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Ta Huy Hung (Vietnam)

# REVISITING THE LINKAGE BETWEEN ENTREPRENEURIAL INTENTION AND BEHAVIOR IN A MEDIATED MODEL: EVIDENCE FROM VIETNAMESE LOGISTICS INDUSTRY STUDENTS

## Abstract

Young entrepreneurs are crucial participants in a country's entrepreneurial ecosystem. This study analyzes the effects of entrepreneurial motivation and perceived university support on the entrepreneurial intention and behavior of Vietnamese students. A survey was conducted with 831 students who are studying logistics and supply chain management programs. Smart PLS and the Sobel test were utilized to validate the proposed hypotheses. The results indicate that financial motivation has a positive impact on student's entrepreneurial intention and entrepreneurial behavior. Conversely, the desire for autonomy motivation has a direct negative impact on entrepreneurial behavior. Furthermore, perceived university support exerts a strong direct influence on student's entrepreneurial intention and entrepreneurial behavior. Notably, entrepreneurial intention partially mediates the relationship between entrepreneurial motivation and entrepreneurial behavior and the relationship between perceived university support and entrepreneurial behavior. The research implications suggest that policymakers should prioritize assessing students' entrepreneurial motivations before implementing entrepreneurship training programs. Additionally, universities should provide appropriate entrepreneurial support to students throughout their entrepreneurial behavior and their entrepreneurial careers.

## Keywords

entrepreneurship, entrepreneurial intention, entrepreneurial behavior, entrepreneurial motivation, perceived university support, intention-behavior link

## JEL Classification

L26, I29, L31

## INTRODUCTION

Entrepreneurship is crucial in driving the economic and social development of any country. In Vietnam, a developing nation, the government places significant emphasis on fostering entrepreneurship among young people, particularly students, to cultivate a generation of knowledgeable entrepreneurs who can make valuable contributions to national progress. To support this strategic initiative, the Ministry of Education and Training has implemented university entrepreneurship training programs for all students and actively encourages student entrepreneurial activities. Since the Doi Moi period, Vietnam has experienced a significant shift in its economic structure, transitioning from an agriculture-based economy to one that is service-oriented. Within this transformation, the logistics industry has emerged as a vital contributor to economic growth, accounting for approximately 4-5% of the country's GDP and providing employment for around 1.5 million workers, constituting 2% of the total workforce. Beyond its role in job creation, the logistics industry offers substantial start-up opportunities for young people, particularly students specializing in

this field. Recognizing these opportunities, universities in Vietnam have been proactive in providing students with avenues to pursue their start-up ideas both during their studies and after graduation. However, despite these efforts, a considerable gap remains between the start-up ideas generated by students in the logistics industry and their actual entrepreneurial behavior. The Global Entrepreneurship Monitor report indicates a notable increase in start-up intentions in Vietnam, rising from 18.2% to 25% between 2014 and 2017. However, the data also highlight a relatively low conversion rate from entrepreneurial intention to actual behavior, with only about 10% of individuals engaging in entrepreneurial activities within three months. Therefore, it is essential to consider the role of students' entrepreneurial motivation in effectively leveraging university support to enhance both entrepreneurial intention and behavior.

## 1. LITERATURE REVIEW AND HYPOTHESES

Entrepreneurship assumes a crucial role in driving economic development (Cui & Bell, 2022; Doanh et al., 2021). It fosters the establishment and growth of businesses to attain overarching objectives. The creation of businesses, particularly among the younger generation, has garnered significant attention as a key strategy for ensuring sustainable business development in each country (Nguyen et al., 2019). Notably, entrepreneurship has become an early career choice for students (Passavanti et al., 2023).

Entrepreneurship involves spotting opportunities, seizing them, and helping other business owners establish new trade opportunities (Prajapati, 2019; Pribadi et al., 2023). According to A. Badeslecu and D. Badeslecu (2013), the entrepreneurial sector is becoming more and more important in promoting innovation, economic growth, and the creation of jobs. Conscious intention is the foundation of entrepreneurial development (Linan et al., 2011). Entrepreneurial intention is the state in which an individual has the desire to advance their career or launch a new venture (Chen & Tian, 2022). Entrepreneurial intention is the desire to start a business by bringing new ideas to market and implementing them (Garaika, 2020). The goal of entrepreneurship is to fulfill people's desire to engage in a particular behavior by choosing to become an entrepreneur.

