Print ISSN: 2288-4637 / Online ISSN 2288-4645
doi:10.13106/jafeb.2022.vol9.no1.0363

The Effect of Institutional Capability on Entrepreneurship Education: An Empirical Study of Vietnamese Universities

Trong Luan NGUYEN[1], Trung Hau NGUYEN[2], Thao Vy THACH[3], Doan Vy TRAN[4], Nguyen Huong Giang HOANG[5], Ngoc Phuong Trang PHAM[6]

Received: September 30, 2021 Revised: December 08, 2021 Accepted: December 15, 2021

Abstract

Entrepreneurs are valuable assets for any country. Rather than being confronted with new obstacles, they should be fostered and nurtured. Entrepreneurial firms have the power to influence how we live and work, in addition to producing jobs and contributing to economic progress. Entrepreneurs have the ability to change the world by creating diversified skill sets and profitable businesses that are vital to the advancement of our economies. How does one go about being a successful business, though? More resources are believed to be needed to create entrepreneurial environments in higher education that foster progressive ideas and innovation while also providing students with the practical knowledge and skills they need to navigate the troublesome, difficult, and uncertain situations that come with owning a business. This article will outline the scales of components from which to measure variables impacting universities' ability to encourage entrepreneurial behavior among students, based on the aforementioned significance of universities. This article is based on a survey of 507 students from different universities and backgrounds in Vietnam. The research methods used are Cronbach's alpha test and Structural Equation Modeling. From the research results, it can be seen that the university's environment plays a significant role in fostering entrepreneurial behavior among students.

Keywords: Institutional Capability, Attitude, Entrepreneurial Attitude, Entrepreneurial Intention, Students

JEL Classification Code: A13, A2, L26, L31

[1]First Author and Corresponding Author. Lecturer, Faculty of Business Administration, FPT University, Can Tho Campus, Vietnam. ORCID ID: 0000-0002-3489-1628. [Postal Address: 600 Nguyen Van Cu Street, An Binh Ward, Ninh Kieu District, Can Tho City, 94100, Vietnam] Email: LuanNT73@fe.edu.vn
[2]Faculty of Business Administration, FPT Can Tho University, Can Tho City, Vietnam. ORCID ID 0000-0002-4713-5784. Email: HauNTCS140112@fpt.edu.vn
[3]Faculty of Business Administration, FPT Can Tho University, Can Tho City, Vietnam. ORCID ID 0000-0001-9345-0702. Email: VyTTCS140100@fpt.edu.vn
[4]Faculty of Business Administration, FPT Can Tho University, Can Tho City, Vietnam. ORCID ID 0000-0002-4617-9769. Email: VyTDCS140161@fpt.edu.vn
[5]Faculty of Business Administration, FPT Can Tho University, Can Tho City, Vietnam. ORCID ID 0000-0003-0759-6276. Email: GiangHNHCS140399@fpt.edu.vn
[6]Faculty of Business Administration, FPT Can Tho University, Can Tho City, Vietnam. ORCID ID 0000-0003-4440-0543. Email: TrangPNPCS140016@fpt.edu.vn

1. Introduction

Universities today play an important role not just in imparting knowledge but also in promoting and inspiring students to pursue entrepreneurial endeavors. Numerous research has discovered that the tendency to start new firms is linked to the university environment, risk-taking propensity, and locus of control (Turker & Selcuk, 2009; Schwarz et al., 2009; Soria-Barreto et al., 2017). Entrepreneurial intention is an individual's desire to start a new firm and is the first step toward entrepreneurial behavior (Krueger & Carsrud, 1993). In this sense, universities play an essential educational role in cultivating entrepreneurial attitudes and intentions (Lacap et al., 2018; Akhter et al., 2020), guiding students in developing business models, and training human resources to efficiently meet business demands. Etzkowitz and colleagues stated the university is a natural and dynamic organization that can assist students' entrepreneurial aspirations and promote their abilities to turn ideas into tangible entrepreneurial activities (Etzkowitz 2001, 2003;

Etzkowitz & Leydesdorff, 2000; Etzkowitz et al., 2000). According to Kushwaha and Sharma (2017), educational institutions can assist individuals to improve their creativity and innovation. A business university, according to Guerrero and Urbano (2012), is an institution that promotes a variety of entrepreneurship-supportive techniques, emphasizing its crucial societal role in shaping economic growth and income-generating activities.

2. Literature Review

2.1. University's Environment

Currently, the field of entrepreneurship education has been focused on expanding, and becoming more popular through a priority focus on educational innovations, especially at the university level (Clark, 1998; Etzkowitz, 2003). In fact, it is possible for university students to learn some aspects of entrepreneurship at university (Autio et al., 2001; Johnson et al., 2006; Vesper & Gartner, 1997). Investing in entrepreneurship education is the best-performing spending in EU countries. With the opportunity to acquire and access entrepreneurship education, young people have the opportunity to build their foundational knowledge, as well as improve their skills and attitudes towards their entrepreneurial intentions themselves. Thereby, their prospects of developing their business ideas and securing a job improve (European Commission, 2011; Fitzsimmons & Douglas, 2011; Liñán & Chen, 2009). As mentioned, the knowledge, skills, and abilities relevant to this field of entrepreneurship education are essential elements that can help promote entrepreneurship spirit among young people and increase their ability to join the labor market in the future. This is further confirmed for students who have the opportunity to fully and effectively access entrepreneurship education throughout their university career (Etzkowitz, 2001; Guerrero & Urbano, 2012).

