



# Factors Affecting Entrepreneurial Intention of Business Students: A Case Study of VNU University of Economics and Business

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Received 5 June 2018

Revised 15 June 2018; Accepted 21 June 2018

**Abstract:** This paper presents results of a research on determinants of entrepreneurial intention (EI) among business students. VNU University of Economics and Business (VNU-UEB) is chosen for the survey location. Two hundred and fifty questionnaires were emailed to business students at VNU-UEB, and of these 224 responses were valid for further analysis. Findings from this research show that knowledge and experience, attitude toward entrepreneurship and perceived behavior control are the three most important factors that influence the EI.

**Keywords:** Entrepreneurship, entrepreneurial intention, business students.

## 1. Introduction

Entrepreneurs play an important role in bringing in economic changes and advancements to a country's economy. The contributions of entrepreneurs towards economic development have been discussed by Baron and Shane (2008) [1], who named the entrepreneurs as "engines of economic growth". No doubt, entrepreneurs have contributed significantly to the economy and society as well as humankind. Specifically, job creation has been regarded as one of major contributions of entrepreneurs [2]. Thus, entrepreneurship has

been promoted as an attractive career alternative among students all over the world [3]. The same phenomenon also takes place in Vietnam.

According to the GEM research in Vietnam 2015, in spite of the fact that the business environment has been significantly improved, the percentage of people who are scared of failure in start-ups is still high, which accounts for more than 52 percent of the survey people. This high rate leads to the low percentage of entrepreneurship, particularly in the group of young people even though there are more business opportunities [4].

Facing this situation, the Ministry of Education and Training has cooperated with some organizations and enterprises to implement various programs to help students

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<https://doi.org/10.25073/2588-1108/vnueab.4159>

develop the skills and knowledge necessary to start their own career as entrepreneurs. Despite the efforts of the Vietnamese government and other civil social organizations to promote entrepreneurship among students, the number of graduates who aim to become a “business owner” is very small. On the other hand, they accept to be employees or staff working in organizations. For students whose major is Business Administration, thanks to the specialized courses that equip them with knowledge and skills of business management systematically, their EI is more positive. But in fact, there are still many obstacles that affect the decision of business students to run their own business.

EI has been extensively researched in the West for a long time and in the East in recent years. However, it still remains as an understudied area in Vietnam. Applying the Western studies in Vietnamese context would definitely raise a question of their appropriateness and applicability. As findings on determinants that predict EI varies across countries and cultures [5, 6]; some studies are actually needed in the local setting to increase the relevancy and accuracy of the results.

With the main objective being to identify factors affecting EI of business students and verify the relationship between the determinants and EI, the authors conducted a survey among 250 business students at the VNU University of Economics and Business.

## 2. Literature review and research hypotheses

### 2.1. Entrepreneurship and EI

The term “entrepreneurship” appeared quite a long time ago around the world. According to many researchers, entrepreneurs must truly be the ones who are willing to overcome fate and take risks with a spirit of innovation and creativity. At the same time, they may bravely suffer serious physical and spiritual disasters when facing failure in doing business.

Peter F. Drucker (1985) said that: “Starting a business is the action of entrepreneurs - people who make the entrepreneurial, financial and innovation senses turn into commodities economically” [7]. The result of these actions is to create new institutions or contribute to the restructuring of “old” organizations. The most obvious way of entrepreneurship is to start new businesses. In other words, the mentality of starting a business is the spirit of innovation.

Schumpeter (1947) defined entrepreneurship as “doing new things or doing things that have been done in a new way” [8]. Similarly, Volkmann (2009) argued that starting a business was not just about creating a business plan and initiating new projects, but about innovation and growth, thoughts and action that fit all parts of the economy, society and the surrounding ecosystem [9]. Recently, entrepreneurship has been given serious concern due to its effect on economic growth, job creation, sources of innovation and productivity [10].

Studies on entrepreneurship have shown that the determinants of EI are an interesting topic.

EI represents the commitment of individuals to start a new business [11]. Several scholars emphasize the importance of EI as a first step towards entrepreneurial behavior (i.e., starting a business) [11, 12]. In fact, prior research suggests that intentions are the single best predictor for planned behaviors, such as starting a business [13, 14]. Analyzing EIs is of particular importance - new firms facilitate the transfer from innovations to marketable products and services, mitigate inefficiencies within an economy, and create new jobs [15].