Entrepreneurial intentions are critical precursors of entrepreneurial action and are defined as the resolve to launch a new company (Krueger & Carsrud, 1993). Discovery, evaluation, and exploitation of an opportunity are the definitions of en-

trepreneurship behavior according to Shane and Venkataraman's (2000) pioneering concept. Any kind of behavior is made up of a variety of decisions people make in response to their own preferences and outside circumstances. Van Gelderen et al. (2018) showed that students' entrepreneurial intentions and, consequently, their entrepreneurial behavior are influenced by their attitude toward entrepreneurship, which is consistent with the underlying theory of planned behavior. To put it another way, entrepreneurial behavior taken with the objective of launching a new business is deliberate rather than accidental and is dictated by students. The degree of sincerity catches the driving forces behind people's actions and additionally shows the levels of effort that people are ready to put in (Bird, 1988). Previous empirical research supports the predictive power of intention on future behavior across a variety of research fields, including entrepreneurship (Shirokova et al., 2016).

According to Alam et al. (2019), Fayolle et al. (2014), and Purwana and Suhud (2018), entrepreneurial motivation has an impact on entrepreneurial intention and entrepreneurial behavior. Entrepreneurial motivation constitutes a crucial element in translating entrepreneurial intention into actual behavior (Segal et al., 2005). Numerous approaches exist for studying entrepreneurial motivation, including pull and push theories (Segal et al., 2005), drive theories, and incentive theories. Moreover, Carsrud and Brännback (2011) identify two primary factors within the theory of entrepreneurial motivation: internal factors and external factors. Internal motivations for entrepreneurship encompass survival goals, achievement for success, and the influence of fear and stress, driving individuals to take action. External environmental factors align more closely with pull theory, in-

corporating financial motivation and achievement motivation. Thus, entrepreneurial motivation encompasses internal or external factors that propel individuals with the intent to start a business, motivating them to engage in entrepreneurial behavior to meet internal needs and capitalize on opportunities or mitigate external risks.

Entrepreneurial motivation serves as the driving force behind entrepreneurial intention and the subsequent execution of business activities. It enables individuals to channel the necessary energy and resources toward formulating intentions for entrepreneurial behavior, aiming to achieve specific goals (Barba-Sánchez & Atienza-Sahuquillo, 2018). According to Barba-Sánchez and Atienza-Sahuquillo (2018), entrepreneurial behavior manifests at both rational and motivational levels. The rational level is influenced by objective environmental factors that either bolster or impede entrepreneurial intention and behavior. Simultaneously, entrepreneurial motivation is intertwined with subjective motives arising from the expectations of individuals aspiring to initiate a business. Barba-Sánchez and Atienza-Sahuquillo (2018) posit three crucial components of entrepreneurial motivation: financial motivation, the desire for autonomy, and the pursuit of achievement. These motivations significantly impact entrepreneurial behavior among students, serving as a foundation for engaging in entrepreneurial activities such as establishing businesses, implementing innovative initiatives, or creating new ventures.

Perceived university support encompasses policies, practices, and formal programs within universities designed to cultivate students' entrepreneurial intentions (Wegner et al., 2020). Saeed et al. (2015) and Sim et al. (2023) highlighted three crucial components of perceived university support for entrepreneurship: perceived education support, perceived business development support, and perceived concept development support. These forms of support contribute to students' confidence in acquiring the necessary skills to initiate entrepreneurial ventures. The university serves as a pivotal institution in nurturing students' entrepreneurial intentions by providing them with essential knowledge, skills, and a conducive environment for realizing diverse entrepreneurial aspirations

(Mustafa et al., 2016). Perceived education support plays a significant role in enhancing students' understanding, critical thinking, and cognitive abilities related to entrepreneurship, thereby fostering and sustaining their intention to embark on entrepreneurial behavior (Sim et al., 2023). Sim et al. (2023) argue that such support not only improves individuals' confidence in their entrepreneurial abilities but also stems from practical experiences gained through hands-on learning. Consequently, perceived education support becomes a fundamental aspect that enhances student's entrepreneurial intention.