After understanding the role of entrepreneurship education in the university environment, it is extremely important for students to experience the entrepreneurial process to exploit similar job opportunities in the future (Heinonen & Poikkijoki, 2006). Simultaneously, the importance of teaching and learning techniques in business schools in ensuring quality uniformity among students from different backgrounds is also emphasized (Rodrigues, 2004). The empirical support that has been studied to show that the entrepreneurial behavior of students is positively affected by the university environment has been provided by Franke and Lüthje (2004), focusing on three aspects of influence: most to entrepreneurship intentions, including initiation, development process and active support activities for students (Souitaris et al., 2007). Thereby, clarifying the relationship between the phrase "the making of an entrepreneur" and business universities (Lüthje & Franke, 2003), emphasizing the importance of entrepreneurship education on students' attitudes and intentions to start their own business (Autio et al., 2001; Etzkowitz et al., 2000; Johnson et al., 2006; Robinson et al., 1991). Recently, there have been theories that educational support plays a pivotal role in determining students' entrepreneurial intentions, arguing that "if the university can provide sufficient knowledge as well as imparting entrepreneurial inspiration, young people's ability to choose a career path will be increased."

H1.1: *University environment has a direct positive impact on students' entrepreneurial attitudes.*

H1.2: *University environment has a direct positive impact on students' entrepreneurial intentions.*

2.2. Risk-taking Propensity and Locus of Control

Modern entrepreneurship education studies show that entrepreneurial intention is closely related to a proactive personality (Crant, 2000; Thompson, 2009). A person with a high locus of control believes that the outcome of an incident is the consequence of his or her own behavioral action rather than luck (Shahneaz et al., 2020).

The concept of proactive behavior is "Taking initiative in changing current situations or establishing new ones," according to Crant (2000), "involves challenging the status quo rather than passively responding to current realities". Accordingly, Gartner (1990) correlates the concept of the entrepreneur with distinct personality traits and talents, one of which is proactive behavior, which is critical in dealing with uncertainty (Carbonara & Caiazza, 2010) and efficiently exploiting opportunities (Shane, 2000).

Following this line of research, variables like risk-taking propensity and locus of control have long been recognized as important proactive traits that foster entrepreneurship (Crant, 1996; Lüthje & Franke, 2003; Robinson et al., 1991; Shane et al., 2003). In terms of our research, we follow the stream of literature that emphasizes the critical importance of risk-taking tendency (Hmieleski & Corbett, 2006) and locus of control (Levenson, 1974), concentrating on three sub-dimensions: (1) Internal Control, (2) Powerful Others, and (3) Chance (Lumpkin, 1988). Levenson (1974) authenticated these scales to estimate perceived mastery over one's individual life and goals, which includes the abilities to influence events and actions, attributing success and failure to "internal variables" directly connected to the exercise of individual capacities (Internal Control); The expectation that pressure groups and "important persons" would exert control over one's interests and behaviors, influencing one's decision-making process (Powerful Others); A person's belief in

chance, which refers to a person's view that their actions and life are directed by fate and are unintentionally influenced by external variables that they cannot control (Chance) (Levenson, 1974; Lumpkin, 1988).

H2.1: *Risk-taking propensity directly positively affects students' entrepreneurial attitude.*

H2.2: *Risk-taking propensity directly positively affects entrepreneurial intention.*

H2.3: *Internal control directly positively affects students' entrepreneurial attitudes.*

H2.4: *Internal control directly positively affects entrepreneurial intention.*

H2.5: *Powerful others directly positively affect students' entrepreneurial attitude.*

H2.6: *Powerful others directly positively affect entrepreneurial intentions.*

H2.7: *Powerful others directly positively affect internal control.*

H2.8: *Powerful others directly positively affect chance.*

H2.9: *Chance directly positively affects students' entrepreneurial attitudes.*

H2.10: *Chance directly positively affects entrepreneurial intentions.*

2.3. Entrepreneurial Attitude and Intention

The entrepreneurial purpose is widely regarded in the entrepreneurship literature (Autio et al., 2001; Krueger et al., 2000; Liñán & Chen, 2009; Bui et al., 2020) as a fundamental factor in the choice to establish a firm. TPB theorists consider perceived behavioral control, subjective norm, and personal attitude as the key determinants of individual purpose, which is consistent with this (Ajzen & Fishbein, 1980; Peterman & Kennedy, 2003; Schlaegel & Koenig, 2014). When applied to the realm of entrepreneurship, it is widely accepted that one of the key antecedents of entrepreneurial purpose is one's attitude toward self-employment (Lüthje & Franke, 2003; Krueger et al., 2000; Thompson, 2009). The majority of studies on entrepreneurial intention have focused on this antecedent because the attitude toward self-employment typically explains a large part of the variation in business foundations' and entrepreneurial activities' related behavior (Franke & Lüthje, 2004; Heinonen & Poikkijoki, 2006; Lüthje & Franke, 2003; Robinson et al., 1991). According to Krueger et al. (2000), as the intention is the best predictor of entrepreneurial behavior, it is critical to understand its antecedents, such as attitude, which "effectively predicts intents". The entrepreneurial purpose is seen as a necessary and basic requirement for becoming a budding entrepreneur. While entrepreneurship is defined as the formation of a new endeavor (Gartner et al., 1992), an individual's desire to pursue an entrepreneurial career is critical to this process (Lee et al., 2011). Furthermore, while the entrepreneurial intention is seen as the initial stage in a series of acts to establish an organization (Bird, 1988), Fishbein and Ajzen (1975) claimed that intentions toward a behavior might be viewed as crucial indications of that behavior.

