

Factors Affecting the Intention to Start-up of an E-commerce Business of Vietnamese Students: The Case of Students at Dai Nam University

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Abstract

This study was conducted with the purpose of showing the factors affecting the intention to start an e-commerce platform-based business of university students in Vietnam. Accordingly, we examine the impact of six factors on startup intention through direct and indirect mechanisms via the intermediate variable "Perception of startup feasibility". The study used the theory of planned behavior (TPB) and conducted a survey of 458 students majoring in Economics, Technology and Social Sciences in Vietnam. Next, we processed the data using linear structural equations – SEM – and on SPSS24 and AMOS24. Research results found that, the higher the students perceive the feasibility of the startup ideas, the higher the startup intention. Additionally, the factor of "Educational environment" plays the most important role in determining "Perception of startup feasibility" and "Startup intention", which reveals the universities' key role in student entrepreneurship training.

Keywords: Start-up, Intention to start-up, Start-up of an E-commerce

1. INTRODUCTION

Current studies on students' intention to start-up are mainly based on the theory of planned behavior (TPB) and are driven by factors originating mainly from within the subject without impacts from external factors associated with the activities of higher education institutions, especially a specific field such as e-commerce. In addition, studies on this issue mainly focus on examining the impact of factors on students' intention to start-up through a direct mechanism, while a few studies consider the impact of these factors to perception of the students' start up feasibility. From this approach, it is necessary to have a study on the impact of factors on students' intention to start-up through both direct and indirect impact mechanisms to make recommendations in terms of reasoning about which mechanism would be better. In addition, the research team decided to research on the scope of startup intentions based on e-commerce platforms because we predict this is a very attractive industry and has high growth potential in the future (Dang Anh Dung , 2023).

Indeed, electronic commerce (e-commerce) has become one of the priority issues for businesses around the world (I. O. Adam, Alhassan, & Afriyie, 2020). In Vietnam, although e-commerce transactions are gradually increasing, the number of start-ups based on e-commerce platforms is still quite modest (Ministry of Industry and Trade, 2022). The reason for that is startups based on e-commerce applications also face a high level of competition due to the early participation of big players such as Shopee, Lazada, Amazon or Tiki... In addition, there are obstacles coming from underdeveloped payment system, goods storage infrastructure, packaging, packing, warehousing, goods rotation, customs procedures, lack of confidence on the part of consumers when purchasing online (Ministry of Industry and Trade, 2022)... These things more or less affect the intention to start a business based on e-commerce applications of startups in general and of Vietnamese students in particular.

Research on intention to behavior performance, intention to start-up in general and students' start-up in particular often focuses on examining factors affecting start-up intention (A. F. Adam & Fayolle, 2015; Alex, 2014; Doan Thi Thu Trang & Le Hieu Hoc, 2018; Krueger, Reilly, & Carsrud, 2000; Linan & Chen, 2009; Luong Ngoc Minh, 2019)... or, focus on considering factors that affect self-confidence about startup feasibility (Doan Thi Thu Trang & Le Hieu Hoc, 2018; Krueger et al., 2000; Truong Duc Thao & Nguyen Trung Thuy Linh, 2019). Meanwhile, confident feeling about the feasibility of starting a business is also one of the factors affecting the intention to start-up of a business.

From the above issues, this study focuses on assessing the current status of intention to start-up of an e-commerce business and the factors affecting this intention through two mechanisms of direct impact and indirect impact through the intermediate variable "Perception of startup feasibility", and we predict that the indirect impact mechanism will be stronger, because human behavior is strongly motivated by prior intentions.

