

# ASSESSING THE IMPACT OF ENTREPRENEURSHIP EDUCATION ON STUDENTS' ENTREPRENEURIAL INTENTIONS

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## **Abstract**

*Entrepreneurship has become a widely research topic in Vietnam in recent years. This topic covers a wide range of unit of analysis from national level (entrepreneurial ecosystem), firm, individuals to university level. This study aims to scrutinize the impact of entrepreneurship education at the university level on entrepreneurial intentions of students. Using a quantitative research method based on a sample of 210 students at the National Economics University, this study shows that aspects of entrepreneurship education entrepreneurship intentions of students in various directions. From the study results, the paper also offers some policy implication for entrepreneurship education of higher education institutions in Economics and Business Management.*

**Keywords:** *Entrepreneurial intention; Entrepreneurship; National Economics; Vietnam*

## **1. Introduction**

Entrepreneurship and innovation are seen as an important tool to tackle global challenges in the 21st century. It contributes to sustainable development by creating new areas of employment, providing employment opportunities, economic growth and improving social welfare. Enterprises are an important component contributing greatly to economic growth, poverty alleviation and job creation in the economy. Entrepreneurship is considered an important content in Vietnam's strategic development orientation in order to use and exploit resources and potentials to contribute to economic growth. The 12th National Party Congress first mentioned the issue of entrepreneurship and designated 2016 as the Year of Startup Countries. According to the "Vietnam Business White Paper 2020", as of 2019,

Vietnam has 758,610 operating enterprises, contributing over 60% of the country's GDP. The strong startup trend in Vietnam is demonstrated by thousands of newly established companies and millions of entrepreneurs who have been trying to start a business. Recognizing the importance of entrepreneurship, the Government has focused on supporting and promoting the development of the startup ecosystem through training workshops, mentoring programs (mentorship programs), business incubation centers and projects to support young businesses (young business accelerator project).

However, according to the results of the GEM 2017/18 study, the percentage of people intending to start a business tends to be opposite to the level of economic development. Countries with a development process based on unskilled labor and natural resources have the highest average proportion of people intending to start a business (30.3%), followed by countries with a development process. efficiency-based (26.3%) and finally countries with innovation-based development (15.2%). Although the rate of people intending to start a business in Vietnam has increased rapidly over the years and reached 25% in 2017, compared to other countries with the same level of development and ASEAN countries, it is still low, even lower than the average rate of people intending to start a business in developed countries based on performance (26.3%).

This study has the following major contributions

*Theoretical contributions of the study include:* the study explains the relationship between entrepreneurship education and the entrepreneurial intention of the learners. On the other hand, this study approaches the role of entrepreneurship education on the sub-components of entrepreneurship education, besides the factors belonging to the learners themselves.

*The research's practical contributions include:* the results of this study are suggestions for policy change in entrepreneurship education from the perspective of managers and policy decision-makers in the field of education. , especially higher education.

This study focuses on analyzing the following main contents: (1) Factors of entrepreneurship education affecting students' intention to start a business; (2) The degree of impact of entrepreneurship education on students' entrepreneurial intention.

## **2. Literature Review**

### **Theoretical basis and research model**

Some researchers have explored the relationship between entrepreneurship education and entrepreneurship intention of students. Studies suggest that education has become an important way to stimulate entrepreneurship for a variety of reasons (Sánchez, 2011). First, education provides individuals with a sense of independence, self-control, and self-confidence. Second, education makes people aware of career alternatives. Third, education

broadens people's horizons, making them better able to perceive opportunities. And finally, education provides knowledge for individuals to develop new business opportunities. Through a proper entrepreneurship education, an individual can acquire the skills and knowledge needed to create and grow a new business. According to Drucker (1985), entrepreneurship is like a subject, and like any course, it can be learned. The presence of successful entrepreneurs and the increase in the number of entrepreneurs in society depends on the extent to which potential entrepreneurs are educated in entrepreneurship.

Bécharde & Toulouse (1998) consider that entrepreneurship education is a series of training courses to teach students about models of business formation and development. It focuses on stimulating the passion for entrepreneurship in students through imparting the knowledge and skills needed to create a business and guiding the business in its early stages to growth. According to the definition of Byabashaija & Katono (2011), entrepreneurial behavior can be classified as planned behavior while behavior is influenced by individual intentions. Indeed, according to Ajzen & Fishbein (1975), intention is a measure of an individual's readiness for a future behavior and it is considered as an important basis directly determining human behavior. According to Ajzen (1991), intention is often considered the sole predictor of an individual's participation in a planned behavior. Behaviors, whether simple or complex, are derived from the intentions of the performer. Intentions play an important role in whether we decide to perform a behavior or not. The stronger the intentions, the more motivating and motivating the individual to perform the desired behavior.

