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Factors affecting the entrepreneurial behavior of students in Hanoi City: The role of entrepreneurial intention and innovation capacity

Do Thi Ngoc Lan[1], Thai Van Ha[2*], Nguyen Van Hau[3], Doan Tat Thanh[4]
[1]School of Languages & Tourism, Hanoi University of Industry, Vietnam; dothingoclan@haui.edu.vn (D.T.N.L.)
[2]Ha Noi University of Business and Technology, Vietnam; vanha280182@gmail.com (T.V.H.)
[3]Posts and Telecommunications Institute of Technology, Hanoi, Vietnam; haunv@ptit.edu.vn (N.V.H.)
[4]University of Labour and Social Affairs, Vietnam; thanhdt2388@gmail.com (D.T.T.)

Abstract: Recognizing the importance of startups, the Vietnamese government implements many preferential and supportive policies to encourage the development of startups and individuals, especially students, following the "Supporting Students to Start a Business until 2025" proposal. The purpose of this study is to explore the impact of innovation capacity on the entrepreneurial behavior of university students in Hanoi City. It also examines entrepreneurial intention as an intermediate variable in the relationship between innovation capacity and entrepreneurial behavior. We used quantitative research methods. The research data was collected using Google Forms with 1,050 valid questionnaires from a survey of university students studying in Hanoi City. The author performed data analysis using linear structural equation modeling (SEM). Research results show a positive relationship between innovation capacity and entrepreneurial behavior through the variable of entrepreneurial intention. Thereby, the authors propose management implications to improve the entrepreneurial behavior of Vietnamese students in today's emerging economy. This study contributes to the completion of the theoretical framework on the innovation capacity and entrepreneurial behavior of students. Besides, it is also a useful reference for firms and researchers.

Keywords: *Absorptive capacity, Entrepreneurial behavior, Entrepreneurial intention, Innovation capacity, Quality of university teaching.*

1. Introduction

In the modern economic context, startups are an indispensable part of each country's development, an essential driving force in promoting regional economic growth, and the main driving force for strengthening economic growth, reforming the supply-side structure, and implementing an innovation-oriented development strategy. Innovation is the foundation of entrepreneurship. It is a strong driving force for economic development and the core of high-quality development [1]. Startup businesses have created new economic momentum through different creative directions and methods. According to data from the General Statistics Office, in 2022, there will be 148,500 new businesses nationwide, with a total registered capital of 1,590.9 trillion VND. The number of companies has increased by 27.1%, although registered capital decreased slightly by 1.3% compared to 2021.

In addition, the document of the 13th National Congress of the Party affirms that science, technology, and innovation are critical strategic breakthroughs for a country to move towards rapid development and sustainability. Therefore, supporting and encouraging the start-up development of each new business is an indispensable part of economic policy for each country. Recognizing the importance of startups, the Vietnamese government implements many preferential and supportive policies to encourage the development of startups and individuals, especially students, following the

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* Correspondence: vanha280182@gmail.com

"Supporting students to start a business until 2025" proposal (issued under Decision No. 1665/QD-TTg, dated October 30, 2017, by the Prime Minister).

However, given the limited domestic R&D capacity and shortage of connecting networks among universities, research institutes, and business sectors, only 20% of Vietnam's innovative startups have brought new products and services to the international market. While most of Vietnam's innovative startups only focus on the domestic market, only 12% of those have received ideas from research units and universities. Furthermore, entrepreneurship rates among students still need to improve, as most graduates apply to existing companies instead of starting a business. Although about 400,000 students graduate yearly, up to 225,000 students are unemployed because their capacity is insufficient to operate a startup.

Therefore, this study focuses on exploring the factors that influence students' entrepreneurial behavior, emphasizing the critical role of innovation in promoting entrepreneurial behavior among students through entrepreneurial intentions. The research aims to improve innovation capacity and promote creative startups while students are still in school. Additionally, we hope that our further research on the role of schools and students in the innovation process will not only add theoretical value but also contribute to developing policies and activities to support innovation in Vietnam.

2. Theoretical Foundation and Research Model

2.1. Theoretical Foundation

2.1.1. The theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), an extension of the Theory of Reasoned Action (TRA) developed by Ajzen and Fishbein [2] their colleagues, discusses a factor that determines behavioral intention through an individual's attitude towards the behavior [2, 3]. With the Theory of Reasoned Action (TRA), the authors have pointed out that the most crucial factor determining human behavior is the intention to perform that behavior. The first two factors are the same as in the Theory of Reasoned Action [2]. The third factor is the perceived behavioral control, which refers to the control an individual perceives over their behavior.