H3: *Entrepreneurial attitudes have a direct positive effect on entrepreneurial intention.*

The research framework of this study is demonstrated in Figure 1.

3. Research Method

3.1. Research Design and Data Analysis

The research was put into practice based on the theoretical model given in Figure 1. The dependent variable in the study is Entrepreneurial Intention (INT). The independent variables included the University's Environment (UNI), Risk-taking Propensity (RIS), Locus of Control (CON), and Entrepreneurial Attitude (ATT). In which, the variable Locus of Control (CON) formed from three components, they are Internal Control (ICT), Powerful Others (PWO), and Chance (CH). These components were measured by a five-point Likert scale ranging from lowest to highest (1 indicates strong disagreement and 5 indicates strong agreement) (Zainudin et al., 2016).

The study was designed using a quantitative method. The research was deployed through an online questionnaire on Google Forms. A questionnaire is one of the most popular tools for gathering data valid and reliably related to a certain topic used for data analysis in social science studies (Taherdoost, 2018). The collection of non-probability samples via Google Forms took place from October 30th to November 5th, 2021. The first part of the questionnaire allows learning of participants' demographic

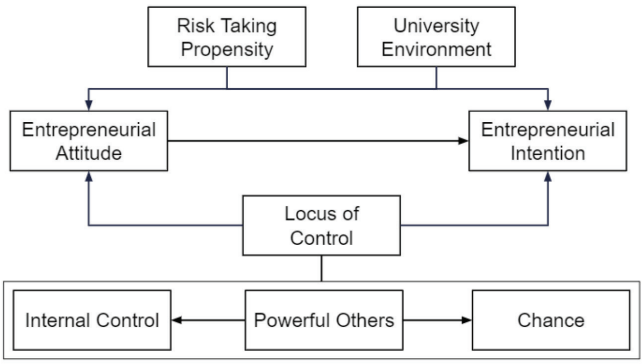

Figure 1: Research Framework

information including age, gender, university major, and occupation. This information supports the research in explanations and explorations about universities' ability to stimulate students' entrepreneurship intention (Miles & Huberman, 1994). The quantitative method converts data collected from part two related to independent and dependent variables into precise assessment measures supporting logical reasoning and judgments. The two software utilized for data processing were Analysis of Moment Structures (AMOS) and Statistical Package for Social Sciences (SPSS). In which, Cronbach's alpha test and Structural Equation Modeling (SEM) were the two main methodologies. Cronbach's alpha reliability refers to the reliability of the questionnaire's measurements (Cronbach, 1951). Structural equation modeling (SEM) is a technique for identifying, estimating, and assessing linear models among a set of observed variables (Byrne, 2010). Therefore, the SEM model was applied to test the hypothesis and evaluate the independent variables' impact on students' entrepreneurial intention.

3.2. Sample Structure

A total of 507 response forms were obtained from respondents who are studying or used to study in Vietnam universities at the age of 18 to 23. The percentage of males participating in the questionnaire was 52.5%, females 46.2%, and others 1.4%. Among the respondents, the 18 to 20 age group accounted for the largest proportion in the sample structure with approximately 65%, while people aged from 21 to 23 and above accounted for slightly over 35%. By occupation, the group made up the largest portion of survey participants was students, with 88.4% recorded. This is the group with the most incentives to start a business since they are able to generate many creative and innovative ideas with great potential. In addition, entrepreneurs and part-time entrepreneurs also contributed to this study in a modest percentage of 9.13%. In terms of university majors, non-business students accounted for 53.3% of the survey respondents, slightly higher than that of business students, which was 46.7%. Regarding the year of university, the majority of Sophomores took part in the survey, making up 34.3% in total. In addition, the group of Freshmen, Juniors, Seniors, and Graduates accounted for 18.1%, 14.6%, 15.8%, and 17.2% respectively.

4. Results

4.1. Reliability Test

Cronbach's alpha was used to measure the reliability coefficient of the scale of the elements in the theoretical model and the correlation between the observed variables and the total variables. The correlation between the observed and the total variables includes (1) University's Environment (UNI); (2) Risk-taking Propensity (RIS); (3) Locus of Control (CON); (4) Entrepreneurial Attitude (ATT); (5) Entrepreneurial Intention (INT). Cronbach's alpha coefficient ranges from 0.838 to 0.956 > 0.6, which means that the scale is reliable (Table 1). Besides, each observed variable's correlation coefficient is also greater than 0.3 (Nunnally & Burnstein, 1994). Hence, it is concluded that the scale has high reliability due to the high correlation of the component variables in the model and the total variable.

4.2. Structural Equation Modeling

The SEM model shows the links between the independent and dependent variables. The model fit results of SEM were accepted according to Hair et al. (2010) with Chi-square (χ^2/df) value at 3.77, less than 5; TLI value at 0.87 and CFI value at 0.88, both greater than 0.80; and RMSEA value at 0.07, less than 0.08. Insignificant correlations (at 95% confidence level) were shown in between UNI/INT, ($\lambda = 0.051$; $P = 0.144 > 0.05$); RIS/INT, ($\lambda = 0.038$; $P = 0.413 > 0.05$); ICT/INT, ($\lambda = 0.014$; $P = 0.800 > 0.05$), PWO/ATT, ($\lambda = –0.008$; $P = 0.911 > 0.05$), CH/ATT, ($\lambda = 0.062$; $P = 0.395 > 0.05$). After evaluating based on statistical data, the rejected hypotheses were indicated in Table 2.