Many models have been used in the study of entrepreneurial intention, but the dominant theoretical model is the theory of planned behavior (Theory of Planned Behavior) developed by Ajzen in 1991. According to this theory, the intention to perform a behavior is influenced by three factors: the individual's attitude towards the behavior, common norms and perceived ability to control the behavior. An individual's attitude toward a behavior is developed based on the individual's beliefs about whether the behavior is positive or negative. Common norms refer to an individual's perception of the beliefs of other individuals. It is the fact that groups with close and important relationships with the subject approve or disapprove of the performance of a certain behavior. Perceived behavioral control is a perception of how easy or difficult it is to perform a behavior within the limits of one's own abilities and resources.

Besides, according to the social cognitive theory (Social Cognitive Theory) developed by researcher Albert Bandura in 1986, human behavior is explained through the mutual interaction between 03 factors as individuals, environment and behavior. From the perspective of the relationship between environmental factors and behavior, Bandura's theory emphasizes the importance of mimicking recorded behaviors through observing patterns from the environment.

Christensen (1991) suggest that knowledge only becomes "useful if it were included in situations that require applications to solve specific problems." Research by Bell & Bell (2016) confirms the effectiveness of experiential learning through business planning. Their research shows the positive effects of this learning method on students' self-confidence and their belief in entrepreneurship.

Meanwhile, Laurillard (2002) points out that feedback is also part of interaction and reflection. Feedback gives learners the opportunity to adjust behavior as needed. Laurillard (2002) also suggests that if students receive feedback during the course, students' entrepreneurial intentions may also be affected.

From the above theoretical analysis, the authors develop the following hypotheses:

*Hypothesis H1: Positive attitude to start the business of students increases the level of their intention to start a business*

*Hypothesis H2: There exists a relationship between standards and subjective way of starting a business and entrepreneurship intention of students*

*Hypothesis H3: Student's strong perception of the possibility of success in starting a business positively affects their intention to start a business.*

*Hypothesis H4: The level of access to inspirational figures in entrepreneurship education has a positive impact on students' entrepreneurial intention.*

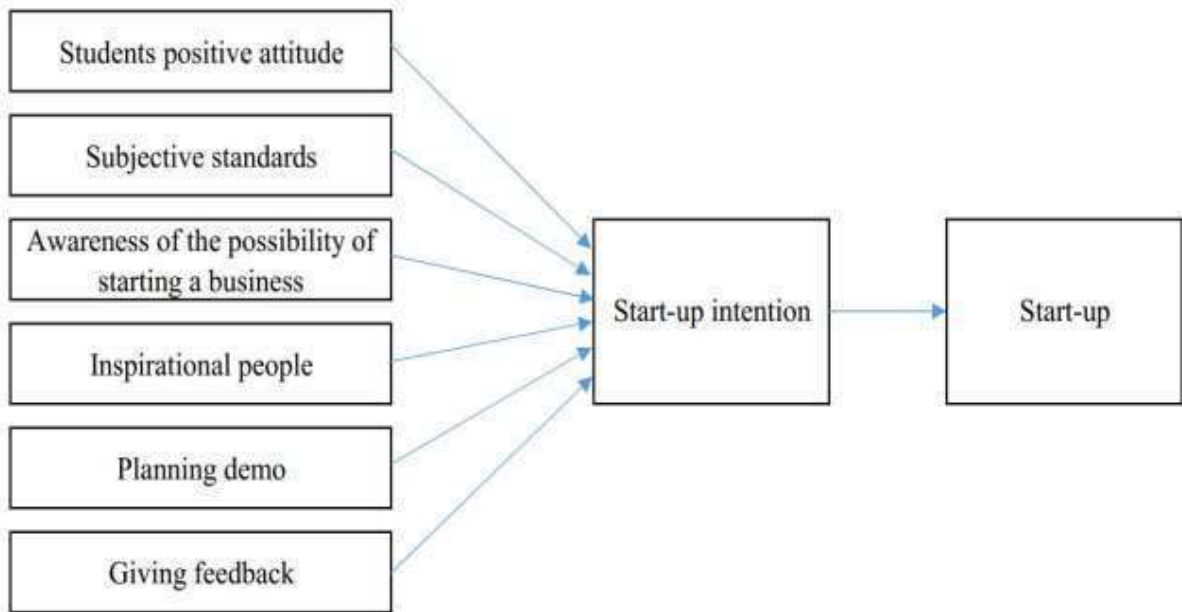
*Hypothesis H5: The use of business planning activities in entrepreneurship education has a positive effect on students' entrepreneurial intention.*

