



## **Entrepreneurial intent among the university students: A study of undergraduates in Rajarata University of Sri Lanka**

P.M.B. Jayathilake

Department of Business Management, Faculty of Management Studies,  
Rajarata University of Sri Lanka, Mihintale, Sri Lanka.  
[bandulapmb@yahoo.com](mailto:bandulapmb@yahoo.com)

### ***Abstract***

*The potentiality of university education to facilitate entrepreneurship development has received increasing attention in the last few decades. However, limited literature pertaining to the area is yet inconclusive and contradictory. This study examines the role of university education in cultivating the entrepreneurial intent among the students. Building on the theory of planned behavior, this study tests the formation of entrepreneurial intention among the undergraduate applying structural equation modeling. Data were collected from 120 final year students drawn from two different management degree programmes at Rajarata University of Sri Lanka. Result revealed that entrepreneurial education has a significant influence over developing perceived behavioral control, attitudes toward entrepreneurship and social norms among undergraduates. Entrepreneurial intent is motivated by perceived behavioral control and attitudes towards the entrepreneurship. Thus, higher education institutions should develop more flexible structure to shape their programs focusing the development of entrepreneurial capabilities of the students.*

**Keywords:** *Attitudes toward entrepreneurship, entrepreneurial education, entrepreneurial intent, perceived behavioral control, social norms.*

### **1. Introduction**

Entrepreneurship is widely acknowledged and recognized as a generator of economic prosperity through employment creation, regional development, promotion of innovations and other significant contribution to the society. Recently, policy makers and academia have realized the potentiality of education in developing entrepreneurship among the students. As a result, higher education institutes including universities have originated a number of initiatives in their curricular in order to develop entrepreneurial people with

the aspiration to equip individuals with the appropriate knowledge and skills required by a successful entrepreneur (Gatewood et al., 2002). Sri Lanka, being a country which provides free education up to university education, has experienced similar reforms in their higher education sector in the last decade especially at the state universities. However, literature dealing with the underlined phenomena is inconclusive and is loaded with vague ascertain. In fact, some empirical studies support that the tendency of university students to involve in business activities and self-owned business as their career (Hart & Harrison, 1992; Karr, 1985) while other studies show that lower entrepreneurial intention among the university students (Brenner et al., 1991). Although education has a potential impact on individual's personal development including changes in attitudes, values, abilities and social beliefs (West & Hore, 1989), how higher education facilitates nurturing entrepreneurial intent among the students and what factors drive such intention are remained to further explanation. Thus, this study aims to examine the factors which facilitate the nurturing entrepreneurial intent among the university students. The findings of the present study would provide new insights for entrepreneurial education in universities and policy formulation.

## **2. Literature review**

The decision to become an entrepreneur, a self-employer and intention towards entrepreneurial behavior have been investigated in empirical studies with different perspective; early studies have paid much attention for personality traits such as locus of control, need for achievement, need for autonomy, risk taking propensity etc. to predict the likelihood of entrepreneurial behavior (McClelland, 1961). Subsequently, the studies are likely to examine the explanatory capacity of demographic variables such as age, gender, origin, religion, level of education, and experience in modeling the entrepreneurial behavior (Reynolds et al., 1994; Storey, 1994). However, recent studies have revealed that the prediction power of those factors is very limited and entrepreneurial intention best predicts the entrepreneurial behavior that can be defined as discovery, evaluation, and exploitation of an opportunity (Ajzen, 1991; Gartner, 1989; Santos & Linan, 2009; Shapero & Soko, 1988; Veciana et al., 2005). Psychological research also believes that intention is a critical predictor of consequent planned behavior (Bagozzi et al., 1989).

Entrepreneurial intention can broadly be defined as a conscious awareness and conviction by an individual that they intent to setup a new business venture and plan to do so in the future (Bird, 1988; Thompson, 2009). The Theory of Planned Behavior (TPB) can be applied to nearly all voluntary behaviors and it provides quite good results in very diverse fields, including the choice of professional career (Ajzen, 2001; Kolvereid, 1996). According to the theory, intention becomes the fundamental element of explaining behavior and it captures the three motivation factors that influence the behavior, (Ajzen, 1991). Those are perceived behavioral control, attitude towards behavior and perceived social norms. Perceived behavioral control is defined as the perception of the easiness or difficulty in the fulfillment of the behavior of interest (become as an entrepreneur). Attitude refers to the degree to which the individual holds a positive or negative perceptual valuation about the behavior. Perceived social norms denote the perceived social pressure to carry out or not to carry out the interest behavior (Ajzen, 1991).