However, not all intentions will turn into action. The EI varies from time to time, case to case. Some available evidence has shown that most people plan to pursue their business careers when they are relatively young. Therefore, the spirit and responsibility for the business of young people in general and students in particular are important in studying the EIs of future entrepreneurs. Consequently,

the spirit and responsibility for the business of young people in general and students in particular are interesting topics in studying the EI of future entrepreneurs. It is believed that many factors will affect the EI of young people.

## 2.2. Education support and EI

The entrepreneurship education program has been recognized as a decisive factor for EI. Previous researchers agree that entrepreneurship education is an effective way to equip students with the necessary knowledge about entrepreneurship [16, 17]. Enterprise education should develop entrepreneurial people and aspirations by equipping individuals with the appropriate knowledge and skills to initiate and sustain enterprises [18]. Entrepreneurship education also affects a student's career choice [19]. To survive in a growing business world, universities are required to play an important role in promoting entrepreneurial spirit.

It is believed that with the knowledge, education and inspiration for start-ups, the ability of the youth to choose a field of business for start-ups can be increased [17]. According to Roxas et al. (2008), the entrepreneurial knowledge acquired from a start-up course will enhance the EI [20]. In addition, special entrepreneurial skills taught in schools and through special adult education programs by teachers familiar with start-up activities may also affect a person's ability in participating in start-ups [21]. Furthermore, Devonish et al. (2011) referred to entrepreneurs who can apply their knowledge to influence their children to carry out family start-ups or to develop new businesses [22]. According to Yusof et al. (2007), an appropriate system of support, education and management ability development will likely help them to be more successful [23]. Moreover, Birdthistle (2008) pointed out that entrepreneurship subjects are taught to students to provide skills and competencies to establish entrepreneurship and self-employment as a career choice [24]. In sum, it is hypothesized as follows.

*H1: Educational support (ES) has a positive effect on the student's EI*

## 2.3. Knowledge and experience and EI

In addition to knowledge, each individual also considers experience as the main criterion in the intention to start a business. Nabi and Holden (2008) agreed that personal life experiences and learning about entrepreneurship allow them to gradually shift their EI into real entrepreneurial activity [25]. Similarly, Davey et al. (2011) further stated that individuals with entrepreneurial backgrounds are highly valued for self-employment [26]. They also pointed out the value of providing students with entrepreneurial experience during their higher education to encourage entrepreneurial behavior in them. In addition, Devonish et al. (2010) also confirmed that the delivery of internship programs to students can enhance student perceptions of the attractiveness and ability to start a business [27]. Therefore, in this study, the authors hypothesize:

*H2: Knowledge and experience of the individual (KE) has a positive influence on the student's EI*

## 2.4. Personal attitude and EI

According to Ajzen (1991), attitude is defined as "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" [28]. In many studies, personal attitude has proven an important factor to explain intention towards entrepreneurship, whereby a significant relationship existed between attitude and EI [6, 29].

Krueger et al. (2000) suggested that attitude is described as an enduring system of positive or negative evaluations of an object [30]. It represents the person's assessment of the object and compares it with other objects based on the person's thinking, beliefs and feelings toward the object [31]. When examining and comparing the US and French markets,

Boissin et al. (2009) showed that “attitude towards entrepreneurship” and “self-efficacy” both positively impacted students’ EI [32]. Mumtaz et al. (2012) found that an undergraduate students’ attitude has a positive impact on intention to choose to be an entrepreneur as a career [16]. From previous studies, it is believed that a favorable attitude of students may more likely strengthen an individual’s intention to participate in entrepreneurship. Therefore, it leads to the following hypothesis.

*H3: Personal attitude toward entrepreneurship (PA) has a positive effect on the student’s EI*

### 2.5. Personal traits and EI

Personality traits are becoming popular as an explanation of entrepreneurial behaviors and intentions. Personality traits are described as constructs to explain regularities in people’s behavior.

Furthermore, personality has been proved to affect the intention to start a business. Shane et al. (2003) suggested characteristics such as “risk acceptance,” “confidence in self-efficacy,” “self-control,” “ambiguity tolerance,” “passion,” “effort” and “vision” are related to the student’s intention to start a business [33]. Brandstätter’s study (2011) shows results that “willingness to innovate”, “being active”, “confidence in self-efficacy,” “pressure tolerance,” and “self-control”, have positive impact on business creation and “successful business” [34]. The study of Ghasemi et al. (2011) showed that there was a positive correlation between “creativity” and the “EI” [35].

