



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.



Entrepreneurial Intention of Final Year Undergraduate Students of the Faculty of Agriculture, University of Peradeniya, Sri Lanka

Shanika Madhushyanthi¹ and Madhavi Wijerathna^{1*}

¹*Department of Agricultural Extension, Faculty of Agriculture, University of Peradeniya, 20400, Peradeniya, Sri Lanka.*

Authors' contributions

This work was carried out in collaboration between both authors. Author SM designed the study, performed the statistical analysis, wrote the protocol, literature searches and wrote the first draft of the manuscript. Authors MW involved in designing the study and managed the analyses of the study and improved the first draft. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJAEES/2020/v38i1030434

Editor(s):

(1) Dr. Roxana Plesa, University of Petrosani, Romania.

Reviewers:

(1) Serene Shekhar, Sadarkrushinagar Dantiwada Agricultural University, India.

(2) Aleciane da Silva Moreira Ferreira, Federal Institute Baiano, Brazil.

(3) Pedro Afonso Cortez, Universidade Metodista de São Paulo, Brazil.

Complete Peer review History: <http://www.sdiarticle4.com/review-history/62458>

Original Research Article

Received 15 August 2020

Accepted 21 October 2020

Published 31 October 2020

ABSTRACT

Aims: The scientific literature on Entrepreneurial Intention (EI) among agricultural university students in Sri Lanka is meager. Therefore, the focus of this study was to evaluate the EI and to understand what factors affect on EI of the final year undergraduate students of the Faculty of Agriculture, University of Peradeniya, Sri Lanka.

Study Design: The study adopted a cross-sectional survey research design. A stratified simple random sample of 100 final year undergraduates that represented 50% of each of the three degree programs of the Faculty of Agriculture, university of Peradeniya were selected for the study. The primary data was collected through a self-administered structured questionnaire.

Place and Duration of Study: Faculty of Agriculture, University of Peradeniya, Sri Lanka from October 2018 to February 2019.

Methodology: The Theory of Planned Behavior (TPB) was used to measure the EI. Thus, it examined the influence of personal attitudes, subjective norms, and perceived behavioral control

*Corresponding author: E-mail: madhavi@agri.pdn.ac.lk;

factors on EI. Short-term risk taking, perceived structural support and social capital on business start-up were examined as additional variables to the theory.

Results: The results revealed that each of the TPB variables significantly ($P = 0.05$) affect on EI, with an overall $R^2 = 0.606$. Attitudes were the strongest predictor of EI, followed by subjective norms and perceived behavioral control. However, overall level of EI of the students was neutral. Awareness programmes, financial support, introducing and updating the entrepreneurial subjects were some major suggestions of the respondents to improve entrepreneurship among the students.

Conclusion: Attitudes toward entrepreneurship is the strongest predictor of EI. However, overall EI of the students was neutral. Improving individual attitudes through motivational programmes, providing an approving nature of the staff towards entrepreneurship (subjective norms), mechanisms to develop entrepreneurial capabilities among students and linking entrepreneurship to the present curriculum, would be important to improve the EI of the students leading to a greater entrepreneurship.

Keywords: *Entrepreneurial intention; theory of planned behavior; undergraduates; faculty of agriculture; University of Peradeniya; Sri Lanka.*

1. INTRODUCTION

Entrepreneurship is the process of designing, launching and running a new business, which is often initially a small business and the people who create these businesses are called entrepreneurs [1]. "Entrepreneurs are leaders willing to take a risk and exercise initiative, taking advantage of market opportunities by planning, organizing and deploying resources" as defined by Deakins & Freel, [2]. The importance of the relationship between entrepreneurship and economic growth has been identified by many scholars. Accordingly, entrepreneurship is considered as the engine of economic growth Kor & Mahoney [3] Moreover, they also emphasized that new businesses usually liberate the economy, promotes foreign investments, introduce new technology, and increases the economic standard of living. Therefore, the governments of both developed and developing countries emphasize mechanisms to raise entrepreneurial levels in their own countries as reported by Koe, [4].

At present, in Sri Lanka, only around 30 per cent of those who sit for G.C.E. (O/L) qualify for General Certificate of Advanced Level Examination (G.C.A/L). Although around 50 per cent who sit for G.C.E. (A/L) qualify for University education, only around 15 to 16 per cent of those who qualify, gain entry to the universities Nanayakkara [5]. However, it is not an easy task to find a suitable job after graduation. The unemployment rate in Sri Lanka increased to 4.60 per cent in the second quarter of 2006 from 4.50 per cent in the first quarter of 2006. Youth unemployment rate has increased up to 22.5% in 2006. In this context, the entrepreneurial

intention of the undergraduates to start a commercial venture as an alternative source of employment is of paramount.

Entrepreneurial education can be greatly varied among universities. Compared to non-graduate-owned firms, graduate-owned firms in the UK, not only younger owners but also intellectual property owners with high growth potential Pickernell et al. [6]. However, the interest in entrepreneurship among youth in Sri Lanka is less and the attitude towards starting up their business ventures is also negative. Majority of them perceived a government employment and the reasons are the job security, stability, pension, and the social status Iburguen [7].

Sri Lankan education system introduced a new entrepreneurial studies course to the school curriculum in 2007 to promote and encourage entrepreneurship in the country, however, the effect of these studies after many years is yet an answered question Weeratunge [8]. Therefore, it is important to understand what factors influenced on entrepreneurial behaviour at different levels of the education system of the country. The state university system in Sri Lanka consists of 15 national universities. Among them, there are 8 Faculties of Agriculture offering agriculture-related degrees. In addition to teaching agriculture as science entrepreneurship and business management subjects have embedded in the curricula of the degree programmes in these faculties to a certain extent.