Concept development support aids students in nurturing and refining their entrepreneurial intention. Universities facilitate this process by providing opportunities for students to engage in idea exchanges with experts through competitions, presenting a chance to further develop and potentially commercialize their start-up ideas (Choi et al., 2018). This support is instrumental in enhancing the feasibility of students' entrepreneurial intention, a critical component of entrepreneurial behavior (Vuorio et al., 2018).

Perceived business development support aids students in securing investments for testing and refining their start-up ideas. This assistance extends to fostering connections between students and advisors, along with industry experts, enabling students to enhance their business models and sales strategies as they embark on entrepreneurial behavior. Furthermore, this support manifests in leveraging the university's reputation to facilitate students in establishing businesses within the university environment, known as spin-offs (Mustafa et al., 2016; Shahid et al., 2018).

In such a context, this study aims to evaluate the impact of entrepreneurial motivation and perceived university support on the entrepreneurial intention and behavior of logistics students in Vietnam. According to the literature review, the hypotheses are:

- H1: *Entrepreneurial motivation positively affects entrepreneurial intention.*
- H2: *Entrepreneurial motivation positively affects entrepreneurial behavior.*

- H3: *Perceived university support for entrepreneurship positively affects entrepreneurial intention.*
- H4: *Perceived university support for entrepreneurship positively affects entrepreneurial behavior.*
- H5: *Entrepreneurial intention positively affects entrepreneurial behavior.*
- H6: *Entrepreneurial intention mediates the relationship between entrepreneurial motivation and entrepreneurial behavior.*
- H7: *Entrepreneurial intention mediates the relationship between perceived university support and entrepreneurial behavior.*

non-public (27.7%). The total number of students enrolled was 2,145,426, with 1,728,856 attending public universities. The study selected students to participate in the survey who met one of the following criteria:

- Those who had a start-up project presented at start-up competitions at all levels of the university where the student is enrolled;
- Students who participated in the university's start-up competition;
- Students engaged in practical start-up activities facilitated by the university; and
- Students who were involved in practical start-up activities (new venture) or had registered to establish a business and participated in the operation of a business organization.

## 2. METHODOLOGY

The study employed a multi-stage stratified random sampling method to select 831 students from 16 Vietnamese universities who are majoring in logistics management, supply chain management, and operational management. The study chose the logistics major because Vietnam's logistics service sector experienced significant advancements between 2017 and 2023, driven by strong economic growth, the redirection of international capital flows, and the country's improved position in the global supply chain. In the initial phase, universities in both the North and South were selected, with a division by Quang Tri province, following the approach employed by Doanh (2021). Data from the Ministry of Education and Training in 2022 indicated that Vietnam had 242 universities, of which 175 were public (72.3%) and 67 were

This sample is suitable for the research goal as these respondents have identified a clear intention to start a business, have participated in entrepreneurship training, and are engaged in certain entrepreneurial behaviors. Additionally, they have the most accurate experiences with perceived university support, making the data collected from this group suitable for achieving the research goal. Students were invited to participate in providing information and were given clear explanations about the research objectives. Personal student data are treated as confidential and utilized solely for research purposes.

The scales utilized in this study (Appendix A) have been previously developed and employed in earlier research. The entrepreneurial motivation scale applied in this study was crafted by Barba-Sánchez

