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Factors influencing students' entrepreneurial intentions: The critical roles of personal attraction and perceived control over behavior

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Factors influencing students' entrepreneurial intentions: The critical roles of personal attraction and perceived control over behavior

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Abstract Many researchers and educators across the world have recently attempted to explore the factors that motivate and enable some individuals and not others to pursue an entrepreneurial career path. The growing attentions given to entrepreneurial intention is partially due the fundamental roles that entrepreneurs and entrepreneurial activities play in fostering economic and social development of developed and developing countries, including Malaysia. Research has highlighted the influence of both personal and environmental factors on one's selection into entrepreneurship. More recent studies emphasized on the impact of a combination of the factors that affect entrepreneurial intention. However, our knowledge about interactions among the factors that construct entrepreneurial intention is limited particularly among university students. This study attempts to narrow the gap in the literature by measuring the factors that affect Malaysian university students' entrepreneurial intentions using the theory of planned behavior. More specifically, it examines the relationships between personal attraction, perceived control over behavior, entrepreneurial skills, subjective norms, valuation of entrepreneurship in the social and close environment and students' entrepreneurial intentions. The sample consisted of 722 students from public and private universities. Structural Equation Modeling was employed to test the hypothesized relationships between the variables. The results emphasized the critical roles that personal attraction and perceived control over behavior play in shaping students' intentions to become an entrepreneur. A system of valuation and support of entrepreneurship consisting of subjective norms and valuation of entrepreneurship in the social and close environment emerged which highly influences students' personal attraction toward entrepreneurship. Specifically, subjective norms affect students' entrepreneurial intentions through its impact on their perceived control over the performance of entrepreneurial tasks and personal attraction toward entrepreneurship. Furthermore, entrepreneurial skills have a low contribution to subjective norms and perceived behavioral control. Implications of these findings for entrepreneurship research and education are discussed.

Keywords: Entrepreneurial intention, entrepreneurial skills, personal attraction, control over behavior.



1. Introduction

Many researchers and educators across the world have recently attempted to answer the critical question why some individuals select to enter the challenging process of establishing a new venture but others do not (e.g., DeClercq et al. 2012, in Canada; Guerrero et al. 2008, Spain; Wu and Wu 2008, China; Fayolle et al. 2006, France; Souitaris et al. 2007, the UK; Mastura and Abdul 2008, Malaysia; Gürol and Atsan 2006, Turkey). The increasing interest in exploring the factors that build one's entrepreneurial intention is due to the critical role that entrepreneurs and entrepreneurial activities play in fostering economic and social growth of developed and developing countries, including Malaysia (Matlay 2006). Some researchers attributed the intention to become an entrepreneur to personal characteristics (e.g., locus of control, need for achievement and tolerance for ambiguity) and cognitive abilities (Hansemark 1998; McClelland 1961). While, others related the challenging decision to environmental factors such as education and training that inspire and prepare students for establishing a new venture (Krueger et al. 2000; Chen et al. 1998).

More recent studies adopted an integrated approach that examines both personal and environmental factors that influence students' decision to establish their own ventures (Wu and Wu 2008; Souitaris et al. 2007; Fayolle at al. 2006) and how interactions among these factors affect the decision (Fitzsimmons and Douglas 2011; Liñán 2008). However, despite the tremendous amount of research conducted in this area, there exists many unaddressed questions on the factors that shape students' entrepreneurial intentions (Chen and He 2011; Liñán 2008; Man and Yu 2007; Fayolle et al. 2006; Kuratko 2005). This study attempts to narrow the gap in the literature by examining the factors that affect Malaysian university students' entrepreneurial intentions using the theory of planned behavior (Ajzen 1991). The findings provide a better understanding of the factors that construct and the path in which these factors influence students' entrepreneurial intentions. The remaining of this paper is organized in four sections. We first describe the theoretical framework and the model to be tested in this study. Next, we explain the methodological design applied for the empirical analysis and testing the hypothesized relationships between the constructs. Consequently, we present the results and finally we discuss the findings in light of implications for entrepreneurship research and education.