Some people have natural qualities to become entrepreneurs but some need training and education for becoming an entrepreneur. However, the intention plays an important role in

showing someone a certain way of behaving (Ajzen,) [9]. Similarly, the entrepreneurial actions and behaviours of an individual are to large extent inspired by the intentions of the entrepreneur. Entrepreneurial intention is defined as “a state of mind directing a person's attention and action towards self-employment as opposed to organizational employment” Souitaris, Zerbinati and Al-Laham [10]. The first step in the process of establishing a business is a strong intention for self-employment Liñán and Chen [11] and the constantly studied factor of the enterprise design Ferreira et al. [12].

Literature shows that the research on entrepreneurship is a research field among in students of tertiary education which has gained much attention and interest Bevan, et al. [13]. Also, many studies state that interest in entrepreneurship among youth is considered necessary as it is an alternative to professional occupation especially for graduates of tertiary education Brenner, et al. [14]. Most of the graduates tend to seek other jobs than starting their own business as soon as they pass out from the universities. On the other hand, both government and non- government jobs are becoming limited due to increasing the demand for jobs.

Student entrepreneurship is “any attempt to launch a new venture undertaken by one or several students” Reynolds et al. [15]. That can be depend on several factors such as their career plans and attitude toward self-employment Shirokova, Osiyevskyy and Bogatyreva [16]. However, the students' entrepreneurial intention is generally low and therefore, different countries have adopted different measures to increase the students' entrepreneurship.

It is important to identify the factors that affect on the entrepreneurial intention and should facilitate them to promote entrepreneurship among university students. Developing youth entrepreneurship will be effective in addressing youth unemployment issues, while contributing to the economic growth of the country. Although limited studies have conducted on students' entrepreneurship in Sri Lanka, the scientific literature on Entrepreneurial Intention (EI) among agricultural university students is meager. Therefore, the focus of this study was to evaluate the EI and to understand what factors affect on EI of the final year undergraduate students of the Faculty of Agriculture, University of Peradeniya,

Sri Lanka, by applying the Theory of Planned Behavior (TPB) Ajzen [17].

Ajzen's TPB [18] argues that a person's attitude towards behavior, subjective norm, and perceived behavioral control are the significant factors that determine his/her intention. This theory is providing the underlying support for the model to measure the entrepreneurial intentions. Therefore, the TPB variables have used as the main independent variables of the many research and concluded the significant of the factors with positive results. Therefore, attitude towards behavior, subjective norm and perceived behavioral control were used as the main independent variables in this study. However, some studies have concluded that several other variables also may influence on EI. For instance, Turker & Selcuk, [19]; Ambad & Damita, [20] found that the perceived structural support as a significant factor toward EI. Also, some researchers had given social capital Linan & Santos [21], and risk taking Naldi, Nordqvist, Sjoberg & Wiklund [22] as important factors toward EI. Therefore, based on the literature, perceived structural support, social capital and risk taking were examine as independent variables in this study in addition to the TPB variables (attitudes toward behavior, subjective norm and perceived behavioral control). The results would be helpful to determine the EI and what factors would be affected on EI of the final year undergraduates of the Faculty of Agriculture, University of Peradeniya in Sri Lanka. It would be helpful to promote entrepreneurship among the faculty undergraduates and other students in similar contexts in the region.

2. MATERIALS AND METHODS

The study adopted a cross-sectional survey research design. A stratified simple random sample of 100 final year undergraduates that represented 50% of each of the three degree programs (Agriculture Technology and Management, Food Science and Technology, Animal Science and Fisheries) of the faculty of agriculture, university of Peradeniya were selected for the study. The primary data was collected through a self-administered structured questionnaire.

The conceptual framework of the study was adopted from the Theory of Planned Behavior (TPB) Ajzen, [23]. According to the TPB, attitudes, subjective norms and perceived behavioral control factors affect on behavioral

intentions. This theory is flexible to use the additional constructs depending on the requirement and suitability Conner & Armitage [24]. Hence, in this study, three additional variables namely, i) perceived structural support Turker & Selcuk [25] ii) given social capital Linan & Santos [26], and iii) short term risk taking Zhang, Wang and Owen [27] were considered. Also, the relationship between some demographic variables (gender and ethnicity), the degree program (ATM, ASF and FST) and extra educational qualifications on EI was examined.

Entrepreneurial Intension (EI) attitudes toward EI, perceived behavioral control and subjective norm were measured using the items developed by (Linan and Chen,) [28] based on TPB. Accordingly, eight items were used to measure the EI. They were i) I am ready to do anything to be an entrepreneur. ii. my professional goal is to be an entrepreneur. iii. I will make every effort to start and run my own business in the future. iv. I am determined to create a business venture in the future. vi. I do not have doubt about ever starting my own business in the future. vii. I have very seriously thought of starting a business in the future. viii. I have strong intention of ever starting a business in the future. Cronbach's value for the constructs was 0.97.

Six items were used to measure the attitude towards EI according to They were i) being an entrepreneur implies more advantages than disadvantages to me ii) a career as an entrepreneur is totally attractive to me iii) If I had the opportunity and resources, I would like to start a business, iv) among various options, I would rather be an entrepreneur, v) being an entrepreneur would give me great satisfaction, vi) My qualifications has contributed positively to my attitude towards becoming an entrepreneur. Cronbach's value for the constructs was 0.92.

Nine items were used to measure the perceived behavioral control. They were i) to start a business and keep it working would be easy for me, ii) I am able to control the creation process of a new business, ii) I believe, I would be completely able to start a business, iv) I am prepared to do anything to be an entrepreneur, v) I know all about the necessary practical details needed to start a business, vi) If I wanted to, I could easily start and run a business, vii) If I tried to start a business, I would have a high chance of being successful, viii) It would be very easy for me to develop a business idea, ix) my

qualification has proved me with sufficient knowledge to start a business. Cronbach's value for the constructs was 0.94.