**Table 1.** Personal characteristics of respondents (*n* = 831)

Characteristics	Category	Frequency	Percentage
Gender	Male	586	70.52%
	Female	245	29.48%
Years of study	The first year of college	11	1.32%
	The second year of college	67	8.06%
	The third year of college	342	41.16%
	The final year of college	411	49.46%
Type of entrepreneurship	Entrepreneurial project	267	32.13%
	Entrepreneurial competitions	428	51.50%
	Entrepreneurial new venture	87	10.47%
	Entrepreneurial business partner	49	5.90%



and Atienza-Sahuquillo (2018) and comprises three components. The need achievement includes four items. The need for independence segment includes six items. Financial motivations encompass five items. Perceived university support scale includes three constructs with 13 items developed by Saeed et al. (2015) and utilized by Sim et al. (2023); perceived education support with six observed variables; perceived business development support with four items, and perceived concept development support with three items. Entrepreneurial intention consists of six items from Liñán and Chen (2009). Entrepreneurial behavior involves ten items cited from the list of start-up activities adopted from the Global Entrepreneurship Monitor and Panel Study of Entrepreneurial Dynamics (PSED). These items have been previously used by Shirokova et al. (2016).

For data analysis, regression analysis is a critical tool in research for elucidating the relationships between various variables. The study begins by evaluating the reliability of the scales using Cronbach's alpha and conducts an EFA to thoroughly assess the internal consistency of the constructs within the conceptual framework. All constructs satisfy the required standards, with Cronbach's alpha values exceeding 0.63 (Nunnally & Bernstein, 1994). Additionally, each observed variable (item) demonstrates an adjusted overall correlation greater than 0.3 (Hair et al., 2010). After completing the EFA, the study reexamines the constructs in the research model to analyze the impact of factors using Partial Least Squares (PLS) software (Smart PLS, version 2). Moreover, the study investigates indirect relationships through Sobel *z*-test analysis.

### 3. RESULTS

Cronbach's alpha values were calculated, and the initial analysis led to the removal of items MAC3 and MAU1 due to their item-total correlations falling below 0.3. After excluding these items, Cronbach's alpha values for all remaining constructs exceeded 0.8. Additionally, the corrected item-total correlations for each remaining item were higher than 0.3. All variables in the research framework were then subjected to EFA using Principle Axis Factoring with Promax

rotation. The EFA results revealed that the five variables met the necessary criteria, with a KMO value of 0.966, a significant Bartlett's Test of Sphericity (Sig. = 0.000 < 0.05), an Eigenvalue of 1.173 (> 1), and a cumulative variance of 66.621% (> 50%). The analysis further identified two distinct components within entrepreneurial motivation: financial motivation (six items) and achievement and autonomy motivation (eight items). Consequently, the validity of all variables was confirmed after removing the items that did not meet the criteria.

In the next stage, confirmatory factor analysis was utilized, and the structural model was examined for the research constructs. Hair et al. (2010) suggested that standardized factor loading should be higher than 0.7; standardized factor loadings range from 0.732 to 0.917. Convergent validity in the CFA is supported by examining CR and AVE. As shown in Table 2, the CR values range from 0.917 to 0.970, and the AVE values range from 0.614 to 0.762, both of which exceed the recommended thresholds. According to Hair et al. (2010), CR should be greater than 0.700, and AVE should be higher than 0.500. Discriminant validity is assessed using the latent variable correlation matrix, where the diagonal elements represent the square root of AVE and the off-diagonal elements represent the correlations among the measures (Table 2). Discriminant validity is considered satisfactory when the diagonal elements are larger than the off-diagonal elements in the same row and column (Fornell & Larcker, 1981).

Table 2 shows that all of the questionnaire items have factor loadings more than 0.6 (0.732–0.917). Ultimately, all research variables have Cronbach's alpha values above 0.7 (0.895–0.965). All of these surpass the widely acknowledged recommendations by Hair et al. (2017). Therefore, all questionnaire items show a high degree of internal consistency, and additional research should be done on their components. Additionally, all CR values were between 0.917 and 0.970, satisfying greater than 0.7 criteria and validating the reliability of the measurement (Hair et al., 2017). The AVEs ranged from 0.614 to 0.762, greater than the specified benchmark of 0.5 and confirmed the satisfactory reliability and convergent validity of the research constructs (Hair et al., 2017).