2.1.2. The Grit Theory

Duckworth's Grit theory on new developments is built based on the Big Five theoretical framework, which describes personal traits to predict their success [4, 5]. Grit represents a person's perseverance and passion for achieving long-term goals or endurance over time [6]. It is reflected in a person's striving to exercise resilience, conscientiousness, autonomy, and persistence in problem-solving. Thus, grit allows us to predict a person's performance in a field where the ability to overcome challenges is more important than measuring talents [7].

In a 2007 study, Duckworth and her colleagues overlooked the timing of questions about goal setting and persistence, how values and expectations impact goal achievement, and how situation factors and cultural or social variables affect performance. As a result, the grit scale contains two components: (1) interest and (2) effort. Each component respectively has six variables observed through the self-report/survey method Duckworth and Quinn [7] and is continued to improve the complete grit scale, called the "Short Grit Scale," with four corresponding observed variables in each component. To summarize, the Grit theory is discovered by Duckworth and her colleagues in 2007 and is continuously being researched to prove its impact on student learning outcomes [8]. Hence, the authors chose to use grit scale in this study.

2.1.3. The Theory of Absorptive Capacity (AC)

The concept of absorptive capacity (AC) was developed by Cohen and Levinthal [9] and has been widely accepted over the years. Cohen and Levinthal [9] define AC as the process of handling knowledge by recognizing value, assimilating, and applying new knowledge. This definition evaluates AC in the R&D departments, subsequently helping employees adapt to new knowledge more quickly,

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thereby increasing the company's absorptive capacity. The AC framework is widely used and rapidly being developed across various research fields, including both theoretical and empirical, with over 1,300 citations and more than 600 published papers. Thus, the theory of absorptive capacity refers to the ability to recognize, acquire, integrate, and apply new external knowledge to enhance competitive advantages [10]. AC helps individuals identify, learn, and understand new or unique knowledge from critical external sources related to their current work [9].

2.1.4. Innovation Capacity

Individual innovation capacity (also known as individual innovation capability or individual innovation competence) is a combination set of qualities, knowledge, skills, and attitudes to create new and unprecedented things [11]. Like other capabilities, individual innovation capability can be learned, practiced, and developed [12, 13]. It is a crucial factor that supports organizations to build competitive advantages in today's rapidly changing environment [14]. Similar to individual innovation capacity, group innovation capacity is the ability of a group to generate and implement new improvements. For students, the research shows that innovation capacity is a learning outcome in higher education [15]. The individual innovation capability scale identifies a person's capabilities related to various organizational innovation processes.

Do [16] examines the literature on innovation capacity and builds and tests a structural equation model to assess the variables influencing university students' ability for innovation. Through measurement model evaluation and structural model evaluation utilizing SPSS 26 and Smart PLS 3.0, the author employed a partial least squares structural equations (PLS SEM) model. Five influencing elements and their respective degrees of impact on students' capacity for innovation were found from the survey results of 303 students at Hanoi institutions. Of these, the managerial skills and social skills aspects significantly affect students' capacity for innovation.

The knowledge flows that support Portuguese enterprises' ability for innovation are identified by [17]. Since Portuguese companies are not as mature in terms of open innovation as companies in other EU countries, we specifically aim to determine which factors influence Portuguese innovation capacity from a macro and micro perspective in order to establish potential ways to promote open innovation (OI) in Portugal. Two stages made up the methodological approach that was employed to accomplish this aim. The multivariate multiple regression strategy based on the ordinary least squares (OLS) method was used to determine the most important variables in Portuguese innovation capability. The results of the present research bring empirical evidence that researchers dedicated to R&D from non-profit institutions (i.e., inbound OI) and researchers from firms (i.e., outbound OI) exert a significant influence on innovation capacity, so the development of an optimal strategy for the strengthening of open innovation by Portuguese firms should take into account the use and combination of these two specific knowledge flows.