2. Theoretical background and models of entrepreneurial intention

In less than half a century, various theories and models have been developed to explain the complex decision to establish a new venture (Trevelyan 2011). The theory of planned behaviour (Ajzen 1991) has been one of the most applied theoretical frameworks to describe students' entrepreneurial intentions (Fayolle at al. 2006). Scholars argue the theory is appropriate to explain entrepreneurial intention as a conscious and deliberate behaviour that can be enhanced by education and training (Guerrero et al. 2008; Krueger et al. 2000). According to the theory, intention to become an entrepreneur is a result of dynamic interactions between attitude toward entrepreneurship (awareness of the importance and positive or negative value of a new venture creation and its consequences), control over entrepreneurial behaviour (perceived competencies to perform the tasks and roles of an entrepreneur and persistence in the face of problems) and subjective and social norms (the value of entrepreneurship for significant people and the extent to which individuals comply with the values). Entrepreneurial intention, therefore, takes shape through a cognitive process of evaluating personal values and abilities as well as social support



and resources that guides one's motivation, emotions, thoughts and behaviour throughout the process of entrepreneurship and performing entrepreneurial tasks (Liñán 2008; Ajzen 1991).

Unlike personal characteristics of entrepreneurs, entrepreneurial intention can be influenced and directed by various personal and environmental factors such as knowledge, skills, experiences and socioeconomic assistants and barriers (Souitaris et al. 2007). Scholars argue that students require a great sense of determination and persistence to decide on pursuing an entrepreneurial career (Fayolle et al. 2006). Liñán (2008) has recently developed and tested a model for university students' entrepreneurial intentions in Spain. The model highlights personal attraction (attitude toward entrepreneurship) and perceived control over entrepreneurial tasks as the most significant factors influencing university students' entrepreneurial intentions. The model also indicates the influential impact of entrepreneurial skills on entrepreneurial intention through their effect on personal attraction, subjective norms and perceived behavioural control. Furthermore, the model measures valuation and support of students' decision to become entrepreneurs by both their close (family, friends and colleagues) and social (people in the community) environments. However, the researchers failed to find a significant relationship between social valuation of entrepreneurship and students' entrepreneurial intentions and called for further investigations on how social values influence students' selection into entrepreneurship. Chen and He (2011) recently examined how valuation and support of the family and friends affect Chinese university students' entrepreneurial intentions. Although value and support of entrepreneurship by the close environment (family and friends) significantly affected entrepreneurial intention through its impact on students' perceptions toward their abilities to perform entrepreneurial tasks (entrepreneurial self-efficacy), there was no direct relationship between the value and support of entrepreneurship in the social environment and students' entrepreneurial intentions. The researchers also emphasized the urgent need for further investigations on how these factors affect entrepreneurial intentions of students. In response, this study adopted the students' entrepreneurial intention model proposed by Liñán (2008) to measure the factors that influence Malaysian university students' entrepreneurial intentions.

3. Research hypotheses

The main purpose of this study was to examine the impact of four personal (personal attraction, control over entrepreneurial tasks, entrepreneurial skills and subjective norms) and two environmental (valuation of entrepreneurship by the close environment and social valuation of entrepreneurship) factors on students' entrepreneurial intentions. Personal attraction, control over behaviour and subjective norms play critical roles in shaping students' entrepreneurial intentions since they both directly and indirectly affect their entrepreneurial intentions. However, entrepreneurial skills and close and social valuation of entrepreneurship have indirect relationships with entrepreneurial intentions through their impact on other factors. These relationships are proposed in the following hypotheses:

Hypothesis 1a: Personal attraction will positively affect entrepreneurial intentions.

Hypothesis 1b: Personal attraction will positively affect control over behaviour.

Hypothesis 2a: Control over behaviour will have a positive influence on entrepreneurial intentions.

Hypothesis 2b: Control over behaviour will positively affect personal attraction.

Hypothesis 3a: Subjective norms will positively affect entrepreneurial intentions.