**Table 2.** Reliability and validity of the constructs

No.	Constructs and items	Loadings	Cronbach's Alpha	Composite reliability	Average variance extracted
<b>Motivation for Autonomy</b>			<b>0.895</b>	<b>0.917</b>	<b>0.614</b>
1	Develop professionally and personally (MAC2)	0.762			
2	Cover my personal needs (MAU2)	0.754			
3	Have good work relations (MAU3)	0.800			
4	Be professionally successful (MAU4)	0.828			
5	Gain social prestige (MAU5)	0.822			
6	Be independent (MAU6)	0.780			
7	Be "the boss" (MAU7)	0.732			
<b>Financial Motivation</b>			<b>0.911</b>	<b>0.931</b>	<b>0.692</b>
1	Be the best at everything I do (MAC1)	0.820			
2	Achieve political and social power (MFI1)	0.809			
3	Earn a lot of money (MFI2)	0.824			
4	Be socially accepted (MFI3)	0.816			
5	Have job stability (MFI4)	0.869			
6	Be financially secure (MFI5)	0.852			
<b>Perceived University Support</b>			<b>0.962</b>	<b>0.967</b>	<b>0.690</b>
1	My university offers elective courses on entrepreneurship (EduS1)	0.834			
2	My university offers project work focused on entrepreneurship (EduS2)	0.848			
3	My university offers internships focused on entrepreneurship (EduS3)	0.853			
4	My university offers a bachelor's or master's study on entrepreneurship (EduS 4)	0.799			
5	My university arranges conferences/workshops on entrepreneurship (EduS 5)	0.784			
6	My university brings entrepreneurial students in contact with each other (EduS 6)	0.833			
7	My university creates awareness of entrepreneurship as a possible career choice (ConS1)	0.844			
8	My university motivates students to start a new business (ConS2)	0.802			
9	My university provides students with ideas to start a new business (ConS3)	0.870			
10	My university provides students with the knowledge needed to start a new business (ConS4)	0.825			
11	My university provides students with the financial means to start a new business (BuS1)	0.822			
12	My university uses its reputation to support students who start a new business (BuS2)	0.850			
13	My university serves as a lead customer of students who start a new business (BuS 3)	0.828			
<b>Entrepreneurial Intention</b>			<b>0.931</b>	<b>0.946</b>	<b>0.744</b>
1	I am ready to do anything to be an entrepreneur (Inte1)	0.805			
2	My professional goal is to become an entrepreneur (Inte2)	0.852			
3	I will make every effort to start and run my own firm (Inte3)	0.864			
4	I am determined to create a firm in the future (Inte 4)	0.887			
5	I have very seriously thought of starting a firm (Inte 5)	0.888			
6	I have a strong intention to start a firm someday (Inte 6)	0.876			
<b>Entrepreneurial Behavior: I have...</b>			<b>0.965</b>	<b>0.970</b>	<b>0.762</b>
1	Discussed product or business idea with potential customers (Beha1)	0.839			
2	Collected information about markets or competitors (Beha 2)	0.871			
3	Written a business plan (Beha3)	0.875			
4	Started product/service development (Beha4)	0.917			
5	Started marketing or promotion efforts (Beha5)	0.916			
6	Purchased material, equipment, or machinery for the business (Beha6)	0.900			
7	Attempted to obtain external funding (Beha7)	0.887			
8	Applied for a patent, copyright, or trademark (Beha8)	0.878			
9	Registered the company (Beha9)	0.838			
10	Sold product or service (Beha10)	0.805			