2. LITERATURE REVIEW

2.1. E-commerce and intention to start-up

2.1.1. E-commerce

E-commerce has 3 levels: information; transaction; and cooperation (Nguyen & Ta, 2019). At the level of information exchange, contract negotiation between buyers and sellers is mainly through email and forums. Accordingly, buyers can make online purchases, but the payment method still follows traditional style. At the transaction level, electronic payments began to take shape, business activities were built on the basis of an internal network mainly for data sharing and the

application of management software. The third level is the highest level of development, requiring the application of information technology in the operating process from the input of the production process to the distribution of output products (Nguyen & Ta, 2019). Thus, it can be said that e-commerce is the use of the internet to buy and sell products and services, accompanying services and after-sale support (I. O. Adam et al., 2020). This is also the concept of e-commerce that the authors will use in this study.

2.1.2. *Intention to Start-Up*

Most of the current research on intention to start-up of an business is built on the foundation of the theory of planned behavior (TPB) initiated by Fishbein et al. (1975) when it is said that human behavior originates from their intentions (Fishbein & Ajzen, 1975). Ajzen (1991) built a model of planned behavior to explain that human behavior originates from pre-existing intentions and plans and is influenced by environmental factors such as people's beliefs around that behavior. Accordingly, the start-up intention is influenced by three factors: (1) Attitude towards a behavior is understood as the degree to which a person has a favorable or unfavorable assessment of starting a business; (2) Subjective norms, which refer to social pressure to perform or not to perform behavior, are influenced not only by business culture, but also the attitudes of individuals, especially such as family, friends, colleagues,... (3) Behavioral control refers to the degree to which individuals feel capable of performing the behavior, it is based on the individual's perception of problems that may occur to perform the behavior (Fishbein & Ajzen, 1975).

Based on this theory, there have been many studies on intention to start-up of an business conducted by many domestic and foreign authors and confirmed that entrepreneurial start-up intention is a state of mind that emphasizes individual's interest and experience to undertake new venture creation (Bird, 1988), it is a representation of planned actions to carry out an entrepreneurial behavior (Tubbs & Ekeberg, 1991), and is the process of identifying, evaluating and exploiting business opportunities (Shane & Venkataraman, 2000). Thompson (2009) believes that the entrepreneurial start-up intention is an individual's affirmation of their intention to own a new business and build an action plan at a certain time in the future (Thompson, 2009).

Besides, there are also authors who give a similar concept of starting a business, accordingly, starting a business is the process of carrying out all the necessary work to deploy a certain business activities (Nguyen Ngoc Huyen, 2016). From the above concepts, the authors believe that, "*Intention to start-up of a business is a state in which an individual aims to create a new business career for himself; They are not yet in business but have confidence that they will create a successful business of their own.*"

2.2. **Factors affecting the intention to start-up of a business**

2.2.1. *Personality Traits*

This factor comes from the idea that we all have self-imagination. One's characteristics are distinguishing among different cultures (Markus & Wurf, 1987). That strong, modern or traditional, perfectionist traits are the main factors determining everyone's entrepreneurial behaviors (Arnould, Price & Zinkhan, 2004). Many personality traits may exist in each individual and have certain influence on his behaviors (Mai, Kwon, Lantz & Loeb, 2003). People with the tendency of modern personalities are often willing to adapt and accept new things (Mai, Smith & Cao, 2009). Personality traits influence one's need, confidence and ability to success, demonstrate his risk-taking willingness and have positive impact to the start-up desire and confidence (Nguyen Van Dinh, Le Thi Mai Huong & Cao Thi Sen, 2001)

From the above arguments, we propose the following hypotheses:

H1a: Personality traits having positive impacts on the intension to start-up based on e-commerce application of Dai Nam University students.

H1b: Personality traits having positive impacts on the perception of entrepreneurship feasibility based on e-commerce application of Dai Nam University students.

2.2.2. Attitude to Start-Up

One's future behaviors are predicted by his previously expressed attitudes, which is his subjective probability that he will perform certain behaviors (Fishbein & Ajzen, 1975). Attitude to start-up is considered to be the level of willingness to start a business when opportunities arise (Krueger et al., 2000). Student's positive attitude towards entrepreneurship nurtures their start-up determination (Linan, Cohard, & Cantuche, 2011). People with positive attitudes towards entrepreneurship are the ones who have positive attitude towards risks or have an independent personality (Kolvereid & Isaksen, 2006). Attitude to star-up has been confirmed to have positive influence on students' intention to start-up (Phan Quan Viet & Hao, 2020; Truong Duc Thao & Nguyen Trung Thuy Linh, 2019).