2.2. Hypothesis and Research Model

2.2.1. Grit

An international study Duckworth, et al. [6] has discovered that intelligence and many other factors, such as creativity, vitality, emotional intelligence, reputation, confidence, emotional stability, physical attractiveness, and other favorable qualities, play an essential role in achieving success. Among them, 'Grit' is one of the most crucial factors for individuals [8, 18, 19]. Grit includes perseverance and passion for achieving long-term goals. It is demonstrated through the efforts to develop resilience, dedication, conscientiousness, and persistence in problem-solving. Therefore, grit requires hard work while facing challenges, maintaining effort, and nurturing interest over a long period, despite difficulties and failures, while continuously pursuing successes [6]. Thus, given the high reliability of the latest grit scale, the authors have applied the grit scale in this study with the following hypothesis:

$H_{1.1.}$ Grit (GR) positively impacts students' innovation capacity (IC).

$H_{1.2.}$ Grit (GR) positively impacts students' entrepreneurial intention (EI).

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2.2.2. Quality of Teaching

Liñán, et al. [20] argues that knowledge capital consists of the knowledge students acquire from training activities related to their entrepreneurial endeavors. According to Vila, et al. [21] higher education plays a crucial role in accumulating the necessary skills to identify opportunities for improvement, search for new solutions, evaluate them, and effectively allocate resources [21]. The instructors' teaching methods play an essential role in the students' process of conveying knowledge and influence the students' needs to develop specific skill sets to drive innovation.

$H_{2:}$ The quality of teaching (QT) positively impacys students' innovation capacity (IC).

2.2.3. Absorption Capacity

Absorptive capacity is the next variable included in the research model. In the entrepreneurial innovation field, very little research provides evidence of its relationship with students' entrepreneurial innovation. Absorptive capacity Finn [22] and Voelkl [23] argue that emotional engagement, referring to positive emotions toward knowledge and skills, suggests that greater intrinsic motivation helps students engage more with learning. Reflecting on information, knowledge, or issues and being willing to complete complex and challenging tasks is considered cognitive engagement [24, 25]. When students first receive the knowledge and skills from their mentors, such as teachers or peers, they often show basic signs of liking and reflecting on the usefulness/necessity of such knowledge, but only to a low degree. According to this argument, the higher the AC of students, the more likely they find the transmitted knowledge enjoyable and attractive, leading to more expressions of enthusiasm. Additionally, students with high AC and deep understanding of the provided knowledge and skills are more likely to apply them to achieve positive results in practices and continuously strive to explore and learn more about the challenging and complex issues (e.g., more focusing, reading additional books, proactively researching, starting businesses, etc.). Thus, the hypothesis here is:

$H_{3.1:}$ Absorptive capacity (AC) positively impacts students' innovation capacity (DMST)

$H_{3.2:}$ Absorptive capacity (AC) positively impacts students' entrepreneurial intention (EI).

2.2.4. Cognitive Capacity of Student

Matejun [26] proposed an analytical framework for the experience environment, focusing on three main factors, including perception, emotion, and social aspects. Matejun [26] emphasizes that positive perceptions and feelings about engaging in innovative behaviors will enhance an individual's innovation capability. If individuals believe that they are expected to participate in creative behaviors, they may be willing to invest time and energy into these behaviors [26]. Therefore, the cognitive scale proposed by Matejun [26] has provided a new approach for evaluating the experience environment in the delivery field and proved the usefulness of research on perception in innovation. Specifically, this scale aligns with the authors' research goals, subjects, and context.

Using data from a survey of 330 young people, Vu and Nguyen [27] examine the variables influencing the startup intention of young people from mountainous regions and ethnic minorities in Ha Giang province. The research findings, which were obtained using descriptive statistics and multivariate data analysis (Cronbach's alpha, EFA, and regression methods), indicate that the following factors influence the youth in Ha Giang Province's intention to start their own business: culture, capital, attitudes, and views on startups; perceived behavioral control; entrepreneurship education; entrepreneurial experience; institutions; and personalities. From there, the study provides a number of recommendations to support young people in the province in starting their own businesses in the near future so they can generate revenue for themselves and society.

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Ho, et al. [28] evaluated the effect of entrepreneurship support policies on youth readiness and entrepreneurial ambitions by surveying 583 youth from six provinces, spanning from Thanh Hoa to Thua Thien Hue. In addition to offering comprehensive analysis of the issue, the research makes important policy recommendations to rectify flaws and encourage entrepreneurship in the area. The results will be used to inform useful support strategies, such as enhancing entrepreneurship education, streamlining administrative processes, and offering business assistance, which will empower young people to take the lead in regional economic growth. In order to successfully encourage entrepreneurship among young people in the North Central provinces, the study makes conclusions and policy recommendations based on the data, including support for entrepreneurship education, administrative processes, and business support solutions.