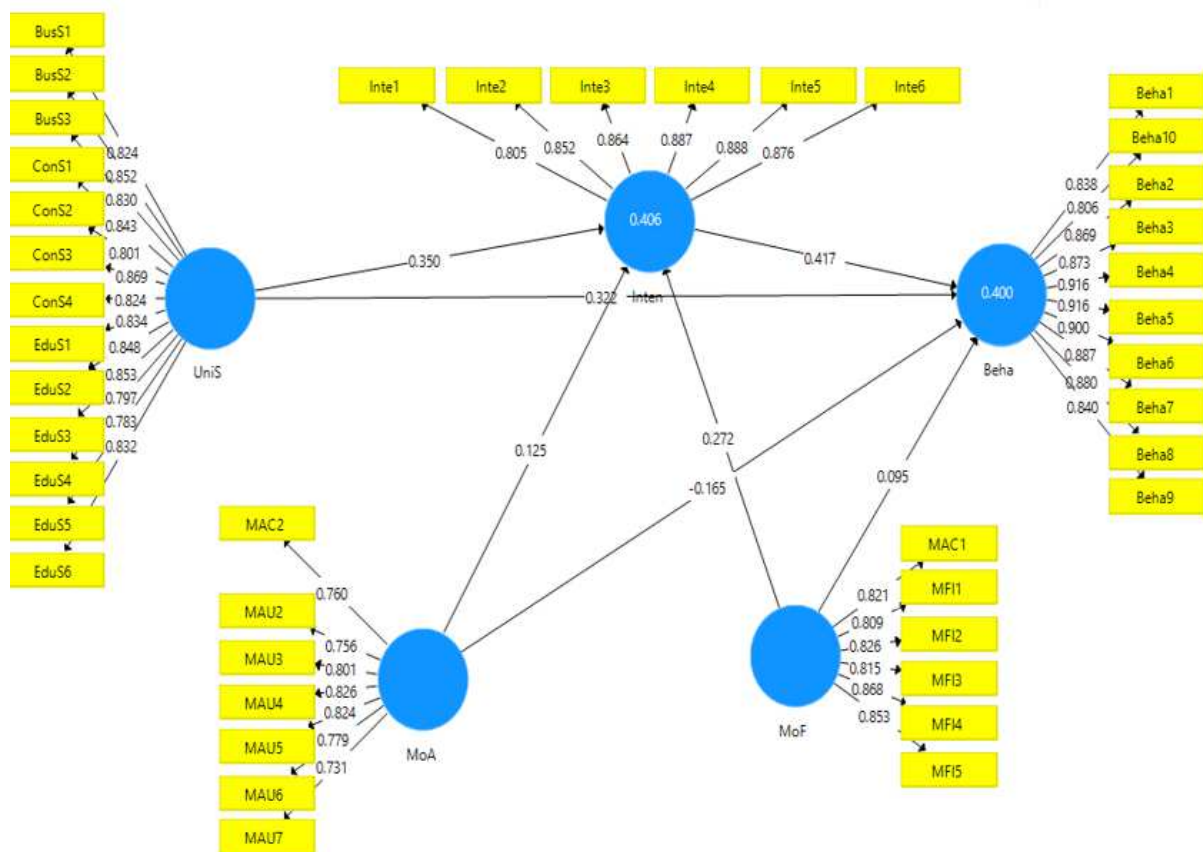
**Table 3.** Hypothesis testing

Hypothesis	$\beta$	Se	t-statistics	p-value	Conclusion
<b>H1. Entrepreneurial motivation → Entrepreneurial intentions</b>					
Financial Motivation → Entrepreneurial intentions	0.272	0.047	5.730	0.000	Accepted and Significant
Motivation for Autonomy → Entrepreneurial intentions	0.125	0.042	2.977	0.035	
<b>H2. Entrepreneurial motivation → Entrepreneurial behavior</b>					
Financial Motivation → Entrepreneurial behavior	0.096	0.042	2.302	0.067	Rejected
Motivation for Autonomy → Entrepreneurial behavior	-0.165	0.041	3.990	0.000	Accepted
<b>H3. University support for entrepreneurship → Entrepreneurial intentions</b>					
University support for entrepreneurship → Entrepreneurial intentions	0.349	0.038	9.305	0.000	Accepted and Significant
<b>H4. University support for entrepreneurship → Entrepreneurial behavior</b>					
University support for entrepreneurship → Entrepreneurial behavior	0.321	0.035	9.216	0.000	Accepted and Significant
<b>H5. Entrepreneurial intention → Entrepreneurial behavior</b>					
Entrepreneurial intention → Entrepreneurial behavior	0.418	0.039	10.760	0.000	Accepted and Significant

Note: \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ .

Table 3 and Figure 1 demonstrate the relationship among research constructs. The research findings confirm that financial motivation and motivation for autonomy positively affect entrepreneurial intention ( $\beta = 0.272$ ,  $t$ -value = 5.730,  $p$ -value < 0.001;  $\beta = 0.125$ ,  $t$ -value = 2.977,  $p$ -value < 0.005, respectively);  $t$ -value higher than 1.96 indicates

that the results are significant. Thus, H1 and H2 are accepted. The research findings confirm that financial motivation does not directly affect entrepreneurial behavior ( $p$ -value > 0.005). However, motivation for autonomy negatively affects entrepreneurial behavior ( $\beta = -0.166$ ,  $t$ -value = 3.990,  $p$ -value < 0.001). Table 3 confirms that perceived



Note: UniS = Perceived University Support; MoA = Motivation for Autonomy; MoF = Financial Motivation; Inten = Entrepreneurial Intention; Beha = Entrepreneurial Behavior.

**Figure 1.** Result of the mediation model



university support positively affects entrepreneurial intention ( $\beta = 0.349$ ,  $t$ -value = 9.305,  $p$ -value < 0.001) and entrepreneurial behavior ( $\beta = 0.321$ ,  $t$ -value = 9.216,  $p$ -value < 0.001). Thus, H3 and H4 are accepted. For the influence of entrepreneurial intention and entrepreneurial behavior, the research findings confirm that entrepreneurial intention positively affects entrepreneurial behavior ( $\beta = 0.418$ ,  $t$ -value = 10.760,  $p$ -value < 0.001).  $T$ -value higher than 1.96 indicates that the results are significant. Thus, H5 is accepted.

For the mediation test, this study applied two stages of Sobel’s statistical method test to evaluate the mediating role of entrepreneurial intention. MacKinnon et al. (2002) state that the following formula is used to calculate the  $z$ -test:

$$Z\text{-value} = \frac{a \cdot b}{\text{SQRT}(b^2 \cdot \text{SE}a^2 + a^2 \cdot \text{SE}b^2)}, \quad (1)$$

where  $a$  and  $b$  represent the path coefficients of the relationships between the mediator and the dependent variables and the independent and mediator variables, respectively;  $SEa$  and  $SEb$  stand for the standard errors ( $SE$ ) and  $SEa$  and  $SEb$ , respectively, for the relationships between the mediator and the dependent variables (Iacobucci, 2012). The mediation effect is significant if the  $z$ -test is greater than the  $t$ -value = 1.96 for two-tailed tests with  $\alpha = .05$  (Sobel, 1982).

Table 4 shows the mediating role of entrepreneurial intention on the relationship between financial motivation and motivation for autonomy and entrepreneurial behavior ( $z = 3.0138$ ,  $p < 0.001$ ;  $z = 5.175$ ,  $p < 0.001$ , respectively). Entrepreneurial intentions partially mediate the relationship between entrepreneurial motivation and entrepreneurial

behavior. Thus, H6 is accepted. Additionally, for the mediation role of entrepreneurial intention on the relationship between perceived university support and entrepreneurial behavior ( $z = 7.474$ ,  $p < 0.001$ ), entrepreneurial intention partially mediates the relationship between perceived university support and entrepreneurial behavior. Thus, H7 is accepted.

## 4. DISCUSSION

Entrepreneurial goals stem from internal intentions and desires, which evolve into ideals and the determination to achieve them rather than being driven by external pressure or coercion (Pribadi et al., 2023). The research results indicate that the entrepreneurial motivation of students has a positive relationship with entrepreneurial intention, including both financial motivation and motivation for autonomy. Research results confirm the significant role of entrepreneurial motivation in asserting one’s desires and transforming them into entrepreneurial intentions. The findings of this study among Vietnamese students align consistently with the results by van Gelderen (2016) and Barba-Sánchez and Atienza-Sahuquillo (2018). However, the research results reveal an intriguing observation when compared with Barba-Sánchez and Atienza-Sahuquillo (2018), who found the positive impact of motivation for autonomy on entrepreneurial intention. This study found a negative correlation between motivation for autonomy and entrepreneurial behavior among students. Nevertheless, upon examining the mediating role of entrepreneurial intention between motivation for autonomy and entrepreneurial behavior, this current study identified a positive relationship emerging. This suggests that the mediating influ-