Hypothesis 3b: Subjective norms will positively affect control over behaviour.

Hypothesis 3c: Subjective norms will positively affect personal attraction.



Hypothesis 4a: Entrepreneurial skills will positively affect personal attraction.

Hypothesis 4b: Entrepreneurial skills will positively affect control over behaviour.

Hypothesis 4c: Entrepreneurial skills will positively affect subjective norms.

Hypothesis 5a: Close valuation of entrepreneurship will positively affect personal attraction.

Hypothesis 5b: Close valuation of entrepreneurship will positively affect control over behaviour.

Hypothesis 5c: Close valuation of entrepreneurship will positively affect subjective norms.

Hypothesis 6a: Social valuation of entrepreneurship will positively affect personal attraction.

Hypothesis 6b: Social valuation of entrepreneurship will positively affect control over behaviour.

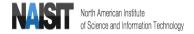
Hypothesis 6c: Social valuation of entrepreneurship will positively affect subjective norms.

4. Method

The participants were 722 Malaysian students enrolled in two private (n= 391, 54.2%) and three public (n= 331, 45.8%) universities during the 2011 to 2012 academic year. The majority of the students aged between 16 and 25 years (76.9%). Of the students, 377 (52.2%) were male and 342 (47.4%) were female. Most of the students were pursuing their Bachelor degrees (n= 541, 74.9%). The students had different educational backgrounds: agricultural science (n= 104, 14.4%), information technology (n= 82, 11.4%), accounting and finance (n= 41, 5.7%), and others (n= 495, 68.5%). Majority of the participants had no business experiences (n= 491, 68%) and had never taken an entrepreneurship course (n= 363, 50.3%).

We utilized the Entrepreneurial Intention Questionnaire (Liñán 2008) to measure students' entrepreneurial intentions. The questionnaire contains 34 items measuring four dimensions of the theory of planed behaviour (Ajzen 1991), including entrepreneurial intention (six items), personal attraction (five items), perceived control over entrepreneurship (six items), and subjective norms (three items). Three items in the questionnaire also measure the valuation and support of students' entrepreneurial intentions by their close environment (family, friends and colleagues) and five items measures social valuation and support of entrepreneurship (by the people and the whole country). The questionnaire also measures specific skills required for managing a new venture (opportunity recognition, creativity, problem solving, leadership and communication, innovation and networking) by six items. Liñán (2008) reported high reliability and validity values for all of the constructs in the questionnaire to measure entrepreneurial intention and its antecedents among university students in Spain (all of the constructs scored a Cronbach's Alpha higher than 0.80). Students' responses were scored on a five-point Likert type scale, with response options ranging from 1 (strongly disagree) to 5 (strongly agreed).

We conducted a confirmatory factor analysis (CFA) to test factor loadings of the individual items, convergent and discriminate validity of the constructs and validity and reliability of the overall measurement model using Structural Equation Modelling (SEM). SEM has been applied in previous studies to examine students' entrepreneurial intentions (Liñán and Chen 2009; Liñán 2008; Guerrero et al. 2008). Table 1 shows reliability and validity statistics for the constructs of the questionnaire in this study. Of the six items measuring students' entrepreneurial intentions, three were deleted (IN8, IN16, IN18) because their loadings were less than the 0.50 threshold (Hair et al. 2010). Three items from personal attraction and two items from social valuation of entrepreneurship were also eliminated due to their low loadings to the factors. Convergent validity of each factor was assessed by average variance extracted (AVE). All of the constructs scored greater than the 0.50 threshold (Table 1). This indicates the items



were valid to measure the factors. Analysis of the measurement model developed with the remaining items implied that the model fits the data well because all of the goodness of fit indices were higher than 0.90 and RMSEA was less than the 0.05 threshold [x^2 =479.197; DF=188; p=000; GFI=.941; AGFI=.921; CFI=.957; NFI=.931; TLI=.947; and RMSEA=.046]. Analysis of the consistent validity of the factors also indicated that all of the constructs of the questionnaire scored an acceptable level of Cronbach's Alpha (>0.50).

