

An Extension of the Theory of Planned Behavior: Explaining Entrepreneurial Intentions of Undergraduates

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Introduction and Research Problem

When discussing entrepreneurship, intention based models are expected to bestow a suitable approach due to increased predictability of entrepreneurial performance. Intentions can be defined as states of mind which direct individuals' actions and attitudes towards accomplishing a particular objective (Bird, 1988). Thus according to Krueger et al. (2000) intentions are the best predictor of a planned behaviour. Shapero's SEE (Shapero, 1982) and Ajzen's TPB (Ajzen, 1991) are known to be the two best models in this respect. Shapero's model incorporates three components that influence entrepreneurial intentions: perceived desirability, perceived feasibility and propensity to act. Ajzen's TPB explicates the human behaviour by understanding the intentions leading to such behaviour. The theory assumes intention as the immediate antecedent of behavior, and subjective norm (i.e. the social pressure to perform the behaviour), perceived behavioural control (i.e. a self-evaluation of one's own competence with regard to the task or behaviour), and attitude towards behaviour (i.e. the degree to which individuals perceive desirable or undesirable appraisal of the behaviour) are antecedents to intention. Explaining and reasoning out the human behaviour is one of the complex tasks. Behavioural dispositions which include social attitudes and personality traits have played an important role in these attempts to predict and explain human behaviour. However in accordance with arguments developed by Ajzen and Fishbein (1980), as cited in Ajzen (1991), broad attitudes and personality traits have an indirect impact on specific behaviours: influencing only some of the factors closely linked to the behaviour in question. This utilised an extended version of Ajzen's TPB, analysing the entrepreneurial intentions of Sri Lankan State university undergraduates.

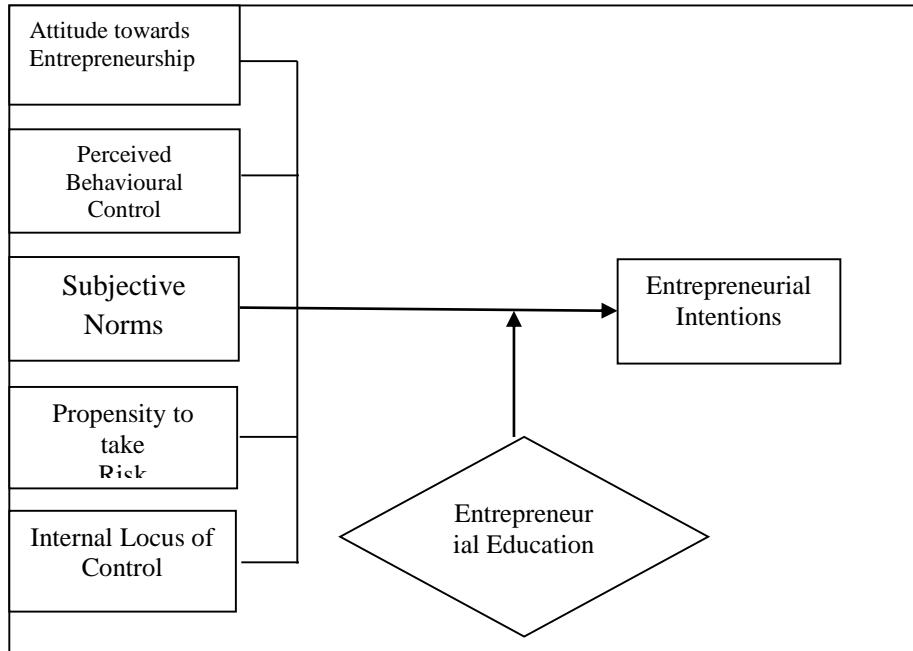
Conceptualisation & Methodology

The theory of planned behavior postulates three conceptually independent determinants: namely, attitude towards the behaviour, subjective norms and perceived behavioural control of intention as key determinants of entrepreneurial intent. As per the described theoretical framework, this study employs an extended

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version of TPB developed by Ajzen (1991) and the schematic diagram of the conceptual model of this study is as follows:

Figure 1: Conceptual Framework



Source: Author Developed

Statements of Hypothesis

- H1 - Attitude towards entrepreneurship positively influences entrepreneurial intentions
- H2 - Subjective norms positively influences entrepreneurial intentions
- H3 - Perceived behavioural control positively influences entrepreneurial intentions
- H4 - Internal locus of control positively influences entrepreneurial Intentions
- H5 - Propensity to take risks influences entrepreneurial Intentions
- H6 - Entrepreneurial education moderates the relationship between entrepreneurial traits and entrepreneurial intentions

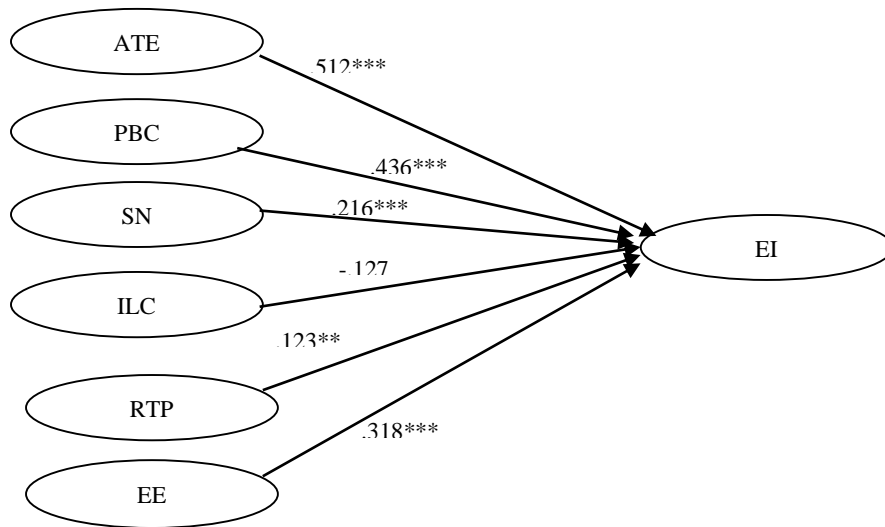
The study is predominantly quantitative in nature. The entrepreneurial intentions questionnaire (EIQ) has been carefully developed and administered among 486 final year undergraduates across the country to draw conclusions about the Sri Lankan State university undergraduates. A joint sampling technique comprising quota