*Hypothesis H6: The provision of feedback in entrepreneurship education have a positive impact on entrepreneurship intention of students*

### **3. Method**

The research method used in this study is the quantitative research method. The analysis includes: measure test analysis to check and determine the reliability of the measure. This is a preliminary research phase, conducted to recalibrate the quantitative measures that were used before to suit the conditions and practical basis of the research.

Regression analysis: The purpose of this research step is to measure the impact of 6 variables on students' entrepreneurial intention.



**Figure 1: Research diagram**

According to Hair et al. (2010), the minimum sample size can be determined based on the number of variables in the analysis. Generalized by the formula, we have:  $n = k \times N$  (where,  $n$  is the minimum sample size;  $k$  can take the value 5, 10 or 20;  $N$  is the number of variables included in the model). In this study, the author uses the formula with  $k = 20$ , the number of variables included in the study includes 7 variables (1 dependent variable, 6 independent variables). Therefore, the minimum number of observations to be collected is  $20 \times 7 = 140$  observations. Thus, the minimum sample size for this study is 140 observations.

Data used in the study is primary data, collected through questionnaires online. The data collection process was carried out from December 2020 to March 2021. The number of observations was 216, including students of different programs of the full-time and international training at the University. Studying National Economics. After data cleaning, the number of valid observations was 210. Thus, the size of this survey exceeded the minimum sample size required to perform the tests and run the model.

After the data was collected and cleaned, the data processing was done through SPSS software. The main results will include the test of the suitability of the measure, linear regression using OLS estimation, and analyzing the effects of the factors of the entrepreneurship education program on the intention to start a business student's career.

## 4. Results

### 4.1. Descriptive statistics

**Table 1: Information about the respondent**

Sample: n = 210		Frequency	%
Majors	General economic field	67	31,9
	The field of business administration	82	39,05
	Other areas	61	29,05
Sex	Female	109	51,9
	Male	101	48,1
School year	First year	31	14,8
	Second year	53	25,24
	Three years	78	37,14
	Last year	48	22,82

*Source: Results from the author's survey*

The survey sample shows that there is not much difference between the groups of students represented in this sample. The author has divided the group into 3 groups of fields including: 1) General economic sector (including Development Economics); 2) The field of business administration (including the majors of the Faculty of Business Administration, the Institute of Business Administration, the Entrepreneurship and Business Development major of the International Training Institute, ...) and 3) The field of business administration. Other fields (Banking - finance, Accounting - Auditing, ...).

### 4.2. Check the suitability of the measure

The results of testing the reliability of the measure show that most of the observed variables (items in the questionnaire) of both independent and dependent variables have high reliability. For items 2, 5, 14, and 29, because the coefficient value is less than 0.6, it will be removed to increase the reliability of the measure in the fact that the observed variables are still many. . (Details see Appendix 1.)

### 4.3. EFA exploratory factor analysis

*Results of KMO test and Bartlett's test*

- KMO coefficients of the independent variables are all ( $> 0.5$ ). Concluded that this factor analysis consistent with reality.
- P-value of Bartlett test we get  $0.000 < 0.05$ . There is a correlation between the observed variables in each factor.

- Test of extracted variance of factors (% Cumulative Variance): Cumulative coefficient results are in the range from 0.74 (> 0.5) to meet the standard. We conclude that 74% of the variation of the factors is explained by the observed variables. In other words, the observed variables used measured about 74% of the factors it measured.

Next, the authors use the factor rotation matrix to reduce the measure.

The results from the factor rotation matrix (presented in Appendix 2) show that, after removing the items after Cronbach's Alpha test, the remaining items all accurately and uniquely reflect the factors it measures. In other words, now the measure has reached the standard for further analysis tich.

### **4.3. Regression analysis**

Before conducting regression analysis, the author checks the defects of the model (function form, variable variance, multicollinearity).