Four items were used to measure the subjective norm. They were i) my closest family member think that I should pursue a career as an entrepreneur, ii) my closest friend think that I should pursue career as an entrepreneur, iii) people which are important to me think that I should pursue career as an entrepreneur and iv) my academic supervisor and other University lecturers think that I should pursue career as an entrepreneur. Cronbach's value for the constructs was 0.88.

Short-term risk taking was measured using four items (Zhang, Wang and Owen) [29]. They are i) doing what I enjoy is more important than planning for long, ii) doing what I enjoy is more important than evaluating the risk on long term, iii) doing what I enjoy is more important than evaluating the growth in long term, iv) I spend more time on doing what I enjoy than plan for long term. Cronbach's value for the constructs was 0.88.

Four items were used to measure the perceived structural support Turker and Selcuk [30]. They are i) Sri Lankan entrepreneurs are encouraged by a structural system including private, public, and non- governmental organizations, ii) Sri Lankan economy provides many opportunities for entrepreneurs, iii) taking loans from banks is quite difficult for entrepreneurs in Sri Lanka and iv) government rules and regulations are adverse to running a business. Cronbach's value for the constructs was 0.76.

Social capital was measured using four items according to Linan and Chen, [31]. i) Sri Lankan entrepreneurs are encouraged by a structural system including private, public, and non-governmental organizations, ii) Sri Lankan economy provides many opportunities for entrepreneurs, iii) Taking loans from banks is quite difficult for entrepreneurs in Sri Lanka and iv) government rules and regulations are adverse to running a business. Cronbach's value for the constructs was 0.97. The responses were taken by using a five point Likert scale from 'Strongly Disagree' to 'Strongly Agree'.

The study used both descriptive and inferential statistics for data analysis. Descriptive statistics were used to summarize and describe data using frequencies, Standard deviations and

percentages. Entrepreneurial intention was analyzed using inferential statistics. SPSS statistical software was used to analyze the data.

3. RESULTS AND DISCUSSION

3.1 Demographic and Personal Characteristics of Respondents

The sample of the study was comprised of 100 final year students who were following one of the three degree programmes offered by the Faculty of Agriculture, University of Peradeniya. The three degree programmes offered by the Faculty are Agriculture Technology and Management (ATM), Food Science and Technology (FST) and Animal Science and Fisheries (ASF). Majority of the respondents were female (70%). In general, about 2/3 of the students in all three degree programmes are females.

3.2 Overall Entrepreneurial Intention of the Students

Table 1 shows the descriptive statistics of the overall entrepreneurial intention of undergraduate students. Since the five point Likert scale was used to measure the entrepreneurial intention, mean value for EI is 3.2896. Accordingly, the overall entrepreneurial intention of the students was neutral.

3.3 Demographic and Personal Characteristics: Comparison with Entrepreneurial Intention (EI)

Entrepreneurial Intention (EI) was compared with gender. Results showed a higher mean value for the male students (3.7). Mean value for female students were (3.1). According to this result girls are somewhat reluctant to enter in to new business compared to boys. However, this difference was not statistically significant according to the results of Mann Whitney U test ($p > 0.01$). Contradictory results were shown according to different studies conducted on effect of gender on entrepreneurial intention. According to Haus et.al. [32] in their study on gender effect

on the entrepreneurial intention reported a higher average entrepreneurial intention for men compared to women. However, (Díaz-García, & Jiménez-Moreno,) [33] found no significant difference in entrepreneurial intention between female and male students. However, the same authors also point out that if entrepreneurship is seen by women as a career option regardless of their own characteristics and values, they will be more motivated to start their own business.

There was no effect of ethnicity on EI according to the results of Kruskal Wallis H test ($p > 0.01$). However, the previous studies have explained that there is an influence of different ideas of the Islamic religion on EI. "Entrepreneurship is part of the way of life in Islam, which has its own way of doing business as stated in the Quran and Hadith" (Anggadwita, et, al.) [34]. Muslim community should undertake entrepreneurial activities by their own choice and according to their own initiative contributing to develop their national economy Faizal, Ridhwan, and Kalsom [35]. Also, Ali [36] explained how Islam may be considered an entrepreneurial religion. However, according to the present study, the association between ethnicity and entrepreneurial intention was not significant and that may be due to small number of representation of Muslims in the sample.

3.4 Relationship of TPB and Additional Variables on Entrepreneurial Intention

Based on the theory of planned behavior (TPB), intention to start-up a business is a function of perceived favorable social norms, personal attitudes as well as perceived entrepreneurial capability (Ajzen,) [37]. According to the TPB (Ajzen,) [38] the study model shows the relationship between each variables (Fig. 1.) The TPB study model is shown in Correlation analysis results of the independent variables (attitude toward behavior, subjective norm, perceived behavioral control, Short-term risk taking, Perceived structural support and Social capital) on entrepreneurial intention are shown in Table 2.

