manage to instil knowledge and suggest solutions to overcome the barriers.

CONCLUSION

Overall, this study has provided empirical evidence on the factors that influence entrepreneurial intention among Malaysian university students. This study also examined the moderating role of entrepreneurship education in enhancing students' entrepreneurial intentions. Based on the results, it can be concluded that the explored factors influence Malaysian students' intentions to be an entrepreneur. However, the role of entrepreneurship education in enhancing students' entrepreneurial intentions remains uncertain. Entrepreneurship education offered in Malaysian

universities still require some improvement to increase the number of entrepreneurs produced by Malaysian universities. Therefore, it is important for the Ministry of Education and Higher Education Institutions (HEIs) to join hands in making sure that students are aware of the institutional support such as funding and programs that are provided by the government in order to produce graduates who are not only innovative and willing to take risks, but also do not easily give up when facing barriers in starting up a business. Future research should discuss other possible factors that are less explored such as social networking and market competition in helping Malaysian universities to provide better entrepreneurship education so that entrepreneurship education in Malaysia would be able to attain a completely new level of success in educating future entrepreneurs.

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