In Vietnam, research by Nguyen & Phan, (2014) revealed differences in personality for survey groups such as entrepreneurs, employees, and students [36]. The survey results show that “enthusiasm”, “open mind thinking”, “responsibility”, and “sincerity” are the characteristics that a young entrepreneur needs.

Consequently, it is necessary to raise a hypothesis about the relationship between personal traits and EI as follows:

*H4: Personal traits (PT) have a positive effect on students’ EI*

### 2.6. Perceived behavior control and EI

Perceived behavior control (PBC) is the ease or difficulty of individual perception in demonstrating entrepreneurial behavior. According to Maes et al. (2014), perceived behavior control is much related to the individual’s ability to run a business [37]. Mumtaz et al., (2012) also found that perceived behavior control positively correlates with EI [16].

Shook and Bratianu (2008) have also concluded that self-efficacy associated with EI positively, in which students were more likely to start-up a business when they believed they could perform the tasks related to entrepreneurship [38]. The positive influence that PBC had on EI has also been shown in the studies by Moriano et al. (2012), Paco et al. (2011), and Fini et al. (2009) [6, 39, 40].

As such, the hypothesis below is proposed.

*H5: Perceived behavioral control (PBC) has a positive effect on students’ EI.*

## 3. Research methodology

The conceptual framework for this study is built based on the Theory of Planned Behavior (TPB) by Ajzen (1991) and a previously presented model on determinants of EI. According to Engle *et al.* (2010), the TPB model does come into view to be an important cognitive process model for the evaluation of EI. The model explains the complexity of the relationship between human behavior and its relevant determinants. Most importantly, it identifies that human behavior is a cause of intention. According to Ajzen (1991), intention is directly affected by three antecedents. They are: (i) attitude (ii) subjective norm and (iii) perceived behavioral control. In other words,

the three factors mentioned above directly affect a person’s intention to perform a behavior. Moreover, Krueger et al. (2000) point out that entrepreneurship is a result of intentional and planned behavior. Thus, using TPB to investigate EI is considered viable. In fact, TPB has been found to be an effective and influential model for studying and understanding EI in many previous studies. Although TPB has proven to be an effective tool in EI research, it is important to integrate other relevant variables into the TPB model to increase its ability to explain and predict intention.

The conceptual framework explains that EI among students is influenced by five main factors, which are: educational support, knowledge and experience, personal traits, personal attitude and perceived behavior control as shown in Figure 1.

ES	H1 (+)	EI
KE	H2 (+)	
PA	H3 (+)	
PT	H4 (+)	
PBC	H5 (+)	

Figure 1. Research framework.

The dependent variable in this research is EI. Intentionality can be defined as a state of mind directing a person’s attention, experience and action towards a specific path to achieve something (Bird, 1988). All questionnaire items were measured using five-point Likert-scale items, ranging from “1 = strongly disagree” to “5 = strongly agree”. The measurement items and their sources are listed in the Appendix.

In addition, student gender (GEN), level (LEV) and experience in running a business (EXP) will also be considered in the model as control variables. The regression equation expressing the relationship of variables with the student’s EI is described as follows:

$$EI = \beta_0 + \beta_1ES + \beta_2KE + \beta_3PA + \beta_4PT + \beta_5PBC + \beta_6GEN + \beta_7LEV + \beta_8EXP$$

The snowball and convenience sampling methods were applied in this study. An online questionnaire was sent to 250 undergraduate business students at VNU-UEB during March 2018. Totally, 250 questionnaires were received, resulting in 100% response rate. After checking the returned questionnaires, 26 responses were rejected due to the lack of some important data and careless response to items. Eventually, 224 responses were valid for further analysis. Statistics of sample characteristics are shown in Table 1.

Table 1. Sample descriptive statistics

No.	Sample information	Quantity (person)	Percentage (%)
1	Gender		
	Female	160	71.4
	Male	64	38.6
2	Level		
	1 <sup>st</sup> year	89	39.8
	2 <sup>nd</sup> year	104	46.4
	3 <sup>rd</sup> year	22	9.8
	4 <sup>th</sup> year	9	4.0
	Others	0	0
3	EI		
	Yes	160	71.4
	No	64	28.6
4	Ever run a business		
	Yes	103	46.0
	No	121	54.0

Source: Authors’ analysis from survey results.