Table 1: Validity and reliability statistics for entrepreneurial intention scale

Constructs	Items	Mean	SD	Factor loadings	α	AVE
Personal attraction	IN14	3.97	0.77	0.73	0.520	0.70
	IN17	3.64	0.87	0.66		
Control over behavior	IN1	3.62	0.76	0.69	0.595	0.56
	IN6	3.44	0.82	0.91		
	IN19	3.60	0.67	0.60		
Subjective norms	IN3	3.73	0.73	0.74	0.692	0.77
	IN7	3.69	0.79	0.83		
	IN10	3.71	0.75	0.74		
Closer valuation	IN21	3.36	0.75	0.68	0.659	0.67
	IN24	3.40	0.73	0.71		
	IN27	3.46	0.67	0.62		
Social valuation	IN25	3.33	0.72	0.67	0.611	0.73
	IN26	3.46	0.75	0.86		
	IN28	3.39	0.78	0.66		
Entrepreneurial skills	OP29	3.60	0.98	0.75	0.863	0.72
	CR30	3.65	0.94	0.75		
	PS31	3.70	0.90	0.78		
	LC32	3.67	0.96	0.72		
	NP33	3.54	0.94	0.68		
	NC34	3.54	0.97	0.64		
Entrepreneurial	IN4	3.75	0.73	0.83	0.711	0.77
intention	IN5	3.44	0.82	0.90		
	IN12	3.49	0.90	0.58		

5. Results

To test the hypothesized relationships among the constructs and the extent to which each factor influences entrepreneurial intentions, we first examined the direct effects of the six constructs on entrepreneurial intentions. Personal attraction and control over behaviour positively affected students' entrepreneurial intentions (β =.71, C.R= 5.23, p=.000; β =.82, C.R= 5.97, p=.000 respectively). Therefore, H1a and H2a that hypothesized positive impact of personal attraction and behavioural control on entrepreneurial intentions were supported by the data (Table 2). The hypothesis about positive impact of personal attraction on control over behaviour (H1b) was not supported by the data (β =.16, C.R= 1.25, p=.21). Control over behaviour also had no significant influence on personal attraction (H2b) because (β =.99, C.R= 1.23, p=.21). Students' perceived behavioural control carried the weight of subjective norms to entrepreneurial intention since there was no significant relationship between subjective norms and entrepreneurial intention (β =-.001, C.R=-.006, p=.995) but the direct relationship between subjective norms and control over



behaviour was significant and positive (β =.64, C.R= 12.07, p=.000). Therefore, Ha3 was not confirmed but H3b was supported by the data. There was also a positive and significant relationship between subjective norms and personal attractions as proposed by H3c (β =.70, C.R= 11.59, p=.000). Entrepreneurial skills did not have a significant direct effect on entrepreneurial intentions (β =-.108, C.R= -2.95, p=.008). Furthermore, the skills had a low significant impact only on behavioural control (β =.181, C.R= 6.404, p=.000) and subjective norms (β =.246, C.R= 6.701, p=.000). But the relationship between entrepreneurial skills and personal attraction was not significant (β =.075, C.R= 2.003, p=.45). Therefore, H4a that hypothesized a positive impact of entrepreneurial skills on personal attraction was not confirmed but H4b and H4c that proposed positive relationships between entrepreneurial skills and control over behaviour and subjective norms were supported by the data. The direct relationship between close valuation of entrepreneurship and entrepreneurial intentions was not significant (β=-.262, C.R= -2.92, p=.003). Furthermore, the positive contribution of close valuation of entrepreneurship to personal attraction as hypothesised by H5a was not significant (β =.135, C.R= 2.85, p=.004). Close valuation of entrepreneurship had also no significant direct impact on control over behaviour $(\beta=.081, C.R=.37, p=.71)$. Therefore, H5b was not also supported. Tests of mediation effect between these variables was conducted and the results indicated that close valuation of entrepreneurship fully mediated the relationship between social valuation and subjective norms because the direct relationship between the constructs was not insignificant (β=.179, C.R= 2.407, p=.016) but social valuation significantly influenced close valuation ($\beta=.676$, C.R= 11.192, p=.000) and subjective norms ($\beta=.392$, C.R= 4.995, p=.000). Therefore, the data supported H5c but did not support H6c that proposed a positive effect of social norms on subjective norms. H6a and H6b that hypothesized positive contributions of social valuation of entrepreneurship to personal attraction and behavioural control were not also confirmed (β =.032, C.R=.72, p=.46; β =.021, C.R=.47, p=.63 respectively).

