The Determinants of Entrepreneurial Cognitions: Start-Up Intentions of Business Students in Vietnam

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Research

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Abstract

There have been thousands of literature reviews and research papers all over the world employing entrepreneurial intention as their powerful theoretical framework. Nevertheless, they mostly focused on personal traits and characteristics and ignored entrepreneurial education, especially in the Vietnam context. To fulfill this gap, this study was conducted with the ultimate aim is to detect and evaluate the impact of perceived education support undergraduates received in universities, self-efficacy, and the Theory of Planned Model on entrepreneurial intention among business students. In the study, a conceptual model was proposed and tested on a sample of 312 undergraduates in some universities in Vietnam. The SmartPLS version 3.0 was employed to analyze the statistical data collected in electronic and paper forms. The statistical data was used to assess the measurement model and the structural model. The finding indicated that perceived education support and two elements of theory planned behavior, specifically, attitude towards entrepreneurship and perceived behavioral control positively and significantly affect entrepreneurial intention. Besides, self-efficacy strengthens the positive relationship between attitude towards entrepreneurship and entrepreneurial intention. Based on the findings, the paper suggests practical implications in terms of increasing the intention of entrepreneurship among undergraduates.

1. Introduction

There has been a positively tight connection between entrepreneurial activities and economic development. In the first half of the twentieth century, Schumpeter highlighted the crucial value of entrepreneurship to economic growth (Frank, 1998). Over a century later, Acs and Szerb (2009) confirmed its significant influence in specific figures through researches in many countries. In other words, entrepreneurship has considerably contributed to the economic expansion of the nation.

Realizing the significance of entrepreneurship to national economies, the Vietnamese government has promulgated an investment policy regarding Foreign direct investment (FDI) to push up the entrepreneurial motivation. Consequently, Ho Chi Minh City (HCMC) has currently been valued as one of the most significant economic development regions in Vietnam with many attractive projects valued ton of dollars. According to General Statistics Office, HCMC appealed the highest portion of FDI nearly two decades, from 1988 to 2006, which created a multi-cultural dynamic environment for young entrepreneurs to authenticate their talent and fulfill their dream (UNCTAD, 2008). In addition, the young seemed to have the intention to be self-employed entrepreneurs. Specifically, the young generation with the age range of 18 to 34 is more likely to become an entrepreneur than older people from 35 to 64 (Gielnik et al., 2018). Their purpose is to gain financial independence as well as accelerate national economic development. The typical study of Sinha (1996) dedicated to the source of mankind's knowledge that entrepreneurs succeed at a relatively young age.

According to the World Bank statistics, Vietnam ranked 99 among 190 nations regarding the Ease in terms of doing business in 2013 and dramatically climbed up to 69 in 2018 (WorldBank, 2018). The
regulation toward business operation and property rights protection in Vietnam was progressively friendlier for starters to establish enterprises. Even though the environment of Vietnam was not ideal comparing to other economies, Vietnam was still considered a potential market in the eye of the investors. However, the unemployment rate of youth in Vietnam is relatively high despite the considerably potential environment for investment. Fish (2017) insisted that this phenomenon is momentous to the Vietnamese labor market. Even though the Vietnamese unemployment index is not high, the rate of the youth unemployed aging from 15 to 24 years old accounts for approximately two thirds. Moreover, the youth unemployment ratio has a tendency to increase from 7.07% in January to 7.29% in September 2018.

Some researchers (e.g., Vuong & Suntrayuth, 2020) found that “lack of skills”, “job selectivity” and “overcapacity of labor but lack of works” mainly cause youth unemployment. When the supply of labor in the market is surplus, the unemployment ratio tends to increase. In this case, self-employment is one of the best solutions for the youth rather than searching for paid jobs. Therefore, it is crucial to have an investigation in entrepreneurship among the youth in order to motivate as well as facilitate for them to become entrepreneurs. Mohamad et al. (2015) figured out that entrepreneur education is a significant factor that affects the intention to establish an enterprise. Thus, this paper will focus on the group of university students aging 18 to 24-year old.