H_4: Cognitive capacity of Student (CS) positively impacts students' innovation capacity (IC).

2.2.5. Student Innovation Capacity

Individual innovation capacity (also known as individual innovation capability or individual innovation competence) is a combination set of qualities, knowledge, skills, and attitudes to create new and unprecedented things [11]. Like other capabilities, individual innovation capability can be learned, practiced, and developed [12]. It is a crucial factor that supports organizations to build competitive advantages in today's rapidly changing environment. Similar to individual innovation capacity, group innovation capacity is the ability of a group to generate and implement new improvements. For students, the research shows that innovation capacity is a learning outcome in higher education [29]. The individual innovation capability scale identifies a person's capabilities related to various organizational innovation processes.

H_5: Students' innovation capacity (IC) has a positive impact on students' entrepreneurial intention (EI).

2.2.6. Entrepreneurial Intention of Students

The theory of entrpreneurshop and the theory of planned behavior suggest that intention is an essential predictor of human behavior. The research by Randall and Wolff [30] also indicated that the relationshop between intention and behavior remains stable over time [30]. Another study further shows a positive correlation between intention and behavior in the contact of entrepreneurship, with intention explaining about 28% (equivalent to r=0.53) of the student's behavior variance [31].

H_6: Students' entrepreneurial intention (EI) has a positive impact on students' entrepreneurial behavior (EB).

2.2.7. Proposed Research Model

Based on both domestic and international studies that inherit and select factors influencing students' entrepreneurial behavior, such as Shapero and Sokol [29] and the Theory of Planned Behavior (TPB) by Ajzen [3] the authors have also included additional independent variables in the study to improve the accuracy of predicting factors affecting students' entrepreneurial behavior (see figure 1). Particularly, students' innovation capability is essential in generating innovation and executing entrepreneurial behaviors. In this study, the authors use Structural Equation Modeling (SEM) to test the model and the proposed research hypotheses.

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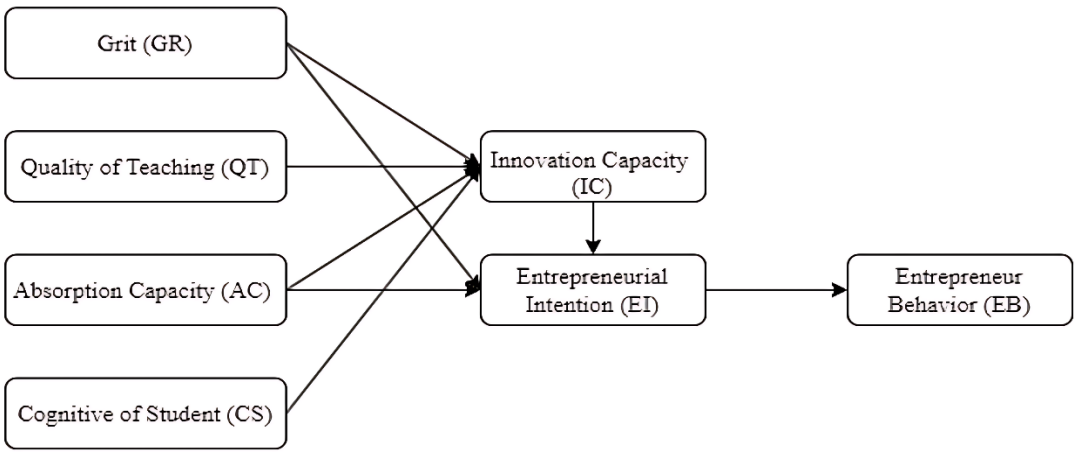

Figure 1.
Proposed research model.

3. Research Methods

The research was conducted using a combination of qualitative and quantitative research methods. The primary data was collected online via Google Forms, with the interview subjects being university students in Vietnam. The primary data was surveyed from October 2023 to February 2024. Secondary data is collected from domestic and foreign research as factors included in the model, and the theoretical models are original and reliable.

The sampling method of the study is a non-probability sampling method based on the list of students in the Economics major, which the author collects until there are enough observations as required. This study's sample size was 1050, which Comrey and Lee [32] determined to be an excellent level. After being collected from survey subjects, data will be encrypted, cleaned, and analyzed using SPSS 22.0 and Amos 20.0 software. Applied data analysis methods include Cronbach's Alpha coefficient analysis, exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and linear structural model analysis (SEM) to test the model and research hypotheses.