Table 1. Entrepreneurial intention of the respondents

	N	Minimum	Maximum	Mean	Std. Deviation
Entrepreneurial intention score	100	1.00	5.00	3.3	.94488
Valid N (list wise)	100				

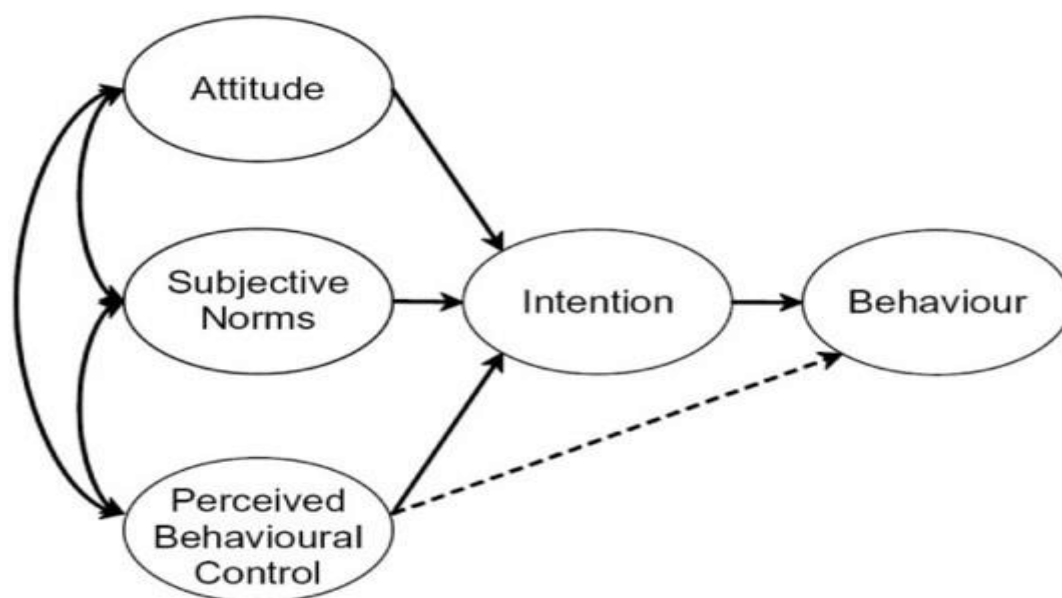


Fig. 1. Theory of planned behaviour (Ajzen, 1991)

Results revealed that there is a strong relationship between independent variables and EI. Accordingly, perceived behavioral control ($r=.722$, $p<0.01$) and subjective norms ($r=.694$, $p<0.01$) had a greater correlation with the attitude toward behavior. Also, the subjective norm had a strong relationship with social capital ($r=.617$, $p<0.01$) and perceived behavioral control ($r=.560<0.01$). According to the correlation results, attitude toward behavior has gave the highest value ($r=0.731$), and also subjective norm and perceived behavioral control had a greater relationship with the entrepreneurial intention. Additional three variables were also had significant correlations with EI.

3.4.1 Attitude toward behavior

Attitude towards behavior is conceptualized as “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question”, in this case entrepreneurship (Ajzen,) [39]. Among the TPB variables, attitude toward behavior had the strongest correlation ($r = 0.858$, $P = 0.000 < 0.01$) on intention. Attitudes indicate a greater relationship on entrepreneurial intention of undergraduates. Previous studies also revealed that the strongest predictor of the entrepreneurial intention of undergraduates is attitude towards the behavior. Eight attitudinal constructs were used to measure the attitude toward behavior.

Also, attitude towards the behavior had significant strong relationships with the subjective norm ($r= 0.694$, $P < 0.01$) and perceived behavioral control ($r= 0.722$, $P < 0.01$).

Table 3. Shows the responses of the students for statements of Attitude toward behavior.

According to the Table 3, the majority of the students were neutral for attitudinal statements on EI. Becoming an entrepreneur was interested only for 5% of the respondents. However, 17% (strongly agree 7%, Agree 10%) would like to be an entrepreneur if opportunities and resources are available. Mumtaz et al. [40], found that the undergraduate students' attitude have a positive impact on intention to choose entrepreneur as a career. Therefore, providing opportunities and resources would be important to increase the entrepreneurship.

3.4.2 Subjective norm

Subjective norm had grater relationship ($r = 0.677$, $P = 0.000 < 0.01$) with entrepreneurial intention. Subjective norm indicate the grater relationship on entrepreneurial intention of undergraduates. 4 constructs were used to measure the subjective norm. Furthermore, subjective norm had strong relationship with attitude toward behavior and perceived behavioral control. Table 4 shows the responses of the students for statements of subjective norm.

Table 2. Correlation analysis of the variables

	Entrepreneurial Intention	Attitude towards behavior	Perceived behavioral control	Subjective norm	Short- term risk taking	Perceived structural support	Social capital
Entrepreneurial Intention	1						
Attitude toward behavior	.858						
Perceived behavioral control	.575	.722					
Subjective norm	.677	.694	.560				
Short-term risk taking	.290	.321	.350	.432			
Perceived structural support	.397	.477	.440	.490	.391		
Social capital	.479	.484	.328	.617	.421	.511	1

Table 3. Summary of the responses of the statements of attitude toward behavior

Statement	Strongly Agree (%)	Agree (%)	Neither agree nor disagree (%)	Disagree (%)	Strongly Disagree (%)
Being an entrepreneur implies more advantages than disadvantages to me	5	8	42	25	20
A career as an entrepreneur is totally attractive to me	3	2	47	26	22
If I had the opportunity and resources, I would rather be an entrepreneur	7	10	32	35	16
Among various options, I would rather be an entrepreneur	4	6	42	28	20
Being an entrepreneur would give me great satisfaction	6	12	39	27	16
My qualifications has contributed positively to my attitude towards becoming an entrepreneur	4	9	35	35	17

Table 4. Summary of the responses of the statements on subjective norm toward behavior

Statement	Strongly disagree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Strongly agree (%)
My closest family members think that I should pursue a career as an entrepreneur	9	24	39	16	12
My closest friends think that I should pursue career as an entrepreneur	31	23	28	10	8
People which are important to me think that I should pursue career as an entrepreneur	33	20	30	10	7
My academic supervisor and other University lecturers think that I should pursue career as an entrepreneur.	27	20	36	9	8

Most of the family members were neutral and disagreed to peruse career as an entrepreneur. Closest Friends and other people in the close circle were also less supportive to be an entrepreneur. Academic supervisors and other lecturers were “neutral” (37%) and very less approved (17%) to be their students to be an entrepreneur. A recent study conducted in an Indian higher education institute by Bhuyan and Pathak, [41] shows a positive and significant influence of subjective norms that affects the entrepreneurial intention. As higher educational institution in Agriculture, it is more important to encourage students to become entrepreneurs.