## 4. Findings and discussion

### 4.1. Results of reliability test

Verification of scale reliability is based on Cronbach's Alpha. Cronbach's Alpha test results show that the observation variables of the ES, KE, PA, PT, PBC and EI scales were greater than 0.6, ranging from 0.653 to 0.772. In addition, the coefficients of the variables in the scales are greater than 0.3. Thus, these variables ensure the reliability of subsequent analysis (Table 2).

### 4.2. Results of EFA analysis

EFA tests were performed with ES, KE, PA, PT, PBC and EI scales. The standard for

EFA testing is that the Eigen value must be greater than 1, and the correlation coefficient must be at least 0.5. When the EFA analysis was run, several variables did not meet the requirements of uniqueness and validity. These variables were removed from the scales including KE1, PT1, PT2, PT3, PT6 (Table 3).

### 4.3. Results of hypothesis testing

To test the hypotheses about the effect of independent variables on students' EI, the regression analysis was performed in SPSS18.0 software and gave the following results (Table 4).

Table 2. Results of scale reliability test

Factors	Cronbach's Alpha	Number of observed variables
ES	0.745	5
KE	0.663	4
PA	0.744	4
PT	0.667	7
PBC	0.733	4

Source: Authors' analysis from survey results.

Table 3. The results of Exploratory Factor Analysis of the factors influencing business students' EI

	Component			
	1	2	3	4
ES1			.672	
ES2			.738	
ES3			.743	
ES4			.633	
ES5			.540	
KE2				
KE3				
KE4				
PA1	.731			
PA2	.607			
PA3	.601			
PA4	.715			
PT4				.611
PT5				.690
PT7				.663
PBC1		.784		
PBC2		.751		
PBC3		.694		
PBC4		.545		

Source: Authors' analysis from survey results.

Table 4. Results of regression analysis

	<b>Model 1</b>	<b>Model 2</b>
<i>Independent variables</i>		
Constant	0.425	0.504
ES	-0.016	0.002
KE	0.146*	0.132*
PA	0.538***	0.545***
PT	0.017	0.011
PBC	0.242**	0.231**
<i>Control variables</i>		
GEN		-0.019
LEV		- 0.064
EXP		0.128
R <sup>2</sup>	0.348	0.356
Adjusted R <sup>2</sup>	0.333	0.332
F	23.332	14.939
*Sig. < 0.05	**Sig. < 0.01	***Sig. < 0.001

Source: Authors analysis from survey results.

Results from regression analysis show that when control variables are not put in the model, only KE, PA and PBC have the positive impact on EI and PA has the most influence on EI of the students. However, when the control variables are considered in the model, the regression analysis shows that all controlled variables do not have impact on the relationship between KE, PA, PBC and EI. Thus, it is concluded that H1 and H4 are rejected while H2, H3 and H5 are accepted in this study.

#### 4.4. Discussion and suggestions

In terms of theoretical issues, this study synthesizes the measurement items of determinants of EI from previous Western studies and put in the context of Vietnam to check its validity and suitability. On the other hand, in terms of practical issue, this study brings about some main following findings.

Firstly, in the full regression model, three independent variables KE, PA and PBC have positive relationship with EI variable. Thus, it can be concluded that knowledge and experience, personal attitude and perceived behavioral control have great influence on EI of the students at VNU-UEB. Results of the regression analysis show that regression

coefficient of PA variable is greater than that of KE and PBC variables. Thus, it can be seen that the most influential factor on EI of surveyed business students is their attitude toward entrepreneurship. When the students have higher and higher positive attitude, they will be more likely to start their own business.

Secondly, it is clear from the regression analysis that PBC ranks the second in the list of factors that affect EI of the students. This result is similar to the study of Ambad and Damit (2016) and Koe et al. (2012).

Thirdly, it is quite interesting that KE shows its positive influence on EI which means the more knowledge and experiences which business students have, the stronger the EI is.

Fourthly, the results from this study suggest that PT does not have any statistically association with EI. In other words, there is insufficient evidence in this study to reflect the influence of individual personality on EI of VNU-UEB business students. It can be seen that surveyed students themselves do not fully understand whether their inner characteristics may affect their start-up decision or not. Most of the surveyed students are freshmen, sophomores and juniors and did not have much experience.