4. Research Results and Discussion

4.1. Test Cronbach's Alpha Reliability Coefficient

The analysis results of Cronbach's Alpha reliability coefficient in Table 1 show valid Cronbach's Alpha results greater than 0.6. All observed variables have a total correlation coefficient greater than 0.3. Therefore, the scale is suitable for use in the EFA exploratory factor analysis step to test its value.

Table 1.
Cronbach's Alpha results of independent and dependent variables.

Observed variables	Coefficient if variables are eliminated	Total Cronbach's Alpha coefficient
Grit (GR)	BB1 (0.923), BB2 (0.887), BB3 (0.883), BB4 (0.881), BB5 (0.881)	0 .913
Quality of Teaching (QT)	GV1 (0.909), GV2 (0.913), GV3 (0.903)	0.937
Absorption Capacity (AC)	HT1 (0.931), HT2 (0.927), HT3 (0.931), HT4 (0.926)	0.946
Cognitive of Students (CS)	NT1 (0.897), NT2 (0.883), NT3 (0.898)	0.926
Innovation Capacity (IC)	DMST1 (0.935), DMST2 (0.926), DMST3 (0.928), DMST4 (0.936)	0.948
Entrepreneurial Intention (EI)	KN1 (0.909), KN2 (0.879), KN3 (0.894)	0.927
Entrepreneur Behavior (EB)	HV1 (0.834), HV2 (0.820), HV3 (0.816), HV4 (0.851)	0.867

4.2. Results of Exploratory Factor Analysis (EFA)

4.2.1. EFA Analysis Results For Independent Variables

The results of the second EFA exploratory factor analysis of the remaining 14 observed (see Table 2) variables show that all factors have KMO coefficient = 0.953 < 1, p-value < 0.05 satisfies the condition, the variables are correlated with each other, and the data material is suitable for EFA. The total variance extracted represents the level of explaining the data variation, reaching 82.72 %, which shows that the scales meet the requirements.

Table 2.
Results of final exploratory factor analysis.

Observed variables	Factor			
	1	2	3	4
BB3	0.851			
BB4	0.809			
BB2	0.737			
BB5	0.729			
HT1		0.747		
HT2		0.744		
HT4		0.726		
HT3		0.699		
GV2			0.809	
GV3			0.802	
GV1			0.801	
NT1				0.793
NT2				0.780
NT3				0.777
KMO				0.953
Sig. (Bartlett's Test)				0.000
Total variance extracted (%)				85.721

4.2.2. EFA Analysis Results for Dependent Variable

EFA factor analysis for the innovation capacity scale (see Table 3): The results of the 04 observed variables of this scale are all accepted. The KMO coefficient is 0.869, the extracted variance is 86.42%, and factor loading is factor loading. The factors of the 04 observed variables are all greater than 0.5. The Eigenvalue coefficient reached 3.457, which meets all the requirements. Just as the factor analysis of entrepreneurial intention and behavior, the coefficients meet the scale requirements to conduct confirmatory factor analysis.

Table 3.
Summary of EFA analysis results for the dependent variable.

The scale	KMO coefficient	P-value	Eigenvalue coefficient	Total square s who quoted
Innovation Capacity (IC)	0.869	0.000	3.457	86.42 %
Entrepreneurial Intention (EI)	0.761	0.000	2.617	87.24 %
Entrepreneur Behavior (EB)	0.781	0.000	2.864	71.61 %

EFA analysis results show that the total variance extracted is > 50%, and the factor loadings of all factors are > 0.5. The coefficient 0<KMO<1 and the Eigenvalue coefficient of the factors are both greater than 1, so all factors are retained for analysis.

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4.3. Confirmatory Factor Analysis (CFA) Results

Based on Figure 2, the chi-square tests of the model reach the critical value with p-value = 0.000 < 0.05; The criteria Chi-square/df = 3.209 < 5 is acceptable Hu and Bentler [33] TLI index = 0.977 > 0.9, GFI = 0.942> 0.9, CFI = 0.981 > 0.9; RMSEA index = 0.047 < 0.6 is good. Thus, all indicators meet the requirements. This measurement model is consistent with market data, and there is no correlation between measurement errors, so it achieves monadicity. The standardized weights are all greater than 0.5, so they are statistically significant, and the concepts achieve convergent validity. Therefore, the measurement scales in the research model are all reliable. In conclusion, the research model is suitable for further SEM linear structural analysis [34].