Recently, entrepreneurial education has widely been acknowledged as viable process in developing attitudes, values, and abilities that facilitate cultivating entrepreneurial intent within individuals. One strand of studies evident that entrepreneurship education is likely to be a significant component to improve the quality of graduate students as well as societal and intellectual attributes to entrepreneurship in the long term within the changing economy where corporation life is being eroded (Coulson-Thomas, 1994). In this view, the entrepreneurs' personal knowledge significantly influences the entrepreneurial intention and venture creation decision. In general, greater knowledge of the entrepreneurial institutional framework directly provides a greater awareness about the existing of the professional career option and makes the intention to become an entrepreneur more credible. The other strand of scholars argue that there are several channels through which education may have an influence on the propensity to become an entrepreneur (Le, 1999). According to Lucas' (1978) model, education would enhance an individual's abilities which in turn facilitate for propensity to be an entrepreneur.

### **Theoretical framework**

Empirical studies have employed various approaches to examine the entrepreneurial intention. Ajzen's (1991) theory of planned behavior (TPB) and Shapero's (1988) model of the Entrepreneurial Event (SEE) have been predominated in the literature (Krueger et al., 2000). The TPB explains three attitudinal antecedent of intention; perceived behavioral control, personal attitude toward the behavior and subjective norms while SEE model explains that personal choice to start a new venture depends on three elements; perceived feasibility, perceived desirability and the propensity to act. However, Krueger et al. (2000) stated that perceived behavioral control in TPB and perceived desirability in SEE are conceptually associated with person's self-efficacy and TPB's other two antecedents correspond to SEE's perceived desirability. Accordingly, there is an inherent similarities in these two models.

Linan et al. (2011) studied the factors affecting the entrepreneurial intention among the university students applying TPB approach. They stated that personal attitude and perceived behavioral control are significant predictors of entrepreneurial intention which is positively correlated with the two antecedents. Wu and Wu (2008) found similar result through an empirical investigation of 150 Chinese university students. They conclude that personal attitudes and perceived behavioral control are main predictors of entrepreneurial intention among the university students. Moreover, some studies reveal that each antecedent of TPB has a positive predicting capacity to explain entrepreneurial intention (Kolvereid, 1996; Thachev and Kolvererd, 1999; Segal et al., 2005). Accordingly, the following hypotheses are proposed for the present study.

*H<sub>1</sub>: Perceived behavioral control has a positive effect on entrepreneurial intent of the university students*

*H<sub>2</sub>: Personal attitudes toward entrepreneurship has a positive effect on entrepreneurial intension of the University students*

*H<sub>3</sub>: Subjective norms have a positive effect on entrepreneurial intention of the university students*

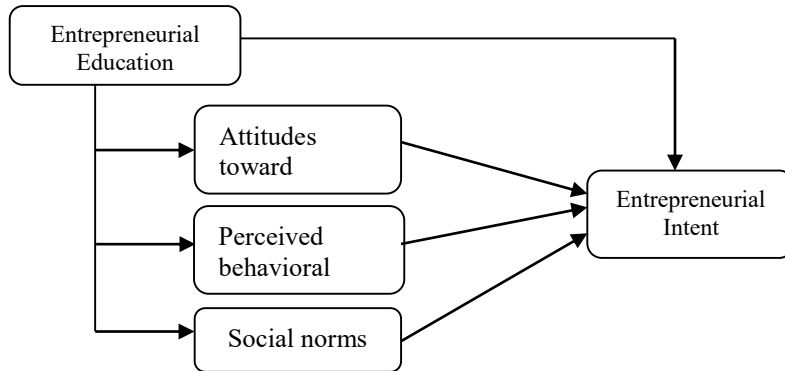
In addition to developing skills for business startup and ownership, entrepreneurial education in universities can represent a positive influence in terms of general attitudes to entrepreneurship and promoting entrepreneurship as a useful and respectable career prospect for graduates (Kolvereid & Moen, 1997). Consequently, the role of education in entrepreneurship has received increasing attention in very recent years (Kuip & Verheul, 2003). Although scientific literature shows that education level of individual has a significant influence of his/her future earnings and help people to achieve overall success (Angrist & Krugrt, 1999), the relationship between education and entrepreneurial intention is still an under-researched area. In general, higher education is considered as a systematic way of making permanent changes on students with personal development including changes in attitudes and values, improvement of abilities and making possible social impact as well (West & Hoer, 1989). It is generally believed that entrepreneurial attitudes may be influenced by educators and practitioners. By cultivating an attitudes toward entrepreneurship, perceived behavioral control, and self-efficacy educators can change individuals' perception of entrepreneurship (Robinson et al., 1991). Ewert and Baker (2001) suggest that higher education differentially prepares people humoristic and technical. Kolvereid and Moen's (1997) study finds that graduates with entrepreneurship major have stronger entrepreneurial intentions than other graduates. Similarly, Webb et al. (1982) state those students who have participated in entrepreneurship courses possess higher level of entrepreneurial intention and are more likely to start their own business than other students. These literature leads to hypothesize;