From the above arguments, we propose the following hypotheses:

H2a: Attitude to start-up having positive impacts on intension to start-up based on e-commerce application of Dai Nam University students.

H2b: Attitude to start-up having positive impacts on the perception of entrepreneurship feasibility based on e-commerce application of Dai Nam University students.

2.2.3. Perception of Behavioral Control

The perception of behavioral control refers to the individual's perception of ease or challenge; whether or not he is supervised when performing the behaviors (Ajzen, 1991). The perception of behavioral control is the awareness of the certain activity performance through the ability to establish, maintain and control opportunities (Linan & Chen, 2009). Individuals with optimistic about their abilities are more confident in behavior performance (Krueger et al., 2000). The perception of behavioral control performs through the situation handling and future business idea nurturing abilities (Brannback, Carsrud, Kickul, & Krueger, 2006). An individual with potential to start a business must have desires and perceive the feasibility of the ideas (Phan Quan Viet & Hao, 2020).

From the above arguments, we propose the following hypotheses:

H3a: Perception of behavioral control having positive impacts on intension to start-up based on e-commerce application of Dai Nam University students.

H3b: Perception of behavioral control having positive impacts on the perception of entrepreneurship feasibility based on e-commerce application of Dai Nam University students.

2.2.4. Subjective Standards

Subjective standards are personal beliefs which are socially affected and influenced by surrounding individuals, it is understood as the beliefs that people think that the surrounding ones have on them (Fishbein & Ajzen, 1975; Krueger et al., 2000). Subjective standards shows the influence of important and close related people have on the performing individual (Ajzen, 1991). People whose parents do business easily get supports when starting their business (Greve & Salaff, 2003). Subjective standards have certain impacts on student's intention to start-up (Alex,

2014). Subjective standards or subjective beliefs have a positive influence of student's intention to start-up (Truong Duc Thao & Nguyen Trung Thuy Linh, 2019).

From the above arguments, we propose the following hypotheses:

H4a: Subjective standards having positive impacts on intension to start-up based on e-commerce application of Dai Nam University students.

H4b: Subjective standards having positive impacts on the perception of entrepreneurship feasibility based on e-commerce application of Dai Nam University students.

2.2.5. Education Environment

The school's education and training programs provide students with the knowledge, skills and abilities to pursue a business career (Ooi, Selvarajah, & Meyer, 2011), educational activities are considered to be the first steps to help students be more confident and more willing to entrepreneurship (Linan et al., 2011). On that basis, Rengiah (2013) built the content of the entrepreneurship training program including analyzing business strategies; learning about different business environments; acquiring skills and knowledge through learning activities; getting familiar with analysis, planning...; practicing skills that can be applied to various complex business situations (Rengiah, 2013). The educational environment is said to play a role in fostering student's business spirit and experiential activities to gain confidence to start a business. Participating in entrepreneurship training programs contributes greatly to the formation and development of student's entrepreneurship intentions (Koe, 2016). Entrepreneurship training is the process of helping learners understand the entrepreneurship knowledge through appropriate methodologies (Souitaris, Zerbinati, & Al-Laham, 2007).

From the above arguments, we propose the following hypotheses:

H5a: Educational environment having positive impacts on intension to start-up based on e-commerce application of Dai Nam University students.

H5b: Educational environment having positive impacts on the perception of entrepreneurship feasibility based on e-commerce application of Dai Nam University students.

2.2.6. Capital

Capital is not the decisive factor in whether an individual can start a business, but it has great influence on the process of turning an entrepreneurial idea into entrepreneurial behavior (Fatoki, 2010; Perera, Jayarathna, & Gunarathna, 2011). Some other studies show that capital greatly affects entrepreneurship (Alex, 2014; Luong Ngoc Minh, 2019; Truong Duc Thao & Nguyen Trung Thuy Linh, 2019).