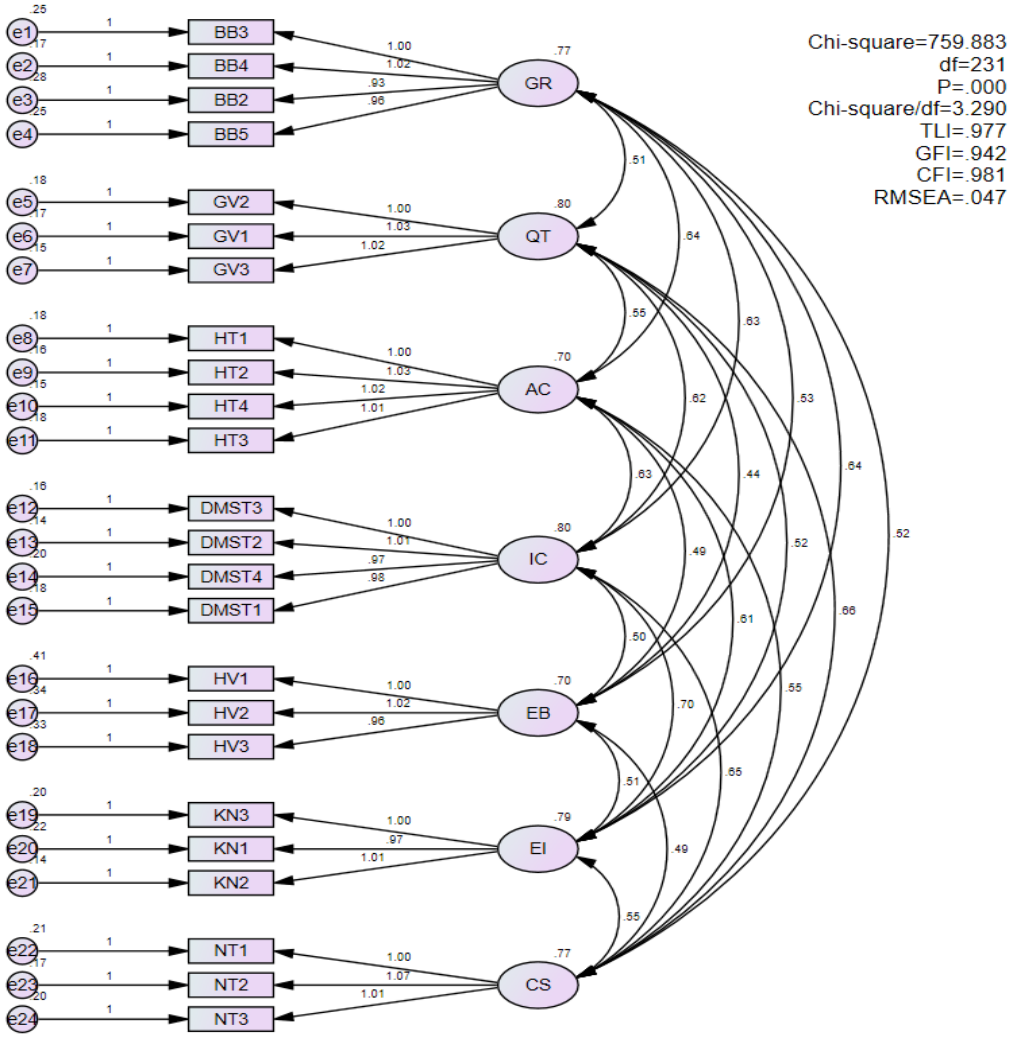

Figure 2.
Results of confirmatory factor analysis CFA.

4.4. Results of SEM Linear Structural Model Analysis

According to figure 3 and Table 4, the results of SEM model analysis show that the p-value of the hypothesis about the relationships between concepts is significant (Pvalue<0.005); the indexes TLI = 0.971, GFI = 0.933, CFI = 0.975, and RMSEA = 0.052. Standardized weights impact innovation

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capacity, innovation capacity positively impacts entrepreneurial intention, and entrepreneurial intention positively impacts entrepreneurial behavior.