*H<sub>4</sub>: Entrepreneurial education influences on attitudes toward the entrepreneurship, perceived behavioral control and social norms among the undergraduates.*

In addition to the variables that were cited above, individual demographic variables such as sex, prior work experience and parental entrepreneurialism may have significant influence on entrepreneurial intention of the students. In fact, some studies have found that male students demonstrate significantly higher entrepreneurial intention than their counterpart (Mazzarol et al., 1999; Kolvererd, 1996). Kolvererd (1996) also states that those with prior experience in entrepreneurial activities have higher entrepreneurial intention compared to those without such an experience. Studies have also revealed that people having a parent who is an entrepreneur are more likely to express higher entrepreneurial intention than others (Krueger, 1993). Since present study focuses the university students those who have started the university education just after their studies in schools, they might have a limited possibility to gain experience through practices.

Figure 1 demonstrates the conceptual framework that was supported by the theory of planned behavior and the extant literature.

Figure 1: Hypothesized framework for entrepreneurial intent



### 3. Methodology

This study is grounded on the TPB and framed on the hypotheses which were derived in the preceding section. Accordingly, entrepreneurial intention (EI) of the students is considered as the dependent variable which is predicted from attitudes toward entrepreneurship (ATE), perceived behavioral control (PBC) and social norms (SN). Entrepreneurial education (EED) is treated as a variable that influences on ATE, PBC and SN.

Final year undergraduates (120) who are following two different management degree programmes at Rajarata University of Sri Lanka provided the data for the empirical examination. The rationale behind the selecting is that those group of students are about to face their professional career choices and those students become to the seemly of the population which experience highest entrepreneurial intention (Reynolds et al., 2002). A questionnaire that was specially designed through empirically validated measures of previous studies used in survey of the students. The questionnaire was equipped with five sections and pilot-tested before final survey to ensure the quality of responses. First section aims to collect the demographics of the respondents and other four sections focused to measure the main research variables on Likert type scale with five points. In particular, items for each variable have been developed through an extensive review of the relevant literature and studies in the similar type of investigation. EI was measured through 5 items utilizing a five point scale ranging from 1 (strongly disagree) to 5 (Strongly agree). The Cronbach alpha for the construct was .78 and acceptable for the study. ATE, PBC and SN were also measured using 5, 5 and 4 items constructs respectively on a five point Likert type scale. Each of constructs has captured Cronbach's alpha values well above the general threshold value of .7 to ensure the construct validity, overall measurement model was tested before performing the structural model in structural equation modeling. Each item loads only to the respective latent constructs and loading reported well over 0.5 level of cutoff values. Composite reliability (CR) for each latent constructs reports values well over 0.7 and confirms the convergent validity. Discriminant validity was further ensured as CR values of all constructs exceed the

squared correlation of respective constructs. GFI (goodness of fit index), RMR (Root mean square residuals), CIF (comparative fit index), RMSEA (root mean square error of approximation) received reasonably fit values and ensured the model fit. Data analysis was performed through path analysis, correlation analysis and other descriptive statistics. AMOS 20 and SPSS 21 versions were used in the analysis.