3.4.3 Perceived behavioral control

Perceived behavioral control had strong correlation ($r = 0.575$, $P = 0.000 < 0.01$) with the entrepreneurial intention. Therefore perceived behavioral control had higher relationship with the entrepreneurial intention of undergraduates. Nine constructs were used to measure the perceived behavioral control. Also perceived behavioral control had relationships with the all of variables while strong relationship with the attitude toward behavior and subjective norms. Table 5 shows the responses of the students for statements on perceived behavioral control statements.

Table 5. Summary of the responses on statements perceived behavioral control toward behavior

Statement	Strongly Disagree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Strongly Agree (%)
To start a business and keep it working would be easy for me	1	6	20	55	18
I am able to control the creation process of a new business	2	4	19	56	19
I believe I would be completely able to start a business	2	6	19	54	19
I am prepared to do anything to be an entrepreneur	1	6	25	48	20
I know all about the necessary practical details needed to start a business	1	6	21	58	14
If I wanted to, I could easily start and run a business	1	6	27	49	17
If I tried to start a business, I would have a high chance of being successful	3	2	20	54	21
It would be very easy for me to develop a business idea	3	4	24	52	17
My qualification has proved me with sufficient knowledge to start a business	3	3	19	55	20

Students are confident with starting a business and keeping it working; (55 % “agree” and 18% strongly agree). Students are able to control the creation process of a new business with 56% were agreeing with the statement. Responses for ability to start a business(59% agree, 19% strongly agree) knowledge about the necessary practical details (50% agree, 17% strongly agree), start and run a business (54% agree, 21% strongly agree), being successful with a business (59% agree, 19% strongly agree), easiness of a starting a new venture (52% agree, 17% strongly agree) and qualification and sufficient knowledge of creating business (55% agree, 20% strongly agree) were at a fairly high level according to the responses. The diverse knowledge and skill development of the students on basic agriculture and allied disciplines by the faculty may be a reason for this fairly positive level of responses. Specially, all the students need to follow an actual business creation project guided by the Department of Agricultural Economics and Business Management. Additionally, students who major in Food Science and Technology and Animal Science and Fisheries engage in product development projects.

3.4.4 Short- term risk taking

Short-term risk taking had correlated ($r = 0.290$, $P = 0.000 < 0.01$) with the Entrepreneurial intention. It clarified that short- term risk taking had relationship with the EI. Four constructs were used to measure the short- term risk taking. Further short- term risk taking had relationships with all the variables.

Table 6 Shows the responses of the students for statements on short-term risk taking.

3.4.5 Perceived structural support

Perceived structural support had correlated ($r = 0.397$, $P = 0.000 < 0.01$) with the entrepreneurial intention. It means the perceived structural support had a relationship with entrepreneurial intention. Five constructs were used to measure the perceived structural support.

Table 7 shows the responses of the students for statements of perceived structural support.

Table 6. Summary of the responses of the statements on short-term risk taking

Statement	Strongly Disagree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Strongly agree (%)
Doing what I enjoy is more important than planning for long	5	10	27	47	11
Doing what I enjoy is more important than evaluation the risk on long term	7	17	33	32	11
Doing what I enjoy is more important than evaluating the growth in long term	8	20	30	29	13
I spend more time on doing what I enjoy than plan for long term	7	12	35	37	9

Table 7. Summary of the responses of the statements on perceived structural support toward EI

Statement	Strongly Disagree (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Strongly agree (%)
Sri Lankan entrepreneurs are encouraged by a structural system including private, public, and non-governmental organizations	12	34	35	17	2
Sri Lankan economy provides many opportunities for entrepreneurs	13	32	36	17	2
Taking loans from banks is quite difficult for entrepreneurs in Sri Lanka	1	7	24	46	22
Government rules and regulations are adverse to running a business	2	8	29	47	14
University students are encouraged by the system of the university toward entrepreneurship	6	17	34	32	11

According to the Table 7, majority of the responses were “neutral” for the statements on structural support. Less practical exposure to the real world experience may be a reason for these responses. However, the majority was “agree” (46%) and “strongly agree” (22%) that the difficulty to obtain bank loans for entrepreneurs.

3.4.6 Social capital

Correlated values for the social capital was $r = 0.479$, $P = 0.000 < 0.01$. It was revealed that the social capital was correlated with EI. Five constructs were used to measure social capital. Table 8 summarizes the responses of the students for statements on social capital.

Most of the students were not known someone who is an entrepreneur in the family, friends or community (Table 8). Also, the majority of the students were not relying on family, friends or

other entrepreneurs for the assistance in starting a business. Based on these findings, it is important to introduce successful entrepreneurs to the students and provide assistance in starting businesses.

3.5 Hierarchical Multiple Regression Analysis

Hierarchical multiple regression analysis was performed in two steps. In step 1, analysis was done using only the three variables namely attitude toward behavior, subjective norm and perceived behavioral control which had been used in the Theory of Planned behavior (shown in Fig. 2). In step 2, other three additional variables namely short-term risk taking, perceived structural support and social capital along with the TPB was used for the analysis as shown in Fig. 3.