People are not interested in engaging in entrepreneurial initiatives when they have limited education. It indicates that the entrepreneurial intention of an individual may be fostered by having adequate education support. Many prior studies show the relationship between education support and entrepreneurship (e.g., Shahab et al., 2019). Many universities in Vietnam have focused on the business segment providing students with the fundamental and necessary knowledge of entrepreneurship. Questions of how effectively these courses shape the intention to start-up among university students, however, remain unresolved due to the fact that not many studies investigate the effect of education support on the tendency to create venture in Vietnam. Individual traits and external environment are the central content in researches in Vietnam.

In summary, entrepreneurship performs a crucial role in contributing to the development of the national economy. With a big jump in the Ease-of-doing-business ranking, Vietnam is considered a potential market in the eye of the investors. Additionally, thanks to the huge Foreign Direct Investment, Vietnam has undergone a radical transformation to become the most potential market in attracting FDI, which has created a multicultural dynamic environment for young entrepreneurs to demonstrate their talents. However, the unemployment rate of the young generation aging from 15 to 24 is relatively high according to statistic sources. Education may considerably contribute to entrepreneurial intention but not be concentrated by previous scholars. Therefore, it is extremely urgent to study factors affecting the intention to be entrepreneurs of the undergraduates in Vietnam.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT
2.1. Theory of Planned Behavior

According to Bird (1988), entrepreneurship required a careful plan to form a new venture. Also, entrepreneurship has been an intentional and planned behavior. The behavior in the future can be directly predicted by behavioral intention (Ajzen, 1991). To Kautonen et al. (2015), the remarkable impact of EI on the behavior of setting up an enterprise is verified. A number of existing models basing on intention have been advanced to comprehend and forecast the behavior of individuals, depending on the Theory of Planned Behavior (TPB) and Krueger– Shapero model (Schlaegel & Koenig, 2014). Basically, TPB is developed from the Theory of Reasoned Action to deal with volitional control (Ajzen, 1991).

Among countless created research frameworks, TPB has been extensively used to forecast intention in different research contexts. In fact, TPB has dominated numerous empirically study papers regarding the intention to start-up so far (Munir et al., 2019). Its validity and applicability have been reasserted in diverse cultural contexts (Miranda et al., 2017). However, the strength of individual tendency to form a venture leans on the national economic status. The stronger predictive power towards entrepreneurial intention in an emerging economy has been illustrated by the TPB model. Specifically, Munir et al. (2019) demonstrated the differences in the impact of the TPB on intention towards entrepreneurship between final year students. The individual effort to create entrepreneurship has been shaped by specific antecedents, including attitude toward entrepreneurship, subjective norm, and perceived behavioral control.

2.2. Entrepreneurial Intention

Entrepreneurial intention reflects a state of mind that individuals prefer self-employment to being employed. According to Thompson (2009), entrepreneurial intention refers to a personal belief that individuals intended to have a new enterprise established with a specific plan in the future. That point may be forthcoming, unpredictable, or even not happen since the intention may change over time. Still, the intention is a prominent forecaster of planned behavior (Bagozzi et al., 1989). Although not all the intentions are executed, actions are controlled by intentions (Ajzen, 1991). The entrepreneurial intention has been the appealing framework and considerably huge phenomenon that has been extensively researched with a huge number of supportive studies of scholars and researchers in the world (e.g., Leutner et al., 2014; Şahin et al., 2019).

2.3. Attitude toward Entrepreneurship

A person can have a positive or negative attitude towards a particular behavior. This attitude is defined as an awareness of individuals about behavioral beliefs and outcome evaluations (Ajzen, 1991). In other words, the behavioral intentions of individuals depend on their attitude toward that behavior. When an individual perceives an increasing appeal to establish an enterprise, the intention towards entrepreneurship increases (Krueger et al., 2000). The higher the attitude towards the planned behavior of an individual, the more possibility that an individual develops an intention and engages in the action. Several prior research papers (e.g., Miranda et al., 2017) have revealed that attitude toward
entrepreneurship (ATE) has played the most principal role in impacting individuals to start an enterprise. In other words, the attitude of an individual toward self-employment is considered a very important antecedent to create and develop the tendency to establish an enterprise. Furthermore, some scholars (e.g., Farooq Muhammad et al., 2018; Shah & Soomro Bahadur, 2017) also confirmed that ATE is positively and greatly correlated with entrepreneurial intention (EI) of students of universities. Thus, the study proposes hypothesis $H_1$ as following.