Results (see Annex 3) allow give some important conclusions following:

- The model has no defects in functional form.
- The results of the B-G test show that the model is not defective in terms of variable variance.
  - Magnification factor coefficients of the independent variables are less than 10 so the model does not suffer from multiple disabilities collinear.

Carrying out the model regression, we have the following results (details see in Appendix 4)

The P-values of the variables in the model are statistically significant.

R2 = 0.56 means that the variables in the model explain on average 56% of the variation of the dependent variable

From the results in the table above, we replace the values of the coefficients from  $\beta_1$  to  $\beta_6$  into the model, we get the following results:

$$yd = -0.65237ph - 0.48368do + 0.99014ko + 0.95177at + 0.74270cm + 0.44292nt + 0,01248$$

In the above model, the influence of the independent variables is statistically significant because the P-values of all variables are less than 0.05. The above model shows that students' curricula have some 'positive' effects on students' intention to start a business. Among them, the use of design lectures with the participation of entrepreneurs (inspirational characters) or based on their real stories has the greatest impact on this intention. Next, students' attitudes also greatly influence their intentions. Smallest influence is aware of the possibility to establish enterprises. This can be explained from the fact that students do not fully understand the difficulties, challenges or opportunities when starting a business while

still in school. On the contrary, the results of this study indicate that the feedback and hands-on demos did not deliver the results of the program's design goals. However, this result also shows the great role of the curriculum in relation to entrepreneurship for students' entrepreneurship and entrepreneurial intentions.

## 5. Discussion and Conclusions

The results of the study indicate that different aspects of entrepreneurship education affect students' entrepreneurial intentions differently and policy makers can apply the results of this study to implement change policies in line with the goal of promoting entrepreneurship among students.

Recommendations include:

- *Increase the use of inspirational characters about entrepreneurship*

The results of this study suggest that entrepreneurship education programs need to be designed more vividly and practically, rather than focusing only on theories. The introduction of entrepreneurial stories or ideally the participation of entrepreneurs in the teaching process of entrepreneurship has a great influence on students' entrepreneurial intentions. This poses a requirement to change the current program design in many universities - where only theory is taught in a field that requires practical content such as entrepreneurship.

- *Increased provision of feedback on student learning*

Teachers have an important role in enhancing students' self-regulation ability. Feedback from teachers is a source for students to assess progress. Furthermore, teachers can detect students' mistakes rather than letting students be self-aware of their own mistakes. Therefore, providing feedback to students is very important to ensure student learning.

- *Expand opportunities for dialogue between teachers and students*

One approach to increasing the value and effectiveness of the feedback provided is dialogue, rather than just conveying information. Feedback in the form of dialogue means that students will not only receive written feedback, but also have the opportunity to discuss the feedback afterward. In this case, to make feedback more effective and valuable, students must understand it before it can be used to improve performance.

- *Encourage the confidence of students*

Motivation can play an important role in learning and assessment because they help students understand self-regulation when they encounter failure. Therefore, teachers should evaluate students' progress instead of pointing out mistakes, instead commenting that pass or fail helps students recognize mistakes and find solutions to overcome.



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**Appendix 1: Checking the reliability of the measure**

	<b>Cronbach's Alpha coefficient</b>	<b>Total variable correlation coefficient</b>	<b>Overall Cronbach's Alpha coefficient</b>
<b>Feedback in the curriculum</b>			<b>(0,71)</b>
1. I often get feedback on ideas or contribute during discussion	0,66	0,58	
2. After receiving feedback, I can do it myself	0,56	0,51	
3. Lessons with teachers motivated me to start-up	0,82	0,78	
4. Teacher comments - She is very clear and helpful	0,81	0,77	
<b>Practical demos in the course</b>			<b>(0,68)</b>
5. I am often encouraged to develop my own business ideas when I take classes	0,45	0,30	
6. In the class, I usually up ideas about business	0,70	0,62	
7. I enjoy the process of writing a business plan	0,88	0,85	
8. I learned about business ideas	0,79	0,69	
<b>Introducing inspirational characters</b>			<b>(0,82)</b>
9. I was listening to presentations by entrepreneurs	0,86	0,85	
10. Among startup influencers, I admire many of them	0,80	0,76	
11. The appearance or presentation they made me love the business	0,87	0,86	
12. I am interested in the process of learning from the example of a typical case of start-up	0,79	0,73	