After detaching the relationships that were not statistically significant, the final SEM model was manifested in Figure 2.

Entrepreneurial Intention (INT) is directly influenced by 3 components including Entrepreneurial Attitude (ATT), Powerful Others (PWO), and Chance (CH). In which, the ATT has the vital positive impact at 0.83***, which means when the ATT increases one unit, the INT will increase by 0.83 units. The PWO affects negatively at –0.50***, which means the INT will decrease 0.50 units if the PWO increases one unit.

Table 1: Cronbach's Alpha Test Result

Variables	Code	Items	Cronbach's α
University's Environment	UNI	10	0.953
Risk-Taking Propensity	RIS	7	0.838
Internal Control	ICT	5	0.880
Powerful Others	PWO	3	0.877
Chance	CH	3	0.881
Entrepreneurial Attitude	ATT	7	0.920
Entrepreneurial Intention	INT	8	0.956

Table 2: Hypothesis Testing Result

Hypotheses	Relationships	λ	P	Results
H1.1	UNI → ATT	0.129	***	Accept
H1.2	UNI → INT	0.051	0.144	Reject
H2.1	RIS → ATT	0.570	***	Accept
H2.2	RIS → INT	0.038	0.413	Reject
H2.3	ICT → ATT	0.565	***	Accept
H2.4	ICT → INT	0.014	0.8	Reject
H2.5	PWO → ATT	–0.008	0.911	Reject
H2.6	PWO → INT	–0.496	***	Reject
H2.7	PWO → ICT	0.444	***	Accept
H2.8	PWO → CH	0.901	***	Accept
H2.9	CH → ATT	0.062	0.395	Reject
H2.10	CH → INT	0.468	***	Accept
H3	ATT → INT	0.827	***	Accept

Note: ****p*-value < 0.001. Significant at the 0.05 level.
λ, Standardized Regression Weights.

Entrepreneurial Attitude (ATT) was directly and significantly impacted by University Environment (UNI) at 0.13***; Risk-taking Propensity (RIS) at 0.57***; and Internal Control (ICT) at 0.57***. The study results indicated that if students have a higher RIS and ICT, their entrepreneurial attitude will raise a lot.

The Powerful Others (PWO), although, influence the Entrepreneurial Intention (INT) negatively, affects positively and significantly Internal Control (ICT) at 0.44*** and Chance factor (CH) at 0.90***. Chance (CH) has a positive effect on Entrepreneurial Intention (INT) and Internal Control (ICT) has an indirect impact on Entrepreneurial Intention (INT) through Entrepreneurial Attitude (ATT). Therefore, the research can consider the increase of the PWO at a suitable level to enhance the INT factor.

To enhance the Entrepreneurial Intention (INT) in students, the universities should pay more attention to raising their Entrepreneurial Attitude (ATT) by improving their Risk-taking Propensity (RIS) and Internal Control (ICT). Besides, other direct and indirect influencing components also need noting and improving. They can develop topics on entrepreneurship and put them into the training program