**4. Results**

Table 1 shows the basic descriptive statistics for main study variables. EI has captured an average of 3.938 with a standard deviation of 0.620. Thus, selected students show considerably moderately higher entrepreneurs intent. The mean difference of EI between female students (M= 4.105.) and male students (M=3.766) is significant (t=3.079, p<0.01) and it indicates that male students have higher level of entrepreneurial intent than that of female students. Three antecedent variables, PBC, ATE and SN, captured averages of 3.523, 3.806, and 3.108 respectively. These values also indicate that selected group of students has self-confidence about their abilities, positive attitude towards the entrepreneurship and favorable social norms. Moreover, result of t-test reveals that male students have higher level of perceived behavioral control (t=3.520, p<0.01) and attitudes toward the entrepreneurship (t=2.487, p<0.05) than that of their counter parts.

Table 1  
Descriptive statistics

Variable	Mean		Summated		T- test/ ANOVA	Sig
	Female	Male	Mean	SD		
Entrepreneurial intent	4.105	3.766	3.938	0.620	3.079	0.003
Perceived Behavioral control	3.350	3.702	3.523	0.569	3.520	0.001
Attitudes toward entrepreneurship	3.712	3.896	3.806	0.415	2.487	0.014
Social Norms	3.047	3.168	3.108	0.574	1.160	0.248
Entrepreneurial Education	3.247	3.328	3.288	0.924	0.475	0.636

To test hypotheses, correlation analysis and structural equation modeling were employed. Table 2 reproduces result of correlation analysis that was performed for main study variables.

Table 2  
Correlation matrix

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
Perceived Behavioral control	-			
Attitude toward entrepreneurship	.356**	-		
	.000			
Social Norms	.097	.112	-	
	.294	.222		
Education	.209*	.199*	.057	
	.022	.017	.170	-
Entrepreneurial intent	.299**	.465**	.173	.334**
	.001	.000	.058	.000

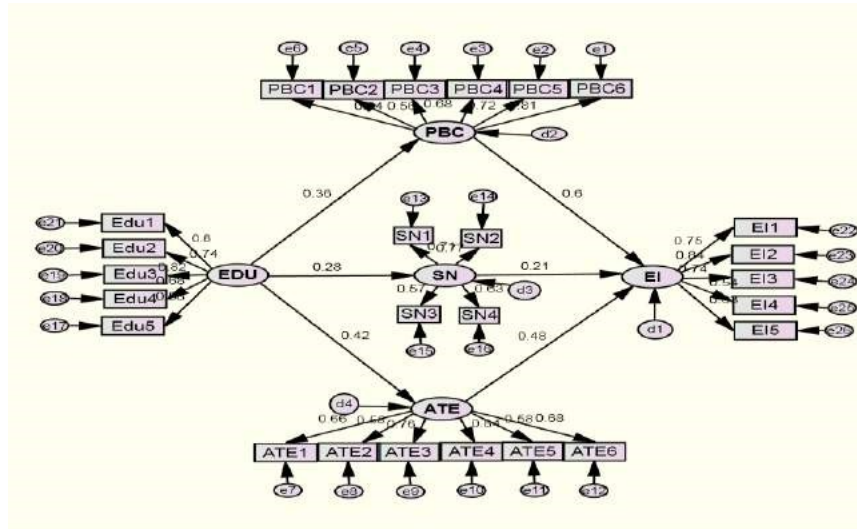
\*\**. Correlation is significant at the 0.01 level (2-tailed).*

\**. Correlation is significant at the 0.05 level (2-tailed).*

Consistent with proposed hypotheses of the study, perceived behavioral control is positively correlated with entrepreneurial intent ( $r=.299$ ,  $p<.01$ ). Attitudes toward entrepreneurship is also positively correlated with entrepreneurial intention ( $r=.465$ ,  $p<.01$ ) providing some initial evidence to hypothesis 2. However, there is no any significant relationship between social norms and entrepreneurial intent ( $r=.173$ ,  $p>.05$ ). On the other hand, entrepreneurial education shows positive relationship with perceived behavioral control ( $r=.209$ ,  $p<.05$ ) and attitudes toward entrepreneurship ( $r=.199$ ,  $p<.05$ ).

Figure 2 presents the structural model with path estimates. Model fit indices and standardized regression weights (SRW) with associated probabilities ( $p$ ) are reported in Table 3. CFI being one of the most commonly using fit indices has captured 0.935 which is well over the general cutoff of 0.90. RMR and RMSEA being absolute and incremental indices have respectively captured 0.06 and 0.032 by showing reasonable fit of the model.