Table 2: Summary of Hypotheses Test Results

Hypothesis	β	p	Accept/Rejec t
H1a: Personal attraction will positively affect entrepreneurial	.71	.000	Accept
intentions. H1b: Personal attraction will positively affect control over behaviour.	.16	.210	Reject
H2a: Control over behaviour will have a positive influence on entrepreneurial intentions.	.82	.000	Accept
H2b: Control over behaviour will positively affect personal attraction.	.99	.210	Reject
H3a: Subjective norms will positively affect entrepreneurial intentions.	00	.995	Reject
H3b: Subjective norms will positively affect control over behaviour.	.64	.000	Accept
H3c: Subjective norms will positively affect personal attraction.	.70		Accept
H4a: Entrepreneurial skills will positively affect personal attraction.	.07	.450	Reject
H4b: Entrepreneurial skills will positively affect control over behaviour.	.18	.000	Accept



H4c: Entrepreneurial skills will positively affect subjective	.24	.000	Accept
norms.			
H5a: Close valuation of entrepreneurship will positively affect	.13	.004	Reject
personal attraction.			
H5b: Close valuation of entrepreneurship will positively affect	.08	.710	Reject
control over behaviour.			
H5c: Close valuation of entrepreneurship will positively affect	.44	.000	Accept
subjective norms.			1
H6a: Social valuation of entrepreneurship will positively affect	.03	.460	Reject
personal attraction.			3
H6b: Social valuation of entrepreneurship will positively affect	02	.630	Reject
control over behaviour.	.02	.050	regeer
H6c: Social valuation of entrepreneurship will positively affect	17	.016	Reject
subjective norms.	.1/	.010	Reject
subjective norms.			

Figure 1 shows the structural model that best fitted the data [x^2 =467.354; DF=200; p=000; GFI=.943; AGFI=.928; CFI=.961; NFI=.933; TLI=.954; and RMSEA=.043]. As the figure shows, personal attraction and perceived control over behaviour contribute 76% of the variance in students' entrepreneurial intentions (personal attraction 54% and control over behaviour 49%, p=000). Subjective norms and its antecedents explain 58% of variance in control over behaviour. Social valuation has a substantial impact on close valuation of entrepreneurship (68%, p=000). In turn, close valuation of entrepreneurship explains a substantial proportion of the variance in subjective norms (44%, p=000). This indicates that social valuation of entrepreneurship indirectly affects subjective norms through close valuation of entrepreneurship and thereby influences students' entrepreneurial intentions. Subjective norms also contributed 64% variance of students' personal attraction toward entrepreneurship. The specific entrepreneurial skills measured in this study accounted for a low extent of subjective norms and students' perceived behavioural control (28% and 25% respectively). These results partially confirmed the structural model for students' entrepreneurial intention proposed by Liñán (2008). These findings are discussed in the next section.