From the above arguments, we propose the following hypotheses:

H6a: Capital having positive impacts on intension to start-up based on e-commerce application of Dai Nam University students.

H6b: Capital having positive impacts on the perception of entrepreneurship feasibility based on e-commerce application of Dai Nam University students.

2.2.7. Perception of Entrepreneurship Feasibility

Perception of feasibility is understood as the one of behavioral control, an individual's entrepreneurial belief and confidence in the ability to carryout an activity successfully (Ajzen, 1991). Perception of feasibility has an impact on the individual's desire and determination level to perform the behavior (Krueger et al., 2000). For start-up activities, the perception of feasibility

can be considered the ability to successfully carry out the start-up activities, it is evaluated through individual’s perception of the business’ ability to survive and develop, how successful the business is, knowledge and experience in information access to make entrepreneurship feasible (Đoan Thi Thu Trang & Le Hieu Hoc, 2018).

From the above arguments, we propose the following hypothesis:

H7: Perception of entrepreneurship feasibility having positive impacts on intension to start-up based on e-commerce application of Dai Nam University students.

3. METHODOLOGY

3.1. Research Model

From the generalization of the above theoretical basis, we propose the following model for this study.

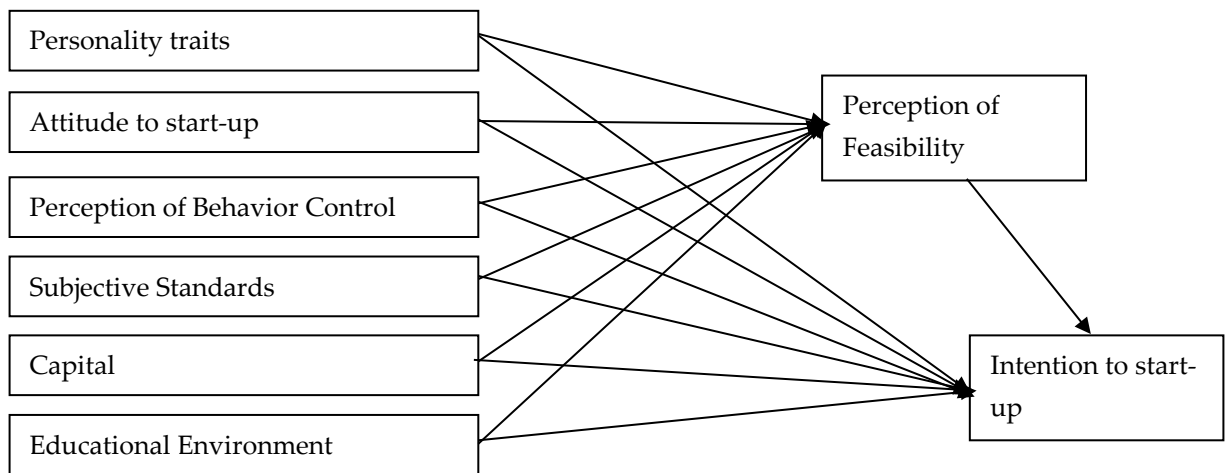


Figure 1. Research model of student’s intention to start-up

Source: Suggested by the authors

3.2. Research Data

From the research overview, a questionnaire with 33 observations for 8 factors in the model. Next, the sample size was calculated according to the sampling formula of Hair et al (Hair, Tatham, & Black, 1998). 500 questionnaires were distributed and 476 were collected (the response rate was 95.2% (>90%)), showing the fact that the respondents were open when taking part in the survey to ensure reliable research results (Neuman, 2014)), in which 458 votes were valid (>330).