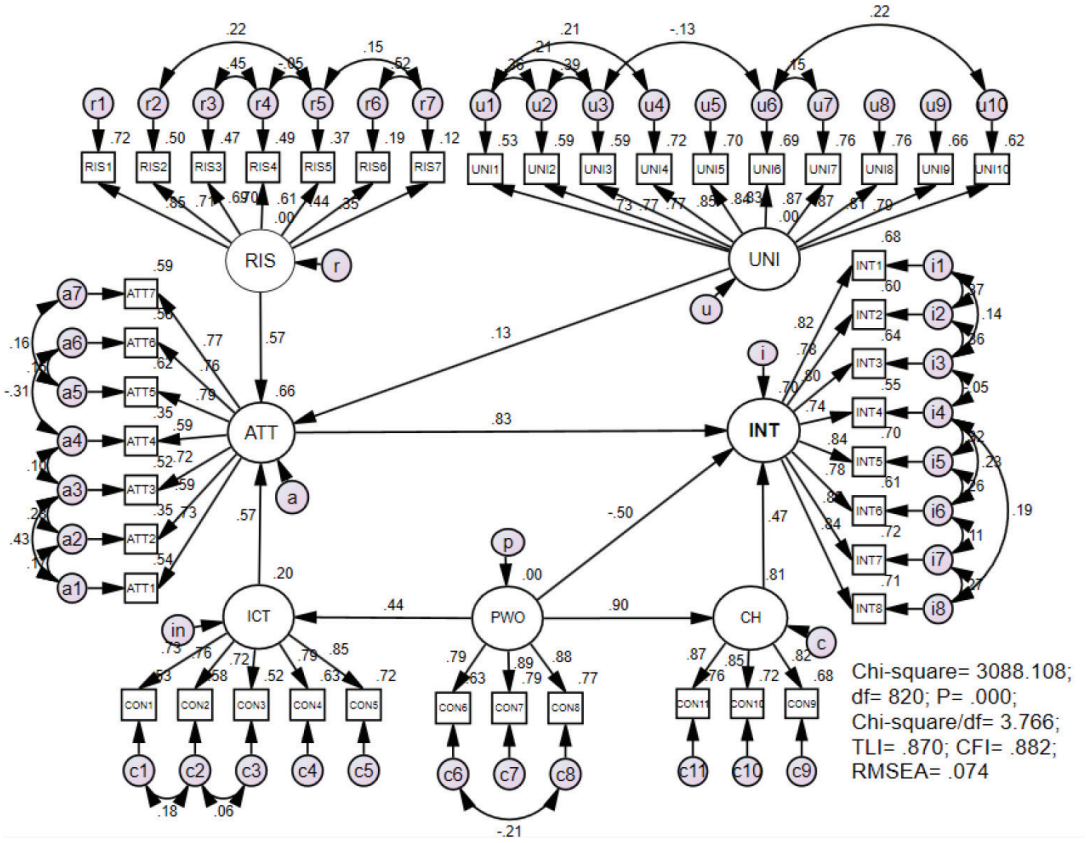

Figure 2: The Final SEM Model

in the direction of compulsory or elective to match reality; form start-up clubs at universities; establish a support center to help students with entrepreneurial issues and with starting a new business as well; support to find funding sources, connect and attract investment for students' startup ideas and projects.

4.3. The Influence of Differences in Demographics on Variables ATT and INT

The differences in the mean of Gender, Age, University Year, and Entrepreneurship Study and their influences on Entrepreneurial Attitude and Entrepreneurial Intention were shown in Table 3. The differences were considered meaningful at the Significant of 0.05, with the Sig. (ANOVA) and Sig. (Multiple Comparisons), or Sig. (2-tailed) less than 0.05.

Specifically, by Gender, there are differences between males and two remaining genders in both ATT and INT elements. The Sig. (Test of Homogeneity of Variances) is larger than 0.05 so the LSD method was applied. It is meaningful in these differences as their Sig. (ANOVA) is less than 0.05. In the ATT, the mean of males is much higher than females and others, valuing 3.70, 3.49, and 3.10 respectively. Similarly, in the INT, the mean of males is 3.74, which is noticeably higher compared to females (3.57) and others (2.98). By Age Group, the Sig. (Test of Homogeneity of Variances) is higher than 0.05 so the LSD method was used. It is meaningful as their Sig. (ANOVA) is lower than 0.05. It can be seen that the differences are quite noticeable with the highest values being contributed by people aged 23 and above, compared to two other age groups in both ATT and INT elements. The mean values for the age group of 18 – 20, 21 – 23, and over 23 are 3.52, 3.64, and 4.00 for ATT and 3.61, 3.66, 3.95 for INT.

By university year, In the ATT, because the Sig. (Test of Homogeneity of Variances) is lower than 0.05 so the Tamhane method was used while the LSD was used in the INT as Sig. (Test of Homogeneity of Variances) is greater than 0.05. The differences are all meaningful because of their Sig. (ANOVA) is lower than 0.05. The results showed that freshmen have the mean ATT much less than sophomores, juniors, seniors, and graduates, with mean values are 3.31, 3.73, 3.65, and 3.64 in turn. The differences in the mean INT are also significant, with only 3.43 for first-year students while other groups' means are 3.68, 3.78, 3.62, and 3.75 respectively. This is due to the fact that to some extent, freshmen normally lack experiences, specialized knowledge, social capital, and fear more about risk than remaining student groups.

Table 3: The Influence of Differences in Demographics on ATT and INT

	N	ATT, Mean	INT, Mean	Sig. Value
Gender				ATT: Sig.(Test of Homogeneity of Variances) = 0.113, Sig.(ANOVA) = 0.003; INT: Sig.(Test of Homogeneity of Variances) = 0.778; Sig.(ANOVA) = 0.005;
Male	266	3.70	3.74	
Female	234	3.49	3.57	
Other	7	3.10	2.98	
Age				ATT: Sig.(Test of Homogeneity of Variances) = 0.832, Sig.(ANOVA) = 0.000; INT: Sig.(Test of Homogeneity of Variances) = 0.284; Sig.(ANOVA) = 0.016;
18–20	328	3.52	3.61	
21–23	130	3.64	3.66	
Over 23	49	4.00	3.95	
University year				ATT: Sig.(Test of Homogeneity of Variances) = 0.012, Sig.(ANOVA) = 0.003; INT: Sig.(Test of Homogeneity of Variances) = 0.417; Sig.(ANOVA) = 0.028;
Freshman (First year)	92	3.31	3.43	
Sophomore (Second year)	174	3.65	3.68	
Junior (Third year)	74	3.73	3.78	
Senior (Fourth year)	80	3.65	3.62	
Graduated	87	3.64	3.75	
Have studied Entrepreneurship				ATT: Sig.(Independent sample T-test) = 0.097, Sig.(2-tailed) Equal variances assumed = 0.005; INT: Sig.(Independent sample T-test) = 0.454, Sig.(2-tailed) Equal variances assumed = 0.001;
No	355	3.53	3.57	
Yes	152	3.75	3.83	

Note: Significant at the 0.05 level.

Last but not least, there are differences between the group of students who have studied Entrepreneurship related subjects and the group of students who have not studied. The differences were meaningful as the Sig.(2-tailed) Equal variances assumed of both ATT and INT variables were less than 0.05. Those who have studied these subjects have the mean ATT and INT at 3.75 and 3.83, higher than those who have not ever studied at 3.53 and 3.57. It can be seen that Entrepreneurship related subjects have supported raising the student's Entrepreneurial Attitude and Entrepreneurial Intention. Therefore, universities should consider deploying these subjects in their training program and extracurricular program as well.