Figure 2: Path diagram



SRWs for paths from EDU suggest that entrepreneurial education has a significant and positive effect on perceived behavioral control (SRW=.360,  $p < .05$ ) and attitudes toward entrepreneurship (SRW=.420,  $p < .05$ ). However, effect of entrepreneurial education on social norms is not significant (SRW=.286,  $p > .05$ ). The result also reveals that perceived behavioral control (SRW=.527,  $p < .001$ ) and attitudes toward entrepreneurship (SRW=.603,  $p < .001$ ) have positive effect on entrepreneurial intent. On the contrary, social norms does not show statistically meaningful effect on entrepreneurial intent (SRW=.036,  $p > .05$ ). These results signify that entrepreneurial education fosters perceived behavioral control and positive attitude toward the entrepreneurship which lead to nourish entrepreneurial intent among the undergraduates.

Table 3  
Result for structural model

Path	SRW	SE	CR	p
Entrepreneurial education (EDU) ---> Perceived behavioral control (PBC)	0.360	0.166	2.174	0.030
Entrepreneurial education (EDU) ---> Social Norms (SN)	0.280	0.268	1.045	0.087
Entrepreneurial education (EDU) ---> Attitudes toward entrepreneurship (ATE)	0.420	0.213	1.971	0.049
Perceived behavioral control (PBC) ---> Entrepreneurial intent (EI)	0.527	0.206	2.558	***
Social Norms (SN) ---> Entrepreneurial intent (EI)	0.036	0.061	0.590	0.435
Attitudes toward entrepreneurship (ATE) ---> Entrepreneurial intent (EI)	0.603	0.127	4.748	***

$\chi^2(295) = 908.377$  \*\*\*  $p < 0.001$   
*RMR = 0.06, GFI = 0.961, NFI = 0.947, IFI = 0.942, TLI = 0.998, CFI = 0.935, RMSEA = 0.032*



## **5. Discussion**

The results of the present study support the findings of previous studies which have been carried out in the similar setting (Thachev & Kolvereid, 1999; Wu & Wu, 2008; Kuip & Verheul, 2003; Kolvereid & Moen, 1997). This study contributes the literature through empirical evidence on entrepreneurial intention of the university students in developing countries where empirical literature is not much developed in developed countries. In particular, entrepreneurial education is found to be an effective way to shape students perceived behavioral control and attitudes toward the entrepreneurship which essentially promote entrepreneurial intent among the students. Ajzen (1991) found that social norms is frequently the weakest element and this view was supported by a number of different studies which applied the theory of planned behavior to various actions. Some of previous studies show that social norms have a limited and unclear influence towards entrepreneurial intentions. However, present study supports the view that social norms do not foster entrepreneurial intent among the students. From point of view of entrepreneurial education, entrepreneurial training needs to consider not only increasing perceived feasibility and desirability but also development of entrepreneurship, the role of the entrepreneurs and the development of the venture after startups.

## **6. Conclusion**

The results of the present study support the literature on positive predictive capacity of entrepreneurial education on perceived behavioral control and attitudes towards entrepreneurship which are found to be significant antecedents of the entrepreneurial intent of the university students. On the contrary, study finds that entrepreneurial intent is not influenced by social norms which have been identified as a factor that makes significant impact by some of previous studies.

The study has number of implications for entrepreneurial education in universities in general as well as for the policy makers. The courses designed in business and management degree programs should be further reformed to enhance students' awareness about the entrepreneurship, creativity and pro-activeness which lead to create potential intent to be an entrepreneur. The prime objectives of the education are making permanent changes of attitudes and knowledge transfer. The major challenge which educators face today is transfer of tacit knowledge in the discipline like entrepreneurship which is demanded more pragmatic skills. In this regards, educators should pay their attention to enrich entrepreneurial education through ways of the training and practical sessions which are believed as viable tools in transferring the tacit knowledge. Moreover, educational reforms that may offer better results would be oriented to increasing perceived behavioral control and personal attitudes as entrepreneurial intention is mostly determined by them.

This study has some limitations when generalization the results into other setting. Firstly, it was carried out on a sample of students selected from one university in Sri Lanka. Therefore, findings should be replicated with further studies using a sample of students from different background and a larger sample. Secondly, the study used self-reported questionnaire in data collection purpose, therefore, finding of the study would have some kind of limitations. Future studies are required pay attention to carryout similar kind of investigation through unbiased measurements.

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