Table 8. Summary of the responses of the statements on social capital toward EI

Statement	Strongly Agree (%)	Agree (%)	Neither agree nor disagree (%)	Disagree (%)	Strongly Disagree (%)
I personally know someone who is an entrepreneur in my family	5	19	21	42	13
I have a friend who is an entrepreneur	8	21	19	38	14
I know other people who are entrepreneurs	7	17	17	47	12
I personally know successful entrepreneurs in my community	12	11	18	45	14
I can rely on my friends for assistance in starting a business	8	16	33	31	12
I can rely on my family for assistance in starting a business	8	14	35	31	12
I can rely on other entrepreneurs for assistance of starting a business	9	15	33	34	9

Model 1

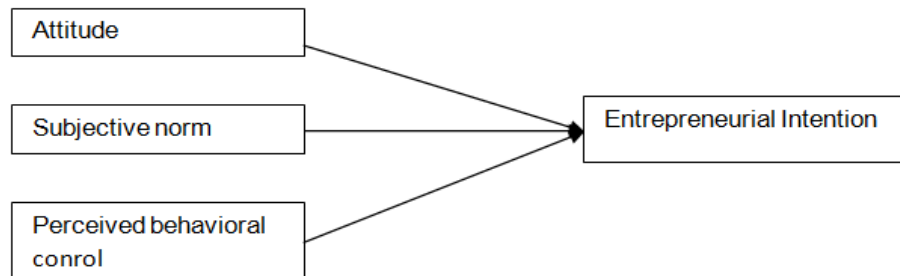


Fig. 2. Model with study variables of TPB

Model 2

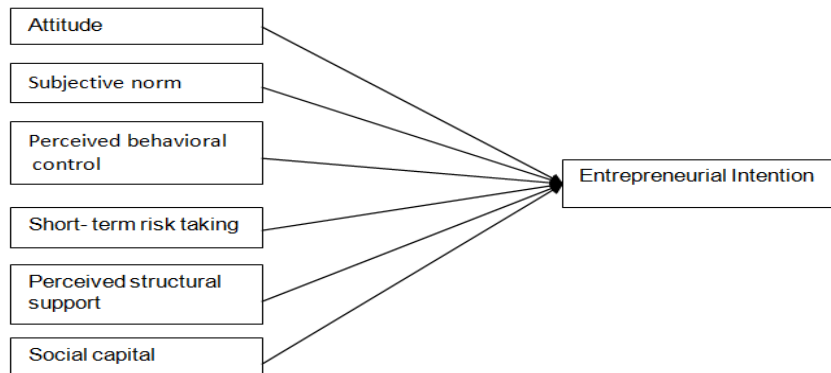


Fig. 3. Study model with TPB and additional variables

Table 9. Hierarchical multiple regression results

Step	Variable	Beta	Beta
1(TPB variables)	Attitude toward behavior	.487	.489
	Subjective norm	.245	.254
	Perceived behavioral control	.159	.163
2(TPB & additional variables)	Short- term risk taking		-.031
	Perceived structural support		-.041
	Social capital		.035
	R Square	.606	.608
	R Square change	.606	.003
	F change	49.644	.213
	Model F	49.644	.24.324
	R	.788	.780

The results of hierarchical multiple regression was used to predict the intention on business-start-up using six independent variables. In step 1, analysis was done using only the three variables namely attitude toward behavior, subjective norm and perceived behavioral control which had been used in the Theory of Planned behavior as shown in Fig. 2). In step 2, other three additional variables namely short-term risk taking, perceived structural support and social capital along with the TPB was used for the analysis as shown in Fig. 3. The results are shown in the Table 9.

According to the results, attitude toward behavior was the strongest predictor on entrepreneurial intention in both two steps (Step 1 Beta = 0.487, $P < 0.01$ & Step 2 Beta = 0.489, $P < 0.01$). Entrepreneurial Intention of students of South African Rural University has a significant influence from attitude towards becoming an entrepreneur Malebana [42] supporting the results of the present study. Therefore, it is important to develop positive attitudes of the students towards entrepreneurship. For instance, it is important to highlight the advantages of being an entrepreneur. It is also important to promote entrepreneurship as an attractive career option.

All TPB variables were significant in the both two steps ($P < 0.01$). However, short- term risk taking (Beta = -0.031, $P < 0.01$) and the perceived structural support (Beta = -0.041, $P < 0.01$) were negatively related with EI.

It is difficult to explain this situation since most of the literatures prove that these factors are positively affected on EI. For instance, being a risk lover has positive, moderate effect on entrepreneurial intentions of public and private university students in Turkey (Yurtkoru ES, Acar

P & Teraman) [43]. The present results may be because of personal characteristics of the students are more important than social/structural characteristics in the studied context when they are considered at once. Otherwise, short-term risk taking and perceived structural support had positively correlated as individual variables with EI according to the correlation analysis (Table 2).

The R square for the first model was 0.6060 and it was slightly increased up to 0.6080 in model 2. The additional variable in model 2 accounts only for a slight increase in the variance on entrepreneurial intention (R Square change = 0.003, $P < 0.01$), F change = 0.213. Therefore, in terms of TPB, it can be status that the TPB variables alone explain the variance to a greater extent (60%). Thus, the study further validates the use of TPB to measure EI.

Suggestions of the students to improve the entrepreneurship among the university students:

Suggestions were asked from the respondents to improve the entrepreneurship among the final year students faculty of Agriculture. Organize the awareness programs on entrepreneurship, motivational programs for undergraduates, encourage the entrepreneurship by facilitating the loan procedures, introduce the entrepreneurial subject along with the degree program and update new findings and provide entrepreneurial internship opportunities were suggestions of the majority.

4. CONCLUSIONS

In relation to the overall objective of the study, which was what factors predicting the entrepreneurial intention, it can be concluded that attitude toward entrepreneurship is the strongest predictor of EI. Subjective norms and

the perceived behavioral control were the second and third most influential factors respectively on the EI of the students. All the six independent variables (attitude toward behavior, subjective norm, perceived behavioral control, short term risk taking, perceived structural support and the social capital) had a significant association with the EI. However, the TPB alone explained 60% of the total variability. The model was not improved significantly by additional variables. Therefore, it can be concluded that the EI of the students were able to determine to a greater extent by using the TPB.