$H_1$: Attitude toward entrepreneurship is positively and significantly correlated with entrepreneurial intention.

### 2.4. Subjective Norm

It is known that subjective norm is one of the important determinants of the Theory of Planned Behavior. According to Ajzen (1991), subjective norm reflects an individual normative belief regarding an intention or behavior. In other words, it can be defined as a social influence of others, namely, family members, relatives, friends, and other important people on an individual perception towards planned behavior. Subjective norm essentially contributes to the development of individual intention to become an entrepreneur. The social effect of family members, relatives, friends, and other important people on a perception of individual towards planned behavior is great to individuals in different levels of education. The importance of SN to ATE and EI was also found in the previous studies (e.g., Farooq Muhammad et al., 2018; Kim et al., 2013). On the contrary, other study results showed that SN has no impact on EI (Trivedi, 2016). This is likely because the research contexts are different, leading to the fact that the results are inconsistent with one another. Thus, the paper is to evaluate the influence of SN on attitude and intention of the start-up of undergraduates in Vietnam. The hypotheses are suggested as following.

$H_2$: Subjective norm is positively and significantly correlated with attitude toward entrepreneurship.

$H_3$: Subjective norm is positively and significantly correlated with entrepreneurial intention

### 2.5. Perceived Behavioral Control

One of the crucial determinants of the Theory of Planned Behavior is perceived behavioral control. Perceived behavioral control (PBC) implies individuals’ perception of their competencies to execute the planned behaviors and the control’s degree over the performance of that behavior (Ajzen, 1991). In other words, this element relates to the perception of whether the planned behavior is feasible with the involvement of internal and external constraints. Perceived behavioral control represents the likelihood of an individual mindset of successfully establishing and operating a business. With a greater perception of PBC, individuals will have a greater intention to implement the planned behavior (Krueger et al., 2000). Besides, PBC was found to have a positive relationship with the attitude and intention to start a venture (Farooq Muhammad et al., 2018; Miranda et al., 2017; Trivedi, 2016). Therefore, hypotheses are proposed below.
$H_4$: Perceived behavioral control is positively and significantly correlated with attitude toward entrepreneurship.

$H_5$: Perceived behavioral control is positively and significantly correlated with entrepreneurial intention.

### 2.6. Perceived Education Support

Many scholars have investigated the effect of perceived education towards entrepreneurship on the tendency of choosing an entrepreneur as a professional. According to Trivedi (2016), education support at university is a crucial element that affected the entrepreneurial intention of students. Moreover, entrepreneurship education provided at institutions, schools, universities, or through postgraduate training programs was considered a vital education (Hattab, 2014). However, Gibb (1993) stated that programs at academic institutions were too theoretical and little inspiration towards entrepreneurship. Offering entrepreneurship courses at both graduate and undergraduate levels has been a manner to overcome this insufficiency. Despite the fact that education support has crucially led to start-up intention, few studies focused on the factor at the undergraduate level, especially in Vietnam. To fulfill the gap, this paper aim is evaluating the influence of perceived education support on the entrepreneurial intention of Ho Chi Minh university students. Moreover, Gelard and Saleh (2011) realized that the educational program plays a significantly role in attitude and intention to start a venture. Thus, the hypothesis is proposed as below.

$H_6$: Perceived Education Support is positively and significantly correlated with entrepreneurial Intention

The attitude of an individual is based on their perception which can be formed by education (Giao & Vuong, 2020; Krueger et al., 2000). Athayde (2009) figured out the fact that the entrepreneurial program provided for young age students has a positive impact on their attitude towards self-employment. Some studies had the same result that the attitude of the individual is significantly and positively affected by perceived education. However, the result may change due to the research contexts. Heuer and Kolvereid (2014), to be specific, proved that entrepreneurial education makes no significant contribution in explaining ATE. Indeed, the effect of PES on ATE varies among previous studies. In this case, this paper will assert the impact of PES antecedent on venture creation of undergraduate students in Vietnam with the proposed hypothesis below:

$H_7$: Perceived education support is positively and significantly correlated with attitude toward entrepreneurship.