In 458 valid votes, the scale of the model is as follow:

Table 1: Summary of Scales

Elements	Content	No of students	Percentage (%)
Gender	Male	239	52.2
	Female	219	47.8
Year of study	Year 1	84	18.3
	Year 2	155	33.8
	Year 3	176	38.4
	Year 4	43	9.4

Majors	E-Commerce	159	34.7
	Business Administration	219	47.8
	Engineering	80	17.5
Students with part-time jobs	Yes	352	76.9
	No	106	23.1
Students with family members doing business	Yes	319	69.7
	No	139	30.3
Total		458	100

(Source: Results processed on SPSS)

Through the statistics on the summary of scales, it shows that the elements of gender, year of study and majors are not appropriate and ensure the representativeness.

EFA analysis results with the principle axis factoring method with Promax rotation and breakpoint when extracting factors with an eigenvalue equal to one used for factor analysis with 33 observations giving the first EFA with KMO = 0.847 satisfying the condition of $0.5 < KMO < 1$ with the Sig. = 0.000. Observation variable TD5 did not explain the main factor "Entrepreneurship Attitude), so it was eliminated. Next, the second EFA was analyzed with 32 observation variables giving KMO = 0.849 with the Sig. = 0.000, we come to the conclusion that the factors are consistent with the survey data and the observation variables have a linear correlation with the representative factors. The results show that the extracting factor is 73.401% with an eigenvalues at the factor stop of 1.007. This shows that up to 73.401% of the changes in factors are explained by observation variables and 32 observation variables are grouped into 08 main factors consistent with the theoretical model. The results of the rotation matrix also show that the component scales converge to the main factors and satisfy factor loading coefficients greater than 0.5, consistent with the theoretical model. The results of testing the reliability of the research concepts and scales show that the Cronbach's Alpha coefficient of the factors all reached a value greater than 0.6, so the scales used in the study are appropriate.

These scales have 435 degrees of freedom (df = 435). The results of CFA test show that the model is compatible with the research data set: Chi-square = 1161.176 (p = 0.000); cmin/df = 2.669; CFI = 0.919; GFI = 0.869; TLI = 0.908; and RMSEA = 0.060. The normalized weights of the observed variables are greater than 0.5 and the abnormalized weights of the variables are statistically significant, so the convergence value of the scales can be confirmed. The correlation coefficients of the concepts are all less than one unit, so the concepts gain discriminant value. The measurement model is suitable for the research data set, there is no correlation between the measurement errors, so the unitarity is achieved.

4. RESULTS

To evaluate the current state of the relationship between factors and the intention to start-up based on e-commerce applications of Dai Nam University students, we conducted SEM and got the following results:

Table 2. Normalized Model Estimation (SEM) Results

No.	Relationship between concepts	Normalized estimation	Abnormalized estimation	Standard deviation	Value (t)	Value (p)
<i>R² of Perception of Entrepreneurship Feasibility = 0.473</i>						
H1a	KT <--- TC	0.184	0.168	0.045	3.763	0.000
H2a	KT <--- TD	0.208	0.194	0.048	3.997	0.000
H3a	KT <--- NT	0.188	0.238	0.072	3.283	0.001

H4a	KT <--- CCQ	0.048	0.041	0.040	1.018	0.309
H5a	KT <--- GD	0.486	0.414	0.059	6.966	0.000
H6a	KT <--- NV	-0.105	-0.089	0.053	-1.682	0.093
<i>R² of Intention to start-up based on e-commerce applications = 0.544</i>						
H1b	YD <--- TC	0.161	0.166	0.048	3.452	0.000
H2b	YD <--- TD	-0.010	-0.011	0.052	-0.203	0.839
H3b	YD <--- NT	0.083	0.119	0.078	1.532	0.126
H4b	YD <--- CCQ	0.030	0.029	0.043	0.682	0.495
H5b	YD <--- GD	0.129	0.124	0.067	1.842	0.065
H6b	YD <--- NV	0.032	0.031	0.057	0.543	0.587
H7	YD <--- KT	0.537	0.609	0.075	8.131	0.000

(Source: Results of figures procession on Amos24)

Through the model estimation results, it is clear that the impact of the factors affecting the Perception of entrepreneurship feasibility has the estimated results of model for the value $R^2 = 0.473$, which means that there is a 47.3% change of “Perception of entrepreneurship feasibility” of Dai Nam University students was explained by the factors: (1) Personality traits; (2) Attitude to start-up; (3) Perception of behavioral control; (4) Educational environment; (5) Capital. About factor of “Subjective standard” whose $P_value = 0.309$, there are not enough evidence for its role in explaining the dependable variable of “Perception of entrepreneurship feasibility of Dai Nam University students.