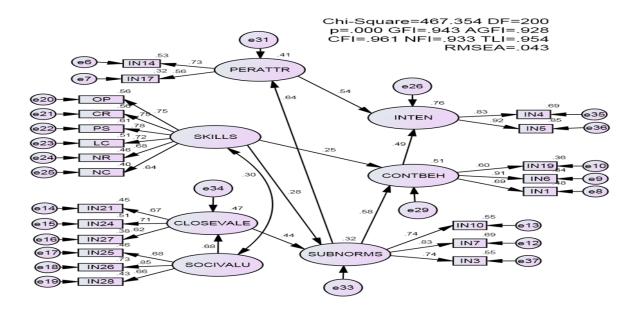


Figure 1: Structural equation model with standardized regression weights for students' entrepreneurial intentions

6. Discussion

This study aimed to examine the factors that influence Malaysian university students' entrepreneurial intentions. Of the 16 hypothesized relationships among students' entrepreneurial intention and its antecedents, seven were accepted. More specifically, personal attraction and control over the process of entrepreneurship had direct and positive impact on entrepreneurial intentions and entrepreneurial skills, subjective norms, close and social valuation of entrepreneurship had significant indirect contributions to the formation of students' entrepreneurial intentions. Our results emphasized the critical role that personal attraction (attitude toward entrepreneurship) and control over entrepreneurship play in shaping students' entrepreneurial intentions (Liñán 2008). Therefore, students' decision to become an entrepreneur is more affected by their perceptions toward the value of entrepreneurship and their perceived abilities to perform entrepreneurial tasks. The higher effect of personal attraction on entrepreneurial intentions also confirms that students' decision to pursue an entrepreneurial career is highly determined by their desire and interest to do so (Guerrero et al. 2008).

According to Liñán's (2008) model for students' entrepreneurial intentions, close valuation of entrepreneurship has both direct and indirect relationships with entrepreneurial intention and social valuation of entrepreneurship has an indirect impact on entrepreneurial intention through entrepreneurial skills. While, our findings indicated that subjective norms and valuation of entrepreneurship in the social and close environments create a system of valuation and support for students' entrepreneurial intentions which highly influences their attitude toward entrepreneurship and consequently enhances their intentions to become entrepreneurs. This supports Shapero and Sokol's (1982: 83) assertion that "social and cultural factors that enter into the formation of entrepreneurial events are most felt through the formation of individual value systems". The indirect relationship between subjective norms and entrepreneurial intentions



through personal attraction highlights the key role that individuals play in evaluating and weighting the values of entrepreneurship in their social and close environments and their tendency to complying with them.

Subjective norms had a great contribution to students' perceived control over behavior (Liñán 2008). Subjective norms also highly influenced the extent to which students considered establishing their own business as valuable and thereby enhanced their entrepreneurial intentions (Liñán 2008; Liñán and Santos 2007). Additionally, subjective norms were affected by valuation of entrepreneurship by students' family, friends and colleagues. In other word, the higher these significant people encouraged and supported the students to become an entrepreneur, the greater they valued entrepreneurship as a career choice and perceived themselves as capable of performing entrepreneurial tasks. This finding supports the significant impact of close environment on students' entrepreneurial intentions (Che and He 2011) but through its contribution to subjective norms and perceived control over behaviour. Interestingly, social valuation of entrepreneurship had a high impact on constructing the valuation of entrepreneurship in students' close environment and thereby the extent of support they received from their family, friends and colleagues to realize their intention to establish their own venture. Our findings support the indirect impact of social valuation of entrepreneurship on students' entrepreneurial intention (Liñán 2008), however, through its contribution to shape the valuation and support of entrepreneurship in the close environment. It also emphasises the difference in the path through which social valuation of entrepreneurship affect students' entrepreneurial intentions across cultures (Che and He 2011; Liñán 2008). To improve students' personal attraction towards and their interest in entrepreneurship, therefore, there should be a strong culture of entrepreneurship in the country, family and community which highly valuates and supports entrepreneurship. Furthermore, there should be great reinforcing linkages between the values and support of entrepreneurship in the family and the social environment in order to highly encourage students to establish their own businesses.