13. Other students also like this design in the program	0,88	0,82	
<b>Student's positive attitude</b>		<b>(0,77)</b>	
14. Start-up gives me many advantages	0,46	0,23	
15. A job like start-up attracts me	0,79	0,75	
16. If I have the opportunity and enough resources, I will start-up	0,75	0,74	
17. Between so many career options, the startup is my first choice	0,71	0,70	
18. Start-up helps me fulfill my passion	0,65	0,63	
<b>Subjective norms</b>		<b>(0,84)</b>	
19. Start-up is what to do with students	0,80	0,77	
20. Start-up is highly appreciated by society	0,87	0,68	
21. Start-up gives me confidence	0,9	0,79	
22. I appreciate start-up in young people	0,79	0,76	
<b>Awareness of the possibility of establishing business</b>		<b>(0,62)</b>	
23. I think starting a business and running it is easy for me	0,76	0,73	
24. I was prepared to ready to start-up	0,79	0,74	
25. I can control the start-up process	0,73	0,7	
26. I know what it takes to start-up	0,66	0,64	
27. I know how to develop a project to start-up	0,65	0,6	
28. I tried to start-up, the probability of success is very high	0,61	0,58	

<b>Intention to start-up</b>		<b>(0,73)</b>	
29. I will do everything to become a start-up	0,46	0,4	
30. I will try my best to start-up	0,7	0,66	
31. I am confident to build my own company	0,74	0,71	
32. I decided to start-up from a small business	0,73	0,65	
33. My career goal is to be a start-up	0,78	0,7	
34. I thought about start-up a private company in earnest	0,8	0,72	

### Appendix 2: Factor Rotation Matrix

Principal Components Analysis						
Call: principal (r = bdl, nfactors = 6, rotate = "varimax")						
Standardized loadings (pattern matrix) based upon correlation matrix						
item	RC1	RC2	RC3	RC4	RC5	RC6
ph1			1	<b>0.77</b>		
ph3			3	<b>0.72</b>		
ph4			4	<b>0.70</b>		
do2		6		<b>0.85</b>		
do3		7		<b>0.81</b>		
do4		8		<b>0.72</b>		
ko1		9			<b>0.69</b>	
ko2		10			<b>0.72</b>	
ko3		11			<b>0.76</b>	
ko4		12			<b>0.80</b>	
ko5		13			<b>0.73</b>	
at2		15			<b>0.73</b>	
at3		16			<b>0.68</b>	
at4		17			<b>0.81</b>	
at5		18			<b>0.71</b>	
cm1		19				<b>0.60</b>
cm2		20				<b>0.82</b>
cm3		21				<b>0.72</b>
cm4		22				<b>0.65</b>

nt1	23	<b>0.78</b>
nt2	24	<b>0.63</b>
nt3	25	<b>0.61</b>
nt4	26	<b>0.70</b>
nt5	27	<b>0.74</b>
nt6	28	<b>0.84</b>

### **Appendix 3: Inspection of defects of the model**

#### **Functional form test: Result of testing the Ramsey**

RESET test
Data: model
RESET = 0.8152, df1 = 2, df2 = 129, p-value = 0.498

#### **B-G test (Test of Variance of Variation)**

Breusch-Godfrey test for serial correlation of order up to 1
Data: model
LM test = 0.67302, df = 1, p-value = 0.3991

#### **Magnification factor (Variance inflation factor)**

ph	do	ko	at	cm	nt
3.0192	7.0394	9.0128	5.0192	2.2440	3.001

#### Appendix 4: Regression results

##### Residuals:

Min	1Q	Median	3Q	Max
-1.1829	-0.3945	-0.0241	0.31470	1.28214

##### Coefficients:

	Estimate	Std. Error	t value	Pr(> t )
ph	-0.65237	0.03471	4.609	9.47e-06 ***
do	-0.48368	0.09867	2.930	0.004 **
ko	0.99014	0.03931	12.477	< 2e-16 ***
at	0.95177	0.02917	3.819	2.71e-07 ***
cm	0.74270	0.01719	1.728	0.001 **
nt	0.44292	0.06103	7.109	< 2e-10 ***

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05

Residual standard error: 0.3651 on 210 degrees of freedom

Multiple R-squared: 0.61, Adjusted R-squared: **0.56**

F-statistic: 2610 on 3 and 210 DF, p-value: < 2.2e-16