Similarly, the model estimation results of the dependence of intention to start-up based on e-commerce applications of Dai Nam university students on direct and indirect factors give the value $R^2 = 0.544$, which means there is a 54.4% change of “Intention to start-up based on e-commerce applications of Dai Nam university” depends on the model factors, the other 45.6% depends on other external model factors and explained random error

From the model estimation results, it can be preliminarily concluded that the impact of factors on “Intention to start-up based on e-commerce application of Dai Nam university” is by indirect mechanism through the intermediate “Perception of entrepreneurship feasibility, which has a stronger impact than the direct mechanism.

5. DISCUSSION AND CONCLUSION

From the model estimation results, we make the following comments:

5.1. Discussion of the Results of Factors Affecting the Perception of Startup Feasibility

H1a: Personality characteristics have a positive impact on the perception of the start-up feasibility based on e-commerce applications of Dai Nam University students. The hypothesis is accepted at the 99% significance level ($p = 0.000$) and with a standardized Beta value of 0.184. This result supports the research of Nguyen Van Dinh and colleagues (2021) who also concluded that personality traits positively impact students' perception of startup feasibility with $P = 0.000 < 0.01$; standardized coefficient ($\beta = 0.329$). This means that the more students have the personality to dare to take risks to start a business, the more positive they will feel about the feasibility of starting a business.

H2a: Attitude towards start-up has a positive impact on the perception of feasibility of starting a business based on e-commerce applications of Dai Nam University students. This hypothesis is accepted at a significance level of over 99% when $p_value = 0.000$, and at a normalized Beta value of 0.208, the second highest level among the impact factors. This is understood to mean that if students show a positive attitude toward start-up on e-commerce application platforms, their

perception of the feasibility of starting a business will also be higher. However, the statistical results of this factor above give an average result of only 2.84 points, which suggests that the university needs to have a solution to enhance students' attitudes towards start-up higher in the years to come.

H3a: Perceived behavioral control has a positive impact on the perception of feasibility of starting a business based on e-commerce applications of Dai Nam University students. This hypothesis is also accepted at a significance level of over 99% because the p_value reaches 0.001 and the normalized Beta value reaches 0.188. This result supports the research of Nguyen Van Dinh and colleagues (2021) when concluding that the factor of perceived behavioral control and confidence in feasibility has $P = 0.036 < 0.05$; Standardization coefficient ($\beta = 0.101$). This result reflects that the more confident students are in their ability to control business and start-up activities, the more their confidence in their ability to succeed in starting a business increases. H4a: Subjective norms have a positive impact on the perception of feasibility of starting a business based on e-commerce applications of Dai Nam University students. Based on the estimated results, there is not enough basis to conclude this relationship. In other words, this study shows that Subjective Norms do not have an impact relationship on the students' perception of startup feasibility (p_value=0.309). This result supports the research of Nguyen Van Dinh and colleagues (2021) and the research of Doan Thi Thu Trang and Le Hieu Hoc (2018) which did not provide a relationship between the impact of this factor on Perception of start-up feasibility.

H5a: The educational environment has a positive impact on the perception of the feasibility of starting a business based on e-commerce applications of Dai Nam University students. This hypothesis is accepted at a significance level of over 99% (p_value = 0.000) and with the standardized Beta value reaching the highest level among the impact factors and equal to 0.486. However, what is worrying is that this factor is being rated quite low by students with an average factor value of only 3.07 points. This implies that university must focus their efforts on improving training programs to equip students with knowledge, skills and an environment that encourages students' start-up. This result supports the research of Nguyen Van Dinh and colleagues (2021) stating that the educational environment has a positive and strong impact on the perception of startup feasibility, with $P = 0.011 < 0.05$; standardized coefficient ($\beta = 0.139$).