sampling, judgmental sampling and convenient sampling was used to select 486 final year undergraduates for the study. Sampling frame has been carefully selected such that it represents the whole State university sector. The universities whose annual intake is more than 1500 viz. Colombo, Peradeniya, Sri Jayewardenepura, Kelaniya, Ruhuna, Jaffna and Moratuwa universities and Uva-Wellassa university which offers industry-oriented degree programmes have been selected to the sampling frame. A previously validated tool by Dinis, Paco, Ferreira, Raposo, & Rodrigues(2013), Solesvik(2013), and LinanandChen(2006) developed using seven-point Likert scale questions was employed to measure levels of entrepreneurial intentions, attitude towards entrepreneurship, perceived behavioural control and subjective norms, risk taking propensity and locus of control. Cronbach's Alpha was used to measure internal consistency as the questionnaire includes multiple Likert scale questions to measure a single construct. Accordingly, the reliability of each construct was measured with Cronbach's Alpha for the data set.

Results and Findings

A majority of respondents were females who constituted 55.6 percent of the study sample while males represented 44.4 percent. The sample was drawn from final year undergraduates and in cases of absences of enough elements in the sample, their immediate juniors were selected as respondents. Thus, more than 95 percent of the participants were 23 years old and above. Moreover, the vast majority of the respondents were Sinhala Buddhists while there were some representatives from other ethnic groups as well. Participation of males in the survey was 216 while female participation was 270. Undergraduate males recorded a mean score of 4.60 for entrepreneurial intentions while female recorded 4.22.

Structural Equation Modelling (SEM) was employed to analysis of the hypotheses. The following diagram shows standardised estimates of the structural model.



Source: Author Developed

EI - Entrepreneurial Intentions; ATE - Attitude towards Entrepreneurship; PBC - Perceived Behavioural Control; SN - Subjective Norms; RTP - Risk taking Propensity; ILC - Internal Locus of Control; EE - Entrepreneurial Education
 *** - Significant at 0.1% level; ** - Significant at 1% level

The structural equation modelling results revealed that the proposed model had an acceptable fit to the data. Even though the Chi-Square (χ^2) value was not significant, the χ^2 to degrees of freedom ratio recorded a value of 3.554, which is in the acceptable range between of 2 to 5 indicates an acceptable fit between the hypothetical model and the sample data (Wheaton et al, (1977) as cited in Hooper et al, 2008, Marsh and Hocevar, 1985).RMSEA recorded a value of 0.096 (< 0.1) indicating a reasonable error of approximation. Meanwhile the baseline comparison indices (TLI = 0.71, CFI = 0.73) related to the structural model exhibited values close to 0.9 indicating a tolerable fit between the hypothetical model and the sample data.

According to the path coefficients of the structural model, there is a significant association (path coefficient = 0.512, critical ratio =10.4, $p < .001$,) between Attitude Towards Entrepreneurship (ATE) and Entrepreneurial Intentions (EI). Therefore, hypothesis 1, which states that the attitude towards entrepreneurship positively influences entrepreneurial intentions, can be accepted. Moreover, a significant association (path coefficient = 0.436, critical ratio =8.215, $p < .001$) can also be noted between Perceived Behavioural Control(PBC) and Entrepreneurial

Intentions (EI). Therefore hypothesis 2, which states that perceived behavioural control is positively related to entrepreneurial intentions, can also be accepted. Furthermore, a significant association (path coefficient = 0.216, critical ratio = 3.348, $p < .001$) can also be noted between Subjective Norms (SN) and Entrepreneurial Intentions (EI). Therefore hypothesis 3, which states that subjective positively influences entrepreneurial intentions, can also be accepted. Even though the path coefficient, critical ratio and the level of significance in the relationship between Risk Taking Propensity (RTP) and Entrepreneurial Intentions (EI) is not as large as previous relationships, there is a reasonable association (path coefficient = 0.123, critical ratio = 2.854, $p < .01$) between the variables. Therefore, hypothesis 4, risk taking propensity is positively related to entrepreneurial intentions, can also be accepted. Meanwhile, no significant association was witnessed (path coefficient = -0.127, critical ratio < 1.96, $p > .05$) between Internal Locus of Control (ILC) and Entrepreneurial Intentions (EI). Thus, hypothesis 5, internal locus of control positively influences entrepreneurial intentions, cannot be accepted. Furthermore, the interaction of Entrepreneurial Education (EE) and Perceived Behavioral Control (PBC) was found to be significant at 5%.

Discussion and Conclusion

This study has proven that subjective norms, meaning social norms and environment affect a person's intention to be an entrepreneur. For example what do family and friends think, accept, and expect from you? How positive and permitting the norms are is also a vital factor. Most importantly, this study empirically verifies applicability of TPB in the Sri Lankan context to explain the entrepreneurial intentions of State university undergraduates. Furthermore, with the importance of entrepreneurial education revealed by this study, it is imperative to take appropriate measures to uplift entrepreneurial education in the country.

Key words: Theory of Planned Behavior, Entrepreneurial Intentions, Attitude towards Entrepreneurship, Subjective Norms

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