Among them, students' cognitive capacity is the factor with the most substantial influence on their innovation capacity (0.37), showing that students are aware of the importance of innovation capacity. The curriculum and learning environment will help enhance students' entrepreneurial intentions and behavior in the digital era. In addition, innovation and entrepreneurship often come with many failures and difficulties. Therefore, students who persevere (0.29; 0.30) can stand up after failures more quickly than others by learning from mistakes and continuing to achieve their goals.

Besides grit, absorptive capacity (0.24; 0.10) is also an indispensable internal factor of students in the innovative startup process. Good absorption ability helps students quickly grasp new knowledge, technology trends, and market information. This ability is vital in startups and innovation when the business environment changes rapidly and continuously, requiring updated knowledge and skills like today. The QT factor shows that the quality of university teaching (0.94), although having a positive impact, does not motivate students to start a business in Vietnam compared to other factors in the author's model.

Innovative capacity strongly impacts entrepreneurial behavior through students' entrepreneurial intention (0.54), showing that innovation capacity is an indispensable competency in the entrepreneurial process. Innovative capacity helps students make a difference, promoting enterprising thinking. That is also consistent with the view with that the ability to identify opportunities in innovation is one of the key factors that promote entrepreneurial behavior. Successful entrepreneurs are often able to see gaps in the market and exploit them to create new products or services.

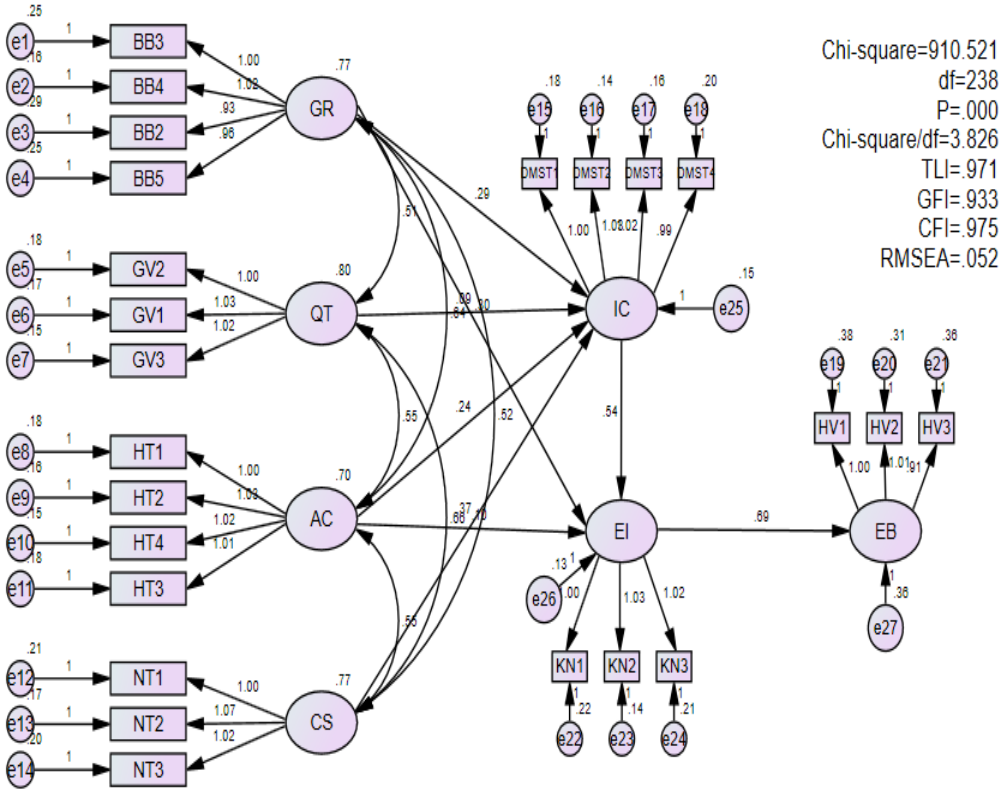

Figure 3.
Results of critical structural model (SEM) testing.

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Table 4.
Table to test the relationship between concepts in the model (Not standardized).