H6a: Capital source has a positive impact on the perception of feasibility of starting a business based on e-commerce applications of Dai Nam University students. This hypothesis is rejected at a significance level of over 90% (p_value=0.093) and with a standardized Beta value of (-0.105), this is understood to mean that the easier it is for students to mobilize capital, the the lower their perception of startup feasibility will be. The results are not consistent with the research results of Truong Duc Thao and Nguyen Trung Thuy Linh (2019) when they said that capital has a positive impact on students' intention to a business start-up. This result is explained by some students that attracting capital too easily from family, friends, and relatives will not create pressure to force them to set business success goals. Besides, in the case of students with capital ranging from several hundred million to billions of dong, they often prioritize choosing the safe option of buying a house instead of investing in a business start-up, so sometimes having capital has a negative impact on perception of startup feasibility.

5.2. Discussion on the Results of Factors Affecting The Intention To Start A Business Based on E-Commerce Applications of Students at Dai Nam University

H1b: Personality traits have a positive impact on Dai Nam University students' intention to start-up of a business based on e-commerce applications. This hypothesis is accepted at a statistical significance level of over 99% (p_value=0.000) and with a standardized Beta value of 0.161. This result supports the research of Nguyen Van Dinh and colleagues (2021), of Truong Duc Thao and

Nguyen Trung Thuy Linh (2019), of Doan Thi Thu Trang and Le Hieu Hoc (2018) ..., and many other studies, when they all agree Personality traits positively impact students' entrepreneurial intention. This confirms that start-up first comes from the students themselves, their personality characteristics will determine their entrepreneurial intentions and behavior, while other external factors are only catalysts and environments encouraging or inhibiting students' intentions and behaviors.

H2b: Attitude towards start-up positively impacts the intention to start a business based on e-commerce applications of Dai Nam University students. There is not enough basis to conclude about this relationship, or in other words, the results of this study did not find an impact relationship between Attitude towards start-up and students' intention to start a business based on e-commerce applications of the Dai Nam University ($p_value=0.839$). This result is not consistent with the research results of Truong Duc Thao and Nguyen Trung Thuy Linh (2019), and of Doan Thi Thu Trang and Le Hieu Hoc (2018). This can be explained by the fact that the research subjects of this study associated with the intention of starting a business based on the e-commerce platform, and the survey subjects are mainly 2nd and 3rd year students, also accounting for the majority of students in the majors who have not studied subjects related to e-commerce, leading to students' attitudes towards starting a business based on e-commerce platforms being still skeptical and uncertain.

H3b: Perceived behavioral control has a positive impact on Dai Nam University students' intention to start a business based on e-commerce applications. This hypothesis is accepted at a statistical significance level of over 85% ($p_value=0.126$) and with a standardized Beta value of 0.083, reflecting a rather weak and fuzzy impact relationship. This result supports the research of Doan Thi Thu Trang and Le Hieu Hoc (2018) but to a lesser extent. This can be explained by the high proportion of students in the study sample who have not been trained in e-commerce and business start-up, and their knowledge on this issue mainly comes from practical activities.

H4b: Subjective norms have a positive impact on Dai Nam University students' intention to start a business based on e-commerce applications. There is not enough basis to conclude about this relationship, or in other words, the results of this study did not find an impact relationship of Subjective Norms and the intention to start a business based on e-commerce applications of the Dai Nam University students ($p_value=0.495$). This result supports the research of Doan Thi Thu Trang and Le Hieu Hoc (2018), but is not consistent with the research results of Truong Duc Thao and Nguyen Trung Thuy Linh (2019).