### 2.7. Entrepreneurial Self-Efficacy

Self-efficacy specifies the beliefs of individuals about their abilities to execute the planned behavior which can be created and altered by the four primary sources, including vicarious experiences, social persuasions, mastery experiences, and physiological and affective states (Bandura, 1997; Ji-Eun, 2019). High self-efficacy people perceive difficult tasks as a challenge to conquer and maintain strong engagement with their set challenging goals. Self-efficacy has an impact on human behavior and selection. Self-efficacy is one of the determinants that attracts many scholars to investigate.
Consequently, existing research papers have implied that self-efficacy (SE) has a great influence on the decision to pursue entrepreneurship. Shahab et al. (2019) asserted that an increase in self-efficacy will yield greater intentions to be entrepreneurs of students in diverse contexts. The authors state self-efficacy is likely to buffer the relationship between ATE and EI. Thus, the hypothesis is suggested as follows.

\[ H_4: \text{Self-efficacy moderates the relationship between attitude toward entrepreneurship and entrepreneurial intention. This positive relationship will be stronger for students who have high self-efficacy.} \]

3. Research Method

3.1. Procedure and Sampling Size

The paper emphasizes the intention to engage in entrepreneurship of undergraduates in Vietnam, therefore, the analysis is based on a sampling of business students in Vietnam. The measuring scale was integrated from diverse papers (e.g., De Noble & Jung, 1999; Liñán & Chen, 2009; Shah & Soomro Bahadur, 2017; Turker & Sonmez Selcuk, 2009) and initially in English. In order to accurately collect the real perception of participants and avoid making them confused, the questionnaire was translated to Vietnamese with simple and clear words by author and piloted the back-translation with the support of several English language experts.

Pilot testing refers to a preliminary study to identify flaws in design and instrument as well as estimate the feasibility of the constructs. To ensure the clarity and reliability of questions, 40 people were randomly approached to fill in the questionnaire and make some comments about its quality and design. The questionnaires were distributed in Google form to students in different universities. Even though the sample size of the pilot test is comparatively small, it brings an overview of the questionnaire’s design and checks the level of understanding of participants. Some respondents left the comments at the end of the survey advising changing the structure of the used form since they had difficulty in answering questions by mobile phones. Through the pilot test, some modifications were made so as to amend the misunderstanding points and structure in the questionnaire.

After finishing the main questionnaires, data was collected by distributing questionnaires, delivered to undergraduates in electronic and paper forms. For electronic form, questionnaires in Google docs form were posted on universities’ pages that participants could easily access to. Questionnaires were directly delivered to students at selected universities and collected after fulfilling for further analysis. There are 333 questionnaires directly distributed at specific universities through online forms and papers. Among them, 170 responses from some universities were acceptably collected in Google forms in which 169 answers were valid. 163 paper questionnaires were distributed. However, 144 out of 163 papers were returned and 143 were valid. This means 2 unreliable answers, involving responses that participants had misunderstood the questions and left the required answered questions blank, were excluded. To sum up, the total distributed questionnaires is 333 while 314 papers were returned. 312 of out 314 returned papers
are valid. As a result, the response rate of the survey is 94.29%, which is relatively high. Table 1 demonstrates the demographic details of participants as shown below.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Demographic characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 312</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>n</td>
</tr>
<tr>
<td>Female</td>
<td>211</td>
</tr>
<tr>
<td>Male</td>
<td>101</td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Major</td>
<td>n</td>
</tr>
<tr>
<td>Business Administration</td>
<td>111</td>
</tr>
<tr>
<td>International Business</td>
<td>67</td>
</tr>
<tr>
<td>Finance Banking</td>
<td>47</td>
</tr>
<tr>
<td>Accounting Finance</td>
<td>43</td>
</tr>
<tr>
<td>Marketing</td>
<td>38</td>
</tr>
<tr>
<td>Hospitality Administration</td>
<td>6</td>
</tr>
</tbody>
</table>