Fifthly, this study shows that ES, GEN, LEV and experience in doing business (EXP) eventually have no effect on EI of VNU-UEB business students. This result is not equivalent to the studies of Kadir et al. (2012), Maresh et al. (2016). It is explainable that the majority of respondents are freshmen at VNU-UEB who have not taken the entrepreneurship course, so they do not have enough information about the curriculum and how entrepreneurship knowledge will be taught in the second and third year of the bachelor program.

From the findings of this study, the authors believe that many stakeholders should be engaged in a variety of activities to promote EI of Vietnamese youth. Therefore, some suggestions are raised as follow:

Firstly, the government should collaborate with universities, companies and social organizations to create more programs to incubate the start-up projects of students. Moreover, the program curriculum also has to be changed with more focus on training entrepreneurial skills.

Secondly, family members and friends should have suitable advice to the entrepreneurs rather than putting more pressures on their decision to start-up.

Thirdly, business students should actively equip themselves with knowledge of entrepreneurship so that when they really start their business, the start-up will sustain for a long time.

## 5. Conclusion

In the international economic integration period, more and more start-ups are established in a variety of businesses. Starting a business is no longer something that is too far or difficult for young people, especially the students at economic and business schools in general and students at VNU-UEB in particular. Entrepreneurship has become a trend that strongly impacts on Vietnamese economy. Entrepreneurship programs, angel investment

funds or startup contests are increasing quickly. Based on the theoretical framework of planned behavior and its relationship with the EIs of students at VNU-UEB and the results of survey, it can be proved that those students studying at VNU-UEB can get access to businesses easily, learn how to set up and manage their own business, or how to turn ideas into reality. Consequently, factors such as behavior control, personality and attitudes of students are important and influential in analyzing intention and planned behaviors.

This study explores factors that affect EI of business students at VNU-UEB. The research model focuses only on one-way impact of determinants on EI rather than the relationship among the determinants themselves. Moreover, the sample size in this study is relatively small so that the representativeness for the population is limited. Further studies should include more independent variables in the research model and increase the sample size.

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## Appendix

Code	Question item	Source
<b><i>Educational Support (ES)</i></b>		
ES1	My university provides me with sufficient knowledge of entrepreneurship	Maresh et al. (2016), Rauch and Hulsink (2015), Bae et al. (2014)
ES2	Studying at the university encourages me to develop innovative ideas to start-up	
ES3	My university develops my skills and ability to start-up	
ES4	The major curriculum equips me adequate ability to start-up	
ES5	My university organizes entrepreneurship orientation activities (seminars, start-up idea contest, etc.)	
<b><i>Knowledge and Experience (KE)</i></b>		
KE1	I myself have basic knowledge of entrepreneurship	Pihie et al. (2013), Zapkau (2015)
	Sufficient knowledge make me confident to start-up	
KE3	My experience enable me to keep calm when solving problems in start-up	
KE4	Studying experience and knowledge from start-up enables me to anticipate and deal with risks	
<b><i>Personal Traits (PT)</i></b>		
PT1	I think diligent and hard-working will lead to success	Kristiansen and Indarti (2004), Kaish and Gilad (1991), Mhango (2006), Nguyen and Phan (2014), Wang et al. (2016)
PT2	I always try my best to raise new ideas	
PT3	I am ready to accept risks	
PT4	I think that success or failure is due to my own behaviors rather than the circumstances	
PT5	I always desire and pursue success	
PT6	I insist on completing tasks on deadlines	
PT7	I am enthusiastic to learn new things	

<b><i>Personal Attitude (PA)</i></b>		
PA1	Becoming an entrepreneur would bring me great satisfaction	Krueger et al. (2000), Autio et al. (2001), Linan and Chen (2009)
PA2	Becoming an entrepreneur would bring more advantages than disadvantages	
PA3	Entrepreneurship is an attractive activity to start my career	
PA4	If I have an opportunity and necessary resources, I would start-up	
<b><i>Perceive Behavior Control (PBC)</i></b>		
PBC1	I know how to develop a start-up project	Krueger et al. (2000), Autio et al. (2001), Linan and Chen (2009)
PBC2	I know necessary aspects to begin a business	
PBC3	Starting and maintaining a business would be easy for me	
PBC4	If I strive my best for start-up, I will definitely be successful	
<b><i>Entrepreneurial Intention (EI)</i></b>		
EI1	I will surely start my own business in the future	Crant (1996), Maresh et al. (2016), Colakoglu and Gozukara (2016)
EI2	I am very serious about starting my own business	
EI3	I will try my best to start and manage my company	
EI4	I will only start my business when I am sure that it will be successful	