Impact factor			Estimate	SE	CR	P	Hypothesis
IC	<---	GR	0.294	0.041	7.199	***	Accept
IC	<---	QT	0.094	0.035	2.699	0.007	Accept
IC	<---	AC	0.241	0.048	5.025	***	Accept
IC	<---	CS	0.367	0.038	9.756	***	Accept
EI	<---	IC	0.544	0.036	15.189	***	Accept
EI	<---	AC	0.103	0.046	2.230	0.026	Accept
EI	<---	GR	0.299	0.042	7.089	***	Accept
EB	<---	EI	0.695	0.032	21.627	***	Accept

4.5. Test the reliability of estimates using Bootstrap

Bootstrap test results are considered a repeated sampling method with replacement, in which the initial sample plays the role of the crowd. In this study, the authors used the Bootstrap method with several repeated samples of N = 500 to test the stability of the estimates. The analyzed data in Table 5 shows that the values |CR| all < 1.96; infer P > 5%, the deviation is very small, not statistically significant at the 95% confidence level. The conclusion is that the estimated model can be reliable, and this is also the expected result when analyzing a linear structural model (SEM). Factors that influence students' entrepreneurial behavior are Grit (GR), Quality of teaching (QT), Absorptive capacity (AC), Cognitive of Student (CS), Competence innovation (IC), and Entrepreneurial intention (EI).

Table 5.
Bootstrap test results.

Parameters			SE	SE-SE	Mean	Bias	SE-Bias	CR
IC	<---	GR	0.052	0.003	0.294	0	0.004	0.0
IC	<---	QT	0.062	0.003	0.094	-0.002	0.004	-0.5
IC	<---	AC	0.065	0.003	0.228	-0.003	0.005	-0.6
IC	<---	CS	0.07	0.004	0.374	0.006	0.005	1.2
EI	<---	IC	0.066	0.003	0.556	0.004	0.005	0.8
EI	<---	AC	0.063	0.003	0.094	-0.006	0.004	-1.5
EI	<---	GR	0.058	0.003	0.306	0.003	0.004	0.8
EB	<---	EI	0.035	0.002	0.705	-0.001	0.002	-0.5

5. Conclusion and Recommendations

In the modern business context with fierce competition, the ability to innovate has become a critical factor in helping individuals and businesses stand out and develop sustainably. The ability to innovate also plays an essential role in promoting the entrepreneurial spirit in students. Creative business ideas bring personal benefits and contribute to creating jobs and fostering economic development. Students with entrepreneurial thinking and innovation abilities will become future business leaders, developing creative business strategies, and contributing to sustainable economic growth.

Therefore, the study has identified factors and the level of impact of each factor on students' entrepreneurial behavior. Thus, to improve students' entrepreneurial behavior, it is necessary first to improve the following aspects:

For the Government: (1) The Government needs to create policies to support startups, such as reducing taxes, providing preferential loans, and creating favorable conditions for startups to access funding sources and resources invested. In particular, the government needs to accelerate reforms to resolve legal barriers to domestic investment funds while simplifying procedures to create favorable conditions for foreign investment in Vietnam and vice versa. (2) Establish and manage startup funds to financially support students' startup projects, helping them have the initial capital to implement their

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ideas. (3) Developing a startup ecosystem: Building and developing a startup ecosystem, including business incubators, startup support centers, and co-working spaces, so that students have a favorable environment to develop ideas. (4) Enhance education and training: Invest in education and training programs on entrepreneurship, helping students have the necessary knowledge and skills to start and develop businesses.

For Universities: (1) The official curriculum needs to be related to entrepreneurship so that students can learn skills and knowledge related to entrepreneurship. (2) Organize startup idea competitions, seminars, and events to encourage student participation and practical experience and connect them with other startups, successful investors, and businesspeople. (3) Build startup support centers: Establish startup support centers at the school to provide consulting, legal support, and necessary services for students when starting a business. (4) Cooperation with businesses: Create opportunities for students to approach businesses through internship programs, business visits, and collaborative projects, helping them better understand the market and have practical experience.

For students: To start a successful business, the role of students themselves is a key factor when students persistently absorb knowledge in learning and imparting from teachers. Instructors help students achieve their goals. Therefore, students must (1) Actively learn and practice: Students must actively seek and participate in courses, seminars, and events about entrepreneurship to improve their knowledge and skills. (2) Participate in startup activities: Participate in competitions, startup clubs, and related activities to gain experience and build a network of relationships. (3) Seek and take advantage of opportunities: Always seek and take advantage of internship opportunities, participate in projects, and cooperate with businesses to gain practical experience and expand knowledge. And especially (4) Developing creative thinking and problem-solving skills: Focus on developing creative thinking, problem-solving skills, and the ability to adapt to change, which is essential to help them succeed in their entrepreneurial journey.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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