### 3.2. Measurement

All variables in the conceptual model were measured with multiple items, which were developed by prior scholars (e.g., De Noble & Jung, 1999; Liñán & Chen, 2009; Shah & Soomro Bahadur, 2017; Turker & Sonmez Selcuk, 2009). Furthermore, the questionnaires comprise 2 distinct sections. The first one obtains demographic information of participants, including gender, age, major and current university. The second section concentrates on 28 items of 6 antecedents. Particularly, an entrepreneurial intention scale was measured by 5 items of Liñán and Chen (2009). A sample item included "I will try my best to found and run my business". Attitude toward entrepreneurship was measured by 5 items of Shah and Soomro Bahadur (2017). A sample item for this construct was “To me, entrepreneurship is very appealing”. Subjective norm scale was measured by 4 items from Shah and Soomro Bahadur (2017). A sample item for this construct was “I am concerned about important people thinking when deciding to pursue entrepreneurship”. The perceived behavioral control scale was measured by 5 items from Ajzen (1991). A sample item for this construct was “I have completely controlled over the situation as an entrepreneur”. Perceived educational support scale was measured by 3 items of Turker and Sonmez Selcuk (2009). A sample item for this construct was “My university equips me with the necessary entrepreneurial knowledge”. Self-efficacy scale was measured by 6 items of De Noble and Jung (1999). A sample item for this construct was “I can develop and maintain favorable relationships with potential investors”. This research adopts a 5-point Likert scale from 1 = Totally Disagree to 5 = Totally Agree to assess items of the constructs.

### 3.3. Data Analysis Method
Giao, Vuong, Huan, et al. (2020) stated that structural equation modeling (SEM) is considered the most preferred method in business management studies. Furthermore, Vuong and Giao (2020) confirmed that Partial Least Squares approaching to Structural Equation Modeling (PLS-SEM) has been a prevailing approach in recent years. This method has been widely applied to confirm and test the theory as well as to detect the complicated correlation. In other words, researchers not only evaluate the existing pathways among variables in the conceptual framework but also develop the theories in exploratory papers which maximize the predictability. The theoretical model of this paper was measured by employing PLS-SEM with Smart PLS version 3.0. It consists of 2 steps to approximate the conceptual framework which is assessing the measurement model and evaluating the structural model. The first step of PLS-SEM is to yield the initial estimates of the composites to measure the construct's reliability and validity. In the next step, it is all about the evaluation of the structural model.

4. Findings And Results

4.1. Assessment of measurement model

To assess the measurement model, reliability, convergent validity, and discriminant validity should be explored (Vuong & Suntrayuth, 2020). Firstly, every single loading of indicators in the research was inspected whether the constructs satisfy the criteria requirements of 0.7 (Vuong & Giao, 2020). Eight items were eliminated from the scale, specifically, three items from factor PBC (PBC1, PBC2, PBC3) and SE (SE1, SE2, SE4), one item from factor PES (PES1) and SN (SN1) are removed. After revising, the outer loadings of the factors fall in the range of 0.736 to 0.937 (Fig. 2). Besides, the convergent validity of the measurement tool could be estimated by Average Variance Extracted (AVE). According to Vuong and Giao (2020), the value of AVE should be greater than 0.5. The AVE values of the constructs are all above the threshold value, ranging from 0.668 to 0.781 (Table 2). Thus, all variables indicated good convergent validity.

Discriminant validity is verified by the Fornell-Larcker criterion. The square roots of AVE values measured on the constructs surpass the correlations shared between the constructs and others (Vuong & Giao, 2020). In other words, constructs are independent, presented in Table 2. In principle, this means that the model has discriminant validity since it fits the criteria.
Table 2
Reliability, validity results of constructs

<table>
<thead>
<tr>
<th></th>
<th>CA</th>
<th>CR</th>
<th>AVE</th>
<th>ATE</th>
<th>EI</th>
<th>PBC</th>
<th>PES</th>
<th>SE</th>
<th>SN</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATE</td>
<td>0.878</td>
<td>0.911</td>
<td>0.674</td>
<td>(0.821)</td>
<td>0.787</td>
<td>0.501</td>
<td>0.455</td>
<td>0.590</td>
<td>0.499</td>
</tr>
<tr>
<td>EI</td>
<td>0.913</td>
<td>0.936</td>
<td>0.745</td>
<td>(0.863)</td>
<td>0.596</td>
<td>0.494</td>
<td>0.535</td>
<td>0.534</td>
<td></td>
</tr>
<tr>
<td>PBC</td>
<td>0.723</td>
<td>0.877</td>
<td>0.781</td>
<td>(0.884)</td>
<td>0.313</td>
<td>0.531</td>
<td>0.600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PES</td>
<td>0.703</td>
<td>0.863</td>
<td>0.760</td>
<td>(0.872)</td>
<td>0.408</td>
<td>0.430</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SE</td>
<td>0.754</td>
<td>0.859</td>
<td>0.670</td>
<td>(0.818)</td>
<td>0.496</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SN</td>
<td>0.750</td>
<td>0.858</td>
<td>0.668</td>
<td>(0.817)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note:
CA = Cronbach’s Alpha; CR = Composite Reliability; AVE = Average Variance Extracted; ATE = Attitude towards Entrepreneurship; EI = Entrepreneurial Intention; PBC = Perceived Behavioral Control; PES = Perceived Behavioral Control; SE = Self-Efficacy; SN = Subjective Norm; Square roots of AVE of latent constructs were shown in the parentheses