This study provided the evidence for overall level of the entrepreneurial intention of final year undergraduate students of the Faculty of Agriculture, University of Peradeniya. Accordingly, the present level of entrepreneurial intention of majority of the students was neutral. Although the past literature suggests a significant difference of entrepreneurial intention in relation to gender, the present study shows that there is no statistically significant difference of gender on entrepreneurial intention. In terms of the three degree programmes offered by the Faculty, Agricultural Technology and Management (ATM) students had a higher intention than the students of other two degree programmes (Food Science and Technology and Animal Science and Fisheries). Majority of the ATM students were following other educational programs along with the degree program and the curriculum of the ATM is comparatively broader and that may have an influence on this higher intention.

Since the study concluded that the strongest predictor of EI is attitudes, it would be possible to improve the entrepreneurship by improving the positive attitudes towards entrepreneurship. Subjective norm was the second most influential factor on entrepreneurial intention of the students. Therefore, approving nature of members of families, friends and academics are important to improve the entrepreneurship. It also important to develop entrepreneurial attributes of the students. Furthermore, providing opportunities and facilities by the university and other relevant outside organizations, linking entrepreneurship to the present curriculum and providing more opportunities to the students will improve the EI of students.

CONSENT

The respondents were given their informed consent.

DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

ACKNOWLEDGEMENTS

Authors would like to acknowledge the final year students (year 2019) of the Faculty of Agriculture, University of Peradeniya, who responded for the questionnaire survey.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Yetisen AK, Volpatti LR, Ahmet F, Sangyeon CC, Kamrani E, Butt M, Khademhosseini A, Yun SH. Entrepreneurship, lab on a chip. Royal Society of Chemistry. 2015;1(3):1-22. DOI:10.1039/c5lc00577a
2. Deakins D, Freel M. Entrepreneurship and small firms. 5th Ed. New York: McGraw Hill; 2009.
3. Kor YY, Mahoney TJ. Advancing the human capital perspective on value creation by joining capabilities and governance approaches. Academy of Management Perspectives. 2007;29(3):296-308. DOI:10.5465/amp.2014.0151
4. Koe W. The relationship between Individual Entrepreneurial Orientation (IEO) and entrepreneurial intention. J Glob Entrepr Res. 2016;6(13). DOI 10.1186/s40497-016-0057-8
5. Nanayakkara AGW. Poverty in Sri Lanka - issues and options. Department of Census and Statistics; 2006. Accessed on 3 November 2018. Available:<http://repo.statistics.gov.lk/bitstream/handle/1/307/15672.pdf?sequence=2&isAllowed=y>.
6. Pickernell D, Packham G, Paul Jones, Christopher Miller C, Brychan Thomas B. Graduate entrepreneurs' are different: they

- access more resources? International Journal of Entrepreneurial Behaviour & Research. 2011;17(2):183-202. DOI:10.1108/13552551111114932
7. Ibarguen C. Youth perceptions: Exploring results from the poverty and youth survey. Centre for Poverty Analysis, Colombo; 2005. Available: <http://www.cepa.lk/uploads/110809040834Youth%20Perceptions%20-%2005.pdf>
8. Weeraratne N. Developing youth entrepreneurs: a viable youth employment strategy in Sri Lanka? in: Gunatilaka R, Mayer M, Vodopivec M. (ed.) The Challenge of youth employment in Sri Lanka. World Bank, Washington, D.C; 2010.
9. Ajzen I. The theory of planned behavior. Organizational Behavior and Human Decision Processes. 1991;50(2):179-211. Accessed on 10 November. Available: <https://www.researchgate.net/publication/272790646>. DOI: 10.1016/0749-5978(91)90020-T.
10. Souitaris V, Zerbini S, Al-Laham A. Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. Journal of Business Venturing. 2007;22(4):566-591. DOI: 10.1016/j.jbusvent.2006.05.002
11. Liñán F. The role of entrepreneurship education in the entrepreneurial process. in A. Fayolle (Ed.), Handbook of research in entrepreneurship education. Edward Elgar Publishing; 2007.
12. Ferreira JJ, Raposo ML, Rodrigues GR, Dinis A, do Paço A. A model of entrepreneurial intention: An application of the psychological and behavioral approaches. Journal of Small Business and Enterprise Development. 2012;19(3):424-440. DOI: 10.1108/14626001211250144
13. Bevan J, Clark G, Banerji N, Hakim C. Barriers to business start-up: A study of the flow into and out of self-employment, Research Paper, 71. Department of Employment. London; 1989.
14. Brenner OC, Pringle CD, Greenhaus JH. Perceived fulfillment of organizational employment versus entrepreneurship: work values and career intentions of business college graduates. Journal of Small Business Management. 1991;29(3):62-74.
15. Reynolds PD, Bygrave W, Autio E, Hay M. Global entrepreneurship monitor. Executive report. Babson College Ewing Marion Kauffman Foundation London Business School; 2002. Available: https://ucema.edu.ar/~gcettolo/WebGlobalGEMReport11.12_1.pdf
16. Shirokova G, Osiyevskyy O, Bogatyreva K. Exploring the intention-behavior link in student entrepreneurship: Moderating effects of individual and environmental characteristics, European Management Journal. 2015;14(1). Available: <http://dx.doi.org/10.1016/j.emj.2015.12.007>
17. Ajzen I. The theory of planned behavior. Organizational Behavior and Human Decision Processes. 1991;50(2):179-211. Accessed on 10 November. Available: <https://www.researchgate.net/publication/272790646>.
18. Ajzen I. The theory of planned behavior. Organizational Behavior and Human Decision Processes. 1991;50(2):179-211. Accessed on 10 November. Available: <https://www.researchgate.net/publication/272790646> DOI:10.1016/0749-5978(91)90020-t.
19. Turker D, Selcuk SS. Which factors affect entrepreneurial intention of university students. Journal of European Industrial Training. 2009;33(2):142-159. DOI: <https://doi.org/10.1108/03090590910939049>
20. Ambad SNA, Damita DHD. Determinants of entrepreneurial intention among undergraduate students in Malaysia. Procedia Economics and Finance. 2016;108-114.
21. Liñán F, Santos FJ. Does social capital affect entrepreneurial intentions? Int Adv Econ Res. 2007;13:443-453. DOI 10.1007/s11294-007-9109-8.
22. Naldi L, Nordqvist M, Sjöberg K, Wiklund J. Entrepreneurial orientation, risk taking, and performance in family firms. Family Business Review. 2016;20(1):33-47. DOI:10.1111%2Ffj.1741-6248.2007.00082.x
23. Ajzen I. The theory of planned behavior. Organizational Behavior and Human Decision Processes. 1991;50(2):179-211. Accessed on 10 November 2018. Available: <https://www.researchgate.net/publication/272790646>.