H5b: Educational environment has a positive impact on the intention to start a business based on e-commerce applications of Dai Nam University students. This hypothesis is accepted at a statistical significance level of over 90% ($p_value=0.065$) and with a standardized Beta value of 0.129. This result supports the research of Truong Duc Thao and Nguyen Trung Thuy Linh (2019), and of Nguyen Van Dinh and colleagues (2021). This once again confirms the extremely important role of the university's educational environment in students' start-up ideas and behavior.

H6b: Capital source has a positive impact on Dai Nam University students' intention to start a business based on e-commerce applications. There is not enough basis to conclude about this relationship, or in other words, the results of this study did not find a relationship between the impact of Capital and the intention to start a business based on e-commerce applications of the Dai Nam University students ($p_value=0.587$). This result is not consistent with the research results of Nguyen Van Dinh and colleagues (2021), of Truong Duc Thao and Nguyen Trung Thuy Linh (2019), of Doan Thi Thu Trang and Le Hieu Hoc (2018) ..., and many other studies. This is explained by some students that the most important thing for a start-up project is the idea and

feeling about the feasibility of the start-up. If these two factors are at a high level, then the lack of capital, with or without capital do not determine their start-up behavior. At that time, they will do everything to implement their own ideas.

H7: Perception about the feasibility of starting a business has a positive impact on the intention to start a business based on e-commerce applications of Dai Nam University students. This hypothesis is accepted at a statistical significance level of over 99% ($p_value=0.000$) and with a very high normalized Beta value (0.537). This result supports the research of Truong Duc Thao and Nguyen Trung Thuy Linh (2019), of Doan Thi Thu Trang and Le Hieu Hoc (2018), of Luong Ngoc Minh (2019). This is considered as a significant finding. The highlight of the study is to confirm that the indirect impact mechanism will be stronger than the direct impact mechanism in the relationship of factors to the intention to start a business based on e-commerce applications of Dai Nam University students.

5.3. Conclusions

Through conducting research on this issue, we draw the following conclusions:

First, most factors have a positive impact on Vietnamese students' intention to start a business based on e-commerce platforms, and their impact through an indirect mechanism via the intermediate variable "Perception of feasibility" is much stronger than the direct one. Besides, the factor "Subjective Norms" does not affect the startup intention, which is similar to the research of Ambad and Damit (2016). This can be explained that, with startups on e-commerce platforms, the experience and trust of the surrounding people such as family, friends, and predecessors do not have much impact on students' startup intention. Indeed, doing business on e-commerce platforms has many factors which differ from the traditional one. It depends heavily on technology, the internet, and the buying behavior of online consumers is also different from the traditional ones. Therefore, it seems that ideas based on the ones around the students do not mean much to them.

Second, different from the results of many previous studies (Ambad & Damit, 2016; Sabah, 2016), this study shows that students with good conditions for capital, easy to mobilize capital or available, the intention to start-up of a business is not as strong as students with more difficulties. The universities in developing and underdeveloped countries should pay attention to to promote the students' start-up spirit. This is a vital point that promotes e-commerce startups as via e-commerce applications, many students can start their business without or with very little capital. They can be a middleman between producers and buyers via Facebook, TikTok...

Third, in addition to factors belonging to the students themselves that positively impact the intention to start a business, factors belonging to the university are also very important. This result is consistent with previous research by Suan et al (2011) or Zhang et al. (2014) (Suan et al, 2011; Zhang et al, 2014). For students, especially Asian ones in general and Vietnamese students in particular, are often of traditional type and their active level is still low (Mai et al, 2009). It is very difficult for them to independently make decision to start a business; therefore, teacher's and university's leadership, support and companionship roles are essential. This is why entrepreneurship training and creating a startup promotion environment, regardless of countries, need immediate attention.

Table 3. List of Symbols

Symbols	Meaning
TC	Student personality traits
TD	Attitude towards start-up behavior

NT	Perceived behavioral control
CCQ	Subjective standards
GD	Educational environment
NV	Capital source
KT	Perception of startup feasibility
YD	Intention to business start-up

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