In terms of assessing reliability, Giao, Vuong, and Tung (2020) suggested that both composite reliability (CR) and Cronbach’s Alpha should be applied to guarantee the data reliability in the study. Findings revealed that all constructs of the model have CR and Cronbach’s Alpha values exceeding the requirement of 0.7, proving the reliability of constructs (Table 2).

4.2. Assessment of structural model

Collinearity should be evaluated before testing the relationships between constructs since the path coefficient is evaluated basing on the regression of dependent variables and their predictors (Vuong & Giao, 2020). Specifically, if the levels of collinearity significantly rise among the predictors, the measurement of path coefficients would be biased. To assess the collinearity, the variance inflation factor (VIF) was employed. Vuong and Giao (2020) recommended that VIF should be less than 5. In this research, all the VIF values of the latent variables in Table 3 are less than 2.0, indicating that there is no multicollinearity problem existing among the independent variables.
Parametric significance tests have great power when used data set is a normal distribution. However, it is uncertain that the data set using in PLS-SEM in the research is a normal distribution. Therefore, the coefficient significance is tested by PLS-SEM relying on nonparametric bootstrapping (Vuong & Giao, 2020). After running the bootstrapping procedure, t-values were evaluated to examine the statistical significance of the coefficient. A complete illustration of results derived from the structural model is demonstrated in Table 4.

Table 3
Collinearity Statistics

<table>
<thead>
<tr>
<th></th>
<th>Attitude towards Entrepreneurship</th>
<th>Entrepreneurial Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude towards Entrepreneurship</td>
<td>1.809</td>
<td>1.809</td>
</tr>
<tr>
<td>Perceived Behavioral Control</td>
<td>1.573</td>
<td>1.810</td>
</tr>
<tr>
<td>Perceived Education Support</td>
<td>1.233</td>
<td>1.368</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>1.743</td>
<td></td>
</tr>
<tr>
<td>Subjective Norm</td>
<td>1.739</td>
<td>1.839</td>
</tr>
</tbody>
</table>

Table 4
Hypothesis testing

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationships</th>
<th>Path Coefficients</th>
<th>Standard Deviation</th>
<th>T-Statistics</th>
<th>P-Values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>ATE → EI</td>
<td>0.601</td>
<td>0.047</td>
<td>12.666</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>SN → EI</td>
<td>0.045</td>
<td>0.044</td>
<td>1.024</td>
<td>0.306</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H3</td>
<td>SN → ATE</td>
<td>0.206</td>
<td>0.057</td>
<td>3.630</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>PBC → EI</td>
<td>0.238</td>
<td>0.051</td>
<td>4.647</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>PBC → ATE</td>
<td>0.291</td>
<td>0.058</td>
<td>5.026</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>PES → EI</td>
<td>0.136</td>
<td>0.053</td>
<td>2.588</td>
<td>0.010</td>
<td>Supported</td>
</tr>
<tr>
<td>H7</td>
<td>PES → ATE</td>
<td>0.276</td>
<td>0.056</td>
<td>4.907</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Moderating Effect</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H8</td>
<td>SE → EI</td>
<td>0.019</td>
<td>0.050</td>
<td>0.381</td>
<td>0.703</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE*ATE</td>
<td>0.115</td>
<td>0.024</td>
<td>4.792</td>
<td>0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note:
ATE = Attitude towards Entrepreneurship; EI = Entrepreneurial Intention; PBC = Perceived Behavioral Control; PES = Perceived Behavioral Control; SE = Self-Efficacy; SN = Subjective Norm.
Table 4 summarized the path coefficients and hypotheses testing of the study. Among eight proposed hypotheses, seven of them were completely supported while the rest was rejected. The finding showed that the two antecedents of the Theory of Planned Behavior, namely, attitude towards entrepreneurship ($\beta = 0.601$, $p$-value = 0.000) and perceived behavioral control ($\beta = 0.238$, $p$-value = 0.000) were verified to have positive and great impacts on the entrepreneurial intention. Besides, perceived behavioral control impacted positively on attitude towards entrepreneurship ($\beta = 0.291$, $p$-value = 0.000). On the other hand, subjective norm ($\beta = 0.045$, $p = 0.306$) did not directly impact on the entrepreneurial intention. It had positive and great impacts on the attitude towards entrepreneurship ($\beta = 0.206$, $p$-value = 0.000). So, attitude towards entrepreneurship mediated fully the relationship between subjective norm and entrepreneurial intention. As a result, $H_1$, $H_3$, $H_4$, $H_5$ were supported while $H_2$ was not supported.