5. Discussion and Recommendations

Through the research result, it is evident that Entrepreneurial Intention is influenced by University's Environment, Risk-taking Propensity, and Internal Control through the mediating variable Entrepreneurial Attitude. Some research has shown that positive attitudes toward entrepreneurship have a direct impact on entrepreneurial intentions (Vuong et al., 2020; Mahfud et al., 2020). One of the most important factors fostering entrepreneurial attitudes is the entrepreneurial education that focuses on skills building, encourages creativity, risk-taking, and develops self-efficacy (Hörnqvist & Leffler, 2014). When it comes to implementing entrepreneurial education, Jones and Iredale (2010) emphasized the role of the lecturers. Entrepreneurial education requires both formal and informal approaches. Therefore, according to Hynes (1996), the instructor must strike a balance between the conceptual lessons and the practical applications for students to develop their understanding, be well-prepared, and give them more incentives to reach an entrepreneurial attitude. Teacher's empowerment is also necessary for students to build their confidence and hence, boost Internal Control. Once they are willing to take risks and believe that they have significant controls for what will likely happen, their entrepreneurial intentions will increase.

Powerful Others, on the other hand, negatively affect Entrepreneurial Intention. This could be explained by the fact that people who believe they are being predetermined by powerful people are less likely to take action, whereas extremely proactive individuals are more likely to make constructive efforts to attain their goals (Zampetakis & Moustakis, 2006; Zampetakis, 2008; Neneh, 2019; Bateman & Crant, 1993). Highly proactive people are typically able to make their own decisions and are prepared to take risks to capture significant rewards. This finding also suggests that to encourage entrepreneurship, students should be given more autonomy over their actions. Reducing the impact of Powerful Others also means increasing Entrepreneurial Intention.

According to the findings, enhancing Entrepreneurial Attitude is necessary to increase Entrepreneurial Intention. Therefore, some managerial implications to encourage the development of entrepreneurial intention in universities are given based on the research findings as follows. In terms of the University Environment, universities must develop lesson plans that provide practical, up-to-date knowledge and information, organize training courses, workshops, or talk shows with entrepreneurs, and international seminars to assist students in starting a business. Universities could also provide a supportive atmosphere for students who want to establish a business by providing start-up financing or linking venture capitalists with student start-up ideas and projects. Students will not only find themselves, realize their skills and shortcomings, but will also learn from the projects, igniting a desire to work in the corporate world. Universities must strengthen their curricula concentrating on boosting students' entrepreneurial activity, such as setting up official channels to give students appropriate guidance, to increase the entrepreneurial intention of students in Vietnam. Lectures on the risks and barriers that may be experienced during the process of launching a business are also beneficial to students' understanding and preparation as well as their confidence.

6. Conclusion

The study's findings, which were based on the SEM model's analytical results and contained 507 observational samples, revealed that the characteristics of University Environment, Risk-taking Propensity, and Internal Control all have an indirect impact on Entrepreneurial Intention via Entrepreneurial Attitude. Through Internal Control, the Powerful Others factor influences students' Entrepreneurial Attitude while negatively influencing their Entrepreneurial Intention. The findings of the study can aid colleges in Vietnam in identifying characteristics that stimulate learners to engage in entrepreneurial activities. Universities should pay special attention to entrepreneurial attitude, as it is the most essential factor determining entrepreneurial intent.

Universities should recognize their Internal Control and Risk-taking Propensity through entrepreneurship instruction, seminars, and extracurricular activities to boost students' entrepreneurial attitudes. The percentage of students with entrepreneurial intent was 84.2 percent among 507 responses. As a result, universities may be concluded to be a reliable supply of high-quality human resources, ensuring that graduates have strong entrepreneurial attitudes and intentions, as well as the knowledge and skills necessary to enable firms, particularly start-ups, to expand sustainably.

References

Ajzen, I., & Fishbein, M. (1980). *Understanding Attitudes and Predicting Social Behavior*. Englewood Cliffs, N.J: Prentice-Hall.

Akhter, A., Hossain, M. U., & Asheq, A. A. (2020). Influential Factors of Social Entrepreneurial Intention in Bangladesh. *Journal of Asian Finance Economics and Business, 7*(8), 645–651. https://doi.org/10.13106/jafeb.2020.vol7.no8.645

Autio, E., Keeley, R. H., Klofsten, M., Parker, G. G. C., & Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and the USA. *Enterprise and Innovation Management Studies, 2*(2), 145–160. https://doi.org/10.1080/14632440110094632

Bateman, T. S., & Crant, J. M. (1993). The proactive component of organizational behavior: a measure and correlates. *Journal of Organizational Behavior, 14*(2), 103–118. https://doi.org/10.1002/job.4030140202

Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *The Academy of Management Review, 13*(3), 442–453. https://doi.org/10.2307/258091

Bui, T. H. V., Nguyen, T. L. T., Tran, M. D., & Nguyen, T. A. T. (2020). Determinants influencing entrepreneurial intention among undergraduates in universities of Vietnam. *Journal of Asian Finance, Economics and Business, 7*(7), 369–378. https://doi.org/10.13106/jafeb.2020.vol7.no7.369

Byrne, B. M. (2010). *Structural equation modeling with Mplus: Basic concepts, applications, and programming*. London, UK: Taylor and Francis.

Carbonara, G., & Caiazza, R. (2010). How to turn crisis into opportunity: Perception and reaction to a high level of uncertainty in the banking industry. *Foresight, 12*(4), 37–46. https://doi.org/10.1108/14636681011062988

Clark, B. (1998). *Creating entrepreneurial universities: Organizational pathways of transformation*. New York, NJ: Pergamon Press.

Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management, 26*(3), 435–462. https://doi.org/10.1177/014920630002600304

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297–334. https://doi.org/10.1007/BF02310555

European Commission (EC). (2012). *A guiding framework for entrepreneurial university*. https://www.oecd.org/site/cfecpr/EC-OECD Entrepreneurial Universities Framework.pdf

Etzkowitz, H. (2001). The second academic revolution and the rise of entrepreneurial science. *IEEE Technology and Society Magazine, 20*(2), 18–29. https://doi.org/10.1109/44.948843

Etzkowitz, H. (2003). Research groups as 'quasi-firms': The invention of the entrepreneurial university. *Research Policy, 32*(1), 109–121. https://doi.org/10.1016/s0048-7333(02)00009-4

Etzkowitz, H., & Leydesdorff, L. (2000). The dynamics of innovation: From national systems and "mode 2" to a triple helix of university-industry-government relations. *Research Policy, 29*(2), 109–123. https://doi.org/10.1016/s0048-7333(99)00055-4

Etzkowitz, H., Webster, A., Gebhardt, C., & Terra, B. R. (2000). The future of the university and the university of the future: Evolution of ivory tower to entrepreneurial paradigm. *Research Policy, 29*(2), 313–330. https://doi.org/10.1016/s0048-7333(99)00069-4

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research*. Reading, Mass: Addison-Wesley Pub. Co.

Fitzsimmons, J. R., & Douglas, E. J. (2011). Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing, 26*(4), 431–440. https://doi.org/10.1016/j.jbusvent.2010.01.001

Franke, N., & Lüthje, C. (2004). Entrepreneurial intentions of business students: A benchmarking study. *International Journal of Innovation and Technology Management, 1*(3), 269–288. https://doi.org/10.1142/s0219877004000209

Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal of Business Venturing, 5*(1), 15–28. https://doi.org/10.1016/0883-9026(90)90023-M

Gartner, W. B., Bird, B.J., & Starr, J. (1992). Acting as if: Differentiating entrepreneurial from organizational behavior. *Entrepreneurship Theory and Practice, 16*(3), 13–32. https://doi.org/10.1177/104225879201600302

Guerrero, M., & Urbano, D. (2012). The development of an entrepreneurial university. *The Journal of Technology Transfer, 37*(1), 43–74. https://doi.org/10.1007/s10961-010-9171-x

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice-Hall.

Heinonen, J., & Poikkijoki, S. (2006). An entrepreneurial-directed approach to entrepreneurship education: mission impossible? *Journal of Management Development, 25*(1), 80–94. https://doi.org/10.1108/02621710610637981

Hmieleski, K. M., & Corbett, A. C. (2006). Proclivity for improvisation as a predictor of entrepreneurial intentions. *Journal of Small Business Management, 44*(1), 45–63. https://doi.org/10.1111/j.1540-627X.2006.00153.x

Hörnqvist, M. L., & Leffler, E. (2014). Fostering an entrepreneurial attitude: Challenging in principal leadership. *Education and Training, 56*(6), 551–561. https://doi.org/10.1108/ET-05-2013-0064

Hynes, B. (1996). Entrepreneurship education and training: Introducing entrepreneurship into non-business disciplines. *Journal of European Industrial Training, 20*(8), 10–17. https://doi.org/10.1108/03090599610128836

Johnson, D., Craig, J. B., & Hildebrand, R. (2006). Entrepreneurship education: Towards a discipline-based framework.

Journal of Management Development, 25(1), 40–54. https://doi.org/10.1108/02621710610637954

Jones, B., & Iredale, N. (2010). Enterprise Education as Pedagogy. *Education and Training, 52*(1), 7–19. https://doi.org/10.1108/00400911011017654

Krueger, N. F., & Carsrud, A. L. (1993). Entrepreneurial intentions: Applying the theory of planned behavior. *Entrepreneurship & Regional Development, 5*(4), 315–330. https://doi.org/10.1080/08985629300000020

Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing, 15*(5), 411–432. https://doi.org/10.1016/S0883-9026(98)00033-0

Kushwaha, G., & Kumar Sharma, N. (2017). Factors influencing young entrepreneurial aspirants' insight towards sustainable entrepreneurship. *Iranian Journal of Management Studies, 10*(2), 435–466. https://doi.org/10.22059/ijms.2017.224885.672467

Lacap, J. P. G., Mulyaningsih, H. D., & Ramadani, V. (2018). The mediating effects of social entrepreneurial antecedents on the relationship between prior experience and social entrepreneurial intent: The case of Filipino and Indonesian university students. *Journal of Science and Technology Policy Management, 9*(3), 329–346. https://doi.org/10.1108/jstpm-03-2018-0028

Lee, L., Wong, P., Foo, M., & Leung, A. (2011). Entrepreneurial intentions: The influence of organizational and individual factors. *Journal of Business Venturing, 26*(1), 124–136. http://doi.org/10.1016/j.jbusvent.2009.04.003

Levenson, H. (1974). Activism and powerful others: Distinctions within the concept of internal-external control. *Journal of Personality Assessment, 38*(4), 377–383. https://doi.org/10.1080/00223891.1974.10119988

Liñán, F., & Chen, Y. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice, 33*(3), 593–617. https://doi.org/10.1111/j.1540-6520.2009.00318.x