- DOI: 10.1016/0749-5978(91)90020-T
24. Conner M, Armitage CJ. Extending the theory of planned behavior: A review and avenues for further research. *Journal of Applied Social Psychology*. 1998;28:1429-1464.
25. Turker D, Selcuk SS. Which factors affect entrepreneurial intention of university students. *Journal of European Industrial Training*. 2009;33(2):142-159. DOI: 10.1108/03090590910939049.
26. Linan F, Chen YW. Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*. 2009;33(3):593-617.
27. Zhang P, Wang DD, Owen CL. A study of entrepreneurial intention of university students. *Entrepreneurship Research Journal*. 2015;5(1):61-82. DOI 10.1515/erj-2014-0004.
28. Linan F, Chen YW. Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*. 2009;33(3):593-617.
29. Zhang P, Wang DD, Owen CL. A study of entrepreneurial intention of university students. *Entrepreneurship Research Journal*. 2015;5(1):61-82. DOI 10.1515/erj-2014-0004.
30. Turker D, Selcuk SS. Which factors affect entrepreneurial intention of university students. *Journal of European Industrial Training*. 2009;33(2):142-159. DOI: 10.1108/03090590910939049
31. Linan F, Chen YW. Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*. 2009; 33(3):593-617.
32. Haus I, Steinmetz H, Isidor R, Kabst R. Gender effects on entrepreneurial intention: A meta-analytical structural equation model. *International Journal of Gender and Entrepreneurship*. 2013;5(2):130-156. DOI: 10.1108/17566261311328828
33. Díaz-García MC, Jiménez-Moreno J. Entrepreneurial intention: The role of gender. *International Entrepreneurship and Management Journal*. 2010;6(3):261-283. DOI:10.1007/s11365-008-0103-2
34. Anggadwita G, Ramadani V, Alamanda DT, Ratten V, Hashani M. Entrepreneurial intentions from an Islamic perspective: A study of Muslim entrepreneurs in Indonesia. *International Journal of Entrepreneurship and Small Business*. 2017;31(2):165-179. DOI: 10.1504/IJESB.2017.084086
35. Faizal PRM, Ridhwan AAM, Kalsom AW. the entrepreneurs characteristic from al-quran and al-hadis. *International Journal of Trade, Economics and Finance*. 2013; 4(4). Accessed on 10 February 2019 Available:https://pdfs.semanticscholar.org/547b/058799c1c50ee528a4db2d2284fbdce5658b.pdf?_ga=2.258792585.2272243531601997461-437698912.1581433200
36. Ali G. Entrepreneurship from an Islamic Perspective. *Journal of Business Ethics*, Forthcoming; 2014. Accessed on 15 January 2019. Available:<https://ssrn.com/abstract=2441668>
37. Ajzen I. The theory of planned behavior. *Organizational behavior and human decision processes*. 1991;50(2):179-211. Accessed on 10 November 2018 Available:<https://www.researchgate.net/publication/272790646>. DOI: 10.1016/0749-5978(91)90020-T
38. Ajzen I. The theory of planned behavior. *Organizational behavior and human decision processes*. 1991;50(2):179-211. Accessed on 10 November 2018 Available:<https://www.researchgate.net/publication/272790646>. DOI: 10.1016/0749-5978(91)90020-T
39. Ajzen I. The theory of planned behavior. *Organizational behavior and human decision processes*. 1991; 50(2):179-211. Accessed on 10 November 2018 Available:<https://www.researchgate.net/publication/272790646>. DOI: 10.1016/0749-5978(91)90020-T
40. Mumtaz BAK, Munirah S, Halimahton K. The relationship between educational support and entrepreneurial intentions in Malaysian Higher Learning Institution, *Procedia - Social and Behavioral Sciences*. 2012;69(24):2164-217.
41. Bhuyan M, Pathak P. the impact of subjective norm on entrepreneurial intention of university students in Uttarakhand State. *International Journal for Research in Engineering Application & Management (IJREAM)*. 2019;4(10):1-6.

- DOI: 10.18231/2454-9150.2018.1276
42. Malebana KJ. Entrepreneurial intentions and entrepreneurial motivation of South African Rural University Students. Journal of Economics and Behavioral Studies. 2014;6(9):709-726.
DOI: 10.22610/jebbs.v6i9.531
43. Yurtkoru ES, Acar P, Teraman BS. Willingness to take risk and entrepreneurial intention of university students: An empirical study comparing private and state universities. Procedia - Social and Behavioral Sciences. 2014; 150:834–840.
DOI:10.1016/j.sbspro.2014.09.092

© 2020 Madhushyanthi and Wijerathna; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<http://www.sdiarticle4.com/review-history/62458>