Moreover, perceived education support positively affected entrepreneurial intention with $\beta = 0.136$, $p$-value = 0.010, and attitude towards entrepreneurship with $\beta = 0.276$, $p$-value = 0.000 in a significant and positive manner. The result also indicated that self-efficacy ($\beta = 0.115$, $p$-value = 0.000) moderated the influence of attitude towards entrepreneurship on entrepreneurial intention. This positive relationship will be stronger for students who have high self-efficacy (Fig. 3). Consequently, $H_6$, $H_7$, and $H_8$ were supported.

### 4.3. Model Fit

Another criterion to be calculated in the structural model is the coefficient of determination. It is applied to express the extent the dependent variable explained by its predictors. The measurement is based on $R$ square values which range from 0 to 1. Vuong et al. (2020) suggested that the $R$ square value of 0.02, 0.13, and 0.26 are proposed to be weak, moderate, and large. From the data showing in Fig. 2, it is clearly seen that the $R$ square value of ATE is 0.374, indicating the very large predictive accuracy. It implies that the predictor SN, PBC, PES accounted for 37.4% of the variance in ATE. Furthermore, the $R$ square value of EI is 0.691, indicating the large predictive accuracy. It refers to 69.1% of the variance in EI that is explained by 3 predictors, including ATE, PBC, and PES. Because $R^2$ values for attitude towards entrepreneurship and entrepreneurial intention were greater than 0.26, the model of this research demonstrated the model-data fit.

### 5. Conclusion And Implications

The research focuses on determining the relative abilities of the constructs to predict entrepreneurial intention across the different universities in Vietnam. In short, the study attempts to determine and evaluate the influence level of the Theory of Planned Behavior, self-efficacy, and education support at universities on the decision to join entrepreneurship. Regarding the first objective of the research identifying the antecedents of the entrepreneurial intention of undergraduates, the finding illustrates that perceived education support and two elements of theory planned behavior, specifically, attitude towards entrepreneurship and perceived behavioral control positively and significantly affect entrepreneurial intention (Fig. 4).
The finding shows that attitude towards entrepreneurship is the most prominent predictor in predicting entrepreneur intention. The research confirms the previous studies’ findings that the attitude of the students is a principal facet of the development of entrepreneurial intention (Farooq Muhammad et al., 2018; Shah & Soomro Bahadur, 2017; Trivedi, 2016). One of the rational reasons for this consequence is that undergraduates may have been exposed to entrepreneurship from the community and their own experiences which enhance their attitudes level towards entrepreneurship. Start-up has become a social trend that attracts the attention of the majority of people, especially the young. Many TV shows concentrating on start-up topics, such as Shark Tank, provide students with practical entrepreneurial knowledge as well as creative ideas for career creation. Besides, students may expose to entrepreneurship by taking a part-time job in their spare time.

In order to encourage the entrepreneurial spirit of undergraduate students, universities public policy decision-makers should place more of an emphasis on improving the degree of attitude towards entrepreneurship among undergraduates. Specifically, universities can encourage competitions and programs regarding entrepreneurship which enhances the attitude degree of the student towards entrepreneurship. Inviting guest speakers who can practically share their experiences and difficulties in establishing and operating their businesses is one of an activity that not only provides entrepreneurial knowledge for students, clears up their queries directly but also inspires them to pursue entrepreneurship. Additionally, founding a community for students who are interested in entrepreneurship is also essential. With the help of policymakers, students can immerse themselves in the environment where they share the same enthusiasm and increase their awareness about entrepreneurship. Besides, public policy decision-makers can offer students loans with low interests as an incentive for them to engage in entrepreneurship.