Lumpkin, J. R. (1988). Establishing the validity of an abbreviated locus of control scale: Is a brief Levenson's scale any better? *Psychological Reports, 63*(2), 519–523. https://doi.org/10.2466/pr0.1988.63.2.519

Lüthje, C., & Franke, N. (2003). The 'making' of an entrepreneur: Testing a model of entrepreneurial intent among engineering students at MIT. *R&D Management, 33*(2), 135–147. https://doi.org/10.1111/1467-9310.00288

Mahfud, T., Triyono, M. B., Sudira, P., & Mulyani, Y. (2020). The influence of social capital and entrepreneurial attitude orientation on entrepreneurial intentions: The mediating role of psychological capital. *European Research on Management and Business Economics, 26*(1), 33–39. https://doi.org/10.1016/j.iedeen.2019.12.005

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. *Journal of Environmental Psychology, 14*(4), 2–10. https://doi.org/10.1016/s0272-4944(05)80231-2

Neneh, B. N. (2019). From entrepreneurial alertness to entrepreneurial behavior: the role of trait competitiveness and proactive personality. *Personality and Individual Differences, 138*, 273–279. https://doi.org/10.1016/j.paid.2018.10.020

Nunnally, J. C., & Bernstein, I. H. (1994). The assessment of reliability. *Psychometric Theory, 3*, 248–292. https://doi.org/10.77143/psyth.1994.3.248292

Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice, 28*(2), 129–144. https://doi.org/10.1046%2Fj.1540-6520.2003.00035.x

Robinson, P. B., Huefner, J. C., & Hunt, H. K. (1991). Entrepreneurial research on student subjects does not generalize to real-world entrepreneurs. *Journal of Small Business Management, 29*(2), 42. https://doi.org/10.1213/jsbm.1991.29242

Rodrigues, C. A. (2004). The Importance Level of Ten Teaching/Learning Techniques as Rated by University Business Students and Instructors. *Journal of Management Development, 23*(2), 169–182. https://doi.org/10.1108/02621710410517256

Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: A meta-analytic test and integration of competing models. *Entrepreneurship Theory and Practice, 38*(2), 291–332. https://doi.org/10.1111/etap.12087

Schwarz, E. J., Wdowiak, M. A., Almer-Jarz, D. A., & Breitenecker, R. J. (2009). The effects of attitudes and perceived environment conditions on students' entrepreneurial intent. *Education and Training, 51*(4), 272–291. https://doi.org/10.1108/00400910910964566

Shahneaz, M. A., Amin, M. B., & Eni, L. N. (2020). The interplay between the psychological factors and entrepreneurial intention: An empirical investigation. *Journal of Asian Finance, Economics and Business, 7*(12), 139–146. https://doi.org/10.13106/jafeb.2020.vol7.no12.139

Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science, 11*(4), 448–469. https://doi.org/10.1287/orsc.11.4.448.14602

Shane, S., Locke, E. A., & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review, 13*(2), 257–279. https://doi.org/10.1016/S1053-4822(03)00017-2

Soria-Barreto, K., Honores-Marin, G., Gutiérrez-Zepeda, P., & Gutiérrez-Rodríguez, J. (2017). Prior exposure and educational environment towards entrepreneurial intention. *Journal of Technology Management & Innovation, 12*(2), 45–58. https://doi.org/10.4067/s0718-27242017000200006

Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programs raise the entrepreneurial intention of science and engineering students? The effect of learning, inspiration, and resources. *Journal of Business Venturing, 22*(4), 566–591. https://doi.org/10.1016/j.jbusvent.2006.05.002

Taherdoost, H. (2018). Validity and reliability of the research instrument: How to test the validation of a questionnaire/survey

in research. *SSRN Electronic Journal, 1*(1), 56–70. https://doi.org/10.2139/ssrn.3205040

Thompson, E. R. (2009). Individual entrepreneurial intent: construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice, 33*(3), 669–694. https://doi.org/10.1111/j.1540-6520.2009.00321.x

Turker, D., & Sonmez Selcuk, S. (2009). Which factors affect the entrepreneurial intention of university students? *Journal of European Industrial Training, 33*(2), 142–159. https://doi.org/10.1108/03090590910939049

Vesper, K. H., & Gartner, W. B. (1997). Measuring progress in entrepreneurship education. *Journal of Business Venturing, 12*(5), 403–421. https://doi.org/10.1016/s0883-9026(97)00009-8

Vuong, B. N., Phuong, N. N. D., Huan, D. D., & Quan, T. N. (2020). A model of factors affecting entrepreneurial intention among information technology students in Vietnam. *The Journal of Asian Finance, Economics and Business, 7*(8), 461–472. https://doi.org/10.13106/jafeb.2020.vol7.no8.461

Zainudin, A., Asyraf, A., & Mustafa, M. (2016). The Likert scale analysis uses parametric-based structural equation modeling (SEM). *Computational Methods in Social Sciences, 4*(1), 56–73. https://doi.org/10.5281/zenodo.1299429

Zampetakis, L. A. (2008). The role of creativity and proactivity on perceived entrepreneurial desirability. *Thinking Skills and Creativity, 3*(2), 154–162. https://doi.org/10.1016/j.tsc.2008.07.002

Zampetakis, L. A., & Moustakis, V. (2006). Linking creativity with entrepreneurial intentions: A structural approach. *The International Entrepreneurship and Management Journal, 2*(3), 413–428. https://doi.org/10.1007/s11365-006-0006-z