In contrast to previous research findings that entrepreneurial skills have a high significant relationship with students' entrepreneurial intentions through personal attraction, subjective norms and perceived behavioural control (Liñán 2008; Chen et al. 1998), we found a negative relationship between entrepreneurial skills and students' entrepreneurial intentions and a low significant impact of entrepreneurial skills on subjective norms and control over behaviour. In better words, the more Malaysian students learn specific entrepreneurship skills, the less they intend to become an entrepreneur. This negative relationship can be a reflection of students' awareness of the complexities and challenges of performing entrepreneurial tasks as they learn the skills. It can also indicate that entrepreneurship education was not effective in developing such skills in students (Ramayah and Zainon 2005). The negative and low relationships between the variables may also be because of our sample which includes students who had not taken entrepreneurship courses and had no knowledge and experiences on specific entrepreneurial skills. They can also be due to inappropriateness of the set of entrepreneurial skills measured in this study for university students. McGee et al. (2009) argue that an instrument that measures the required skills for the process of establishing a new venture can better assess students' capability to perform entrepreneurial tasks. Therefore, a more reliable scale should be developed to measure students' entrepreneurial skills.

7. Conclusion



Based on the findings of this study, it can be concluded that intention to become an entrepreneur is a complex and personal decision that is highly shaped by students' attitudes (attraction) toward entrepreneurship and perceived behavioural control. However, the paths in which students' entrepreneurial intentions take shape may vary in different contexts. Social and close valuation of entrepreneurship create a mechanism of valuation and support for Malaysian university students' intentions to become entrepreneurs which highly affects their attitudes toward entrepreneurship and their perceived ability to successfully perform the challenging tasks in the process of entrepreneurship. Despite their great desire, perceived ability and intention to establish their own businesses, university students in Malaysia do not perceive themselves as capable of performing the specific skills of managing a new business. Our findings have several implications for entrepreneurship research and education. First, entrepreneurship research which has been criticized for lacking robust theoretical foundations for research (Man and Yu 2007; Fayolle et al. 2006) can use the theory of planned behaviour as a theoretical framework. Second, students' entrepreneurial intention questionnaire (Liñán 2008) can be applied to measure students' entrepreneurial intentions and its antecedents. However, there is still a need for revising some of the items of the questionnaire due to their low loadings to the constructs and developing a standardized instrument to measure students' entrepreneurial intentions. Third, the entrepreneurial intention model emerging from this study can be applied to measure students' intentions to become an entrepreneur in other contexts. Furthermore, the high contribution of social valuation of entrepreneurship to the support students receive for their decision to become an entrepreneur in their close environment provides a better understanding of how values and supports provided for entrepreneurs and entrepreneurial activities can enhance their intentions to establish new ventures. This may also assist policy makers and educators to develop a strong culture and support system for entrepreneurship through offering public courses and training and removing the impediments in the process of establishing new ventures specifically by university students (Liñán 2008; Fuchs et al. 2008).

This study found a negative relationship between entrepreneurial skills and students' entrepreneurial intentions and limited impact of the skills on control over behaviour and subjective norms. This highlights the necessity and importance of identifying the entrepreneurial skills that improve students' entrepreneurial intentions. It also emphasises the urgent need for providing Malaysia university students with appropriate learning opportunities such as experiential entrepreneurship learning activities in order to improve their skills in specific tasks of entrepreneurs (Cheng et al. 2009). To do so, educators may need to involve students in business plan writing, case studies and running a small new business (Fayolle et al. 2006; Chen et al. 1998) rather than stressing only on entrepreneurship theories and traditional methods of teaching entrepreneurship (e.g., Trevelyan 2011; Pittaway and Cope 2007). Further qualitative research should be done to investigate why acquiring more knowledge and skills on specific tasks of entrepreneurs negatively affect students' entrepreneurial intentions. Furthermore, future research can be conducted with a sample of students who have entrepreneurship education and experiences and nascent entrepreneurs to examine if education and experience affect entrepreneurial intentions. The relationships between social and close valuation of entrepreneurship, subjective norms and perceived control over behaviour have also great potential for further investigations in other contexts than Malaysia. Finally, the differences in the mechanisms through which students' entrepreneurial intention take shape across countries should be examined by researchers to explore the impact of environmental and personal factors on the decision to become an entrepreneur.



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