It is evidence showing that perceived behavioral control has a great correlation with entrepreneurial intention, consistent with many previous researches. According to Trivedi (2016), scores of perceived behavioral control are found to have a positive relationship with the intention to start a venture. Furthermore, Miranda et al. (2017) and Farooq Muhammad et al. (2018) contributed to the fact that a significant and positive relationship between perceived behavioral control and the intention to have an enterprise established has existed. This may be because through the time studying at universities or exposure to entrepreneurship, undergraduates narrow down the gap between their perceived control and actual control. It is extremely essential to identify whether the planned behavior is feasible so as to successfully form a venture.

The influence of perceived education supports on the intention to become a venture founder was evaluated. The result implies that education support received from universities has a large and positive correlation with entrepreneurial intention. It simply refers to the fact that the necessary knowledge about entrepreneurship and skills and abilities related to entrepreneurship developed by studying at universities encourage undergraduates to confidently have the thought of being entrepreneurs in the future. In fact, students can learn the entrepreneurial knowledge, skills and improve their abilities through talk shows, workshops, competitions about entrepreneurship which are organized by clubs or faculties. Also, doing
class projects also helps students to enhance their comprehension about the business, such as how it works, how it overcomes the problems. By being equipped with necessary elements, students would feel more empowered to have the intention to establish an enterprise. Moreover, perceived education supports are found to have a significant impact on students’ attitudes towards entrepreneurship. Through the activities undergraduates join at universities, their attitude towards entrepreneurship might be affected.

Subjective norm was considered to have an influence on attitude towards entrepreneurship, which is consistent with prior studies of Kim et al. (2013). This finding implies that the social influence of others, namely, family members, relatives, friends, and other important people on an individual perception towards entrepreneurship is significant. In Vietnam, parents have an extremely great influence power on the decision of their children. However, they are less likely to force students to choose a career as their desire. Although parents are really worried about the future of their children, they still believe in their offspring’s selection in terms of future prospects. Therefore, undergraduates mostly focus on perceived education and place a high value on their personal attitude towards entrepreneurship. In these undergraduates’ perception, the learned entrepreneurial knowledge, skills, and their individual predisposition to respond towards entrepreneurship are the fundamental elements in their decision of self-employment.

Although self-efficacy did not impact directly on entrepreneur intention, Self-efficacy was explored to moderate the impact of attitude towards entrepreneurship on the intention to pursue entrepreneurship. Students seem to have the fundamental abilities to be a founder of an enterprise, they are likely to strengthen attitude and intention towards entrepreneurship.

6. Limitations And Further Research

On account of the lack of resources and time in research implementation, the study cannot avoid limitations. Firstly, the scope of the research is comparatively small. Only 312 valid responses of undergraduates were collected at public, private, and people-founded in Vietnam that have fields related to economics. The undiversified sample and limited geographic accessibility capacity prevent the result to comprehensively illustrate the impact of university role on the entrepreneurial intention of the university students in the Vietnam. Secondly, the findings were not deeply explained since the paper employed a quantitative method only. Some points in the paper could not exactly describe the real thoughts and beliefs of the undergraduates which are needed further research.

Since the research only focused on a narrow scope, the findings cannot reflect the intention of the start-up of undergraduates in Vietnam as a whole. Therefore, it is essential to have research that covers more universities in Vietnam with a bigger sample size that may accurately manifest the intention to pursue entrepreneurship of undergraduates in Vietnam. Moreover, the environmental elements such as the status of the Vietnam economy and the government policies could be included in future research.

Abbreviations
Declerations

Availability of data and materials

I can provide the dataset that has been used during the current study on reasonable request.

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References


**Figures**

Figure 1

Conceptual Framework
Figure 2

The measurement model
Figure 3

Self-efficacy strengthens the positive relationship between attitude towards entrepreneurship and Entrepreneurial intention.
Figure 4

Findings of structural model