**Table 4.** The mediation effect by the Sobel test

Path	a	b	SE <sub>a</sub>	SE <sub>b</sub>	z-test	Conclusion
H6. Entrepreneurial motivation → Entrepreneurial intentions → Entrepreneurial behavior						Partial mediation
Financial motivation → Entrepreneurial intentions → Entrepreneurial behavior	0.125	0.399	0.040	0.035	3.0138***	
Motivation for autonomy → Entrepreneurial intentions → Entrepreneurial behavior	0.273	0.399	0.047	0.035	5.175***	
H7. Perceived university support for entrepreneurship → Entrepreneurial intentions → Entrepreneurial behavior	0.349	0.399	0.036	0.035	7.474***	Partial mediation

Note: \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$ .

ence of entrepreneurial intention transforms the relationship from negative to positive, indicating a link from motivation for autonomy to entrepreneurial intention and, consequently, to entrepreneurial behavior.

Furthermore, the research findings highlight the positive significant impact of students' financial motivation on entrepreneurial behavior. This external motivational factor is observed to strongly impact both entrepreneurial intention (Barba-Sánchez & Atienza-Sahuquillo, 2018) and behavior. Such results accentuate the motivational role of financial considerations in driving students toward entrepreneurial pursuits. However, if students' motivation to engage in entrepreneurial activities is solely driven by financial objectives, it can yield various effects on entrepreneurial behavior. Conversely, intrinsic entrepreneurial motivation, derived from a desire for autonomy in work or the aspiration to achieve accomplishments, exhibits a counterproductive impact on entrepreneurial behavior. The divergent effects of motivation for autonomy and entrepreneurial behavior can be attributed to potential losses in the event of unsuccessful entrepreneurial endeavors, which in turn could diminish entrepreneurial motivation. Motivation for autonomy represents a student's internal drive, where a higher degree of internal motivation correlates with an increased inclination toward entrepreneurial ventures, primarily due to its direct impact on financial resources. Additionally, it is characterized by an inconsistency in goal alignment and the behavior associated with goal implementation. The execution of entrepreneurial behavior requires a dedicated commitment and effort to achieve entrepreneurial goals. Greater intrinsic motivation necessitates students to be more contemplative and cautious in executing entrepreneurial activities.

The research results reveal a robust correlation between entrepreneurial intention and entrepreneurial behavior among students, underscoring

a causative linkage between these aspects within the Vietnamese context. These findings support Duong (2022) and Shirokova et al. (2016). This insight presents valuable opportunities for educational institutions to nurture entrepreneurial intention among students, thereby fostering practical entrepreneurial behavior in the future.

The analysis underscores the crucial mediating role of entrepreneurial intention as an intermediary between entrepreneurial motivation and entrepreneurial behavior. This highlights the pivotal role of entrepreneurial intention in the transformative process bridging entrepreneurial motivation and resultant behavior. The entrepreneurial intention mechanism serves to bring about change and mitigate the adverse effects of autonomy and achievement motivation, ultimately yielding a positive impact on entrepreneurial behavior. Consequently, universities are urged to assess and scrutinize students' start-up concepts, aiding them in forming a precise and accurate understanding of their entrepreneurial motivations.

Research findings identify a direct link between perceived university support and both entrepreneurial intention and entrepreneurial behavior, which supported Saeed (2015) and Shirokova et al. (2016). Additionally, the confirmed partial mediation of entrepreneurial intentions serves to elucidate the connection between perceived university support and entrepreneurial behavior. This highlights the necessity for a time lag for perceived university support to translate into specific entrepreneurial actions within the university. Ministry of Education and Universities advocates for policies aimed at transforming universities into hubs for entrepreneurship and innovation. Additionally, it stresses the importance of recognizing the role of entrepreneurship within academic environments to foster a culture that encourages entrepreneurial initiatives, including the development of incubators to support start-ups on campus.

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## CONCLUSION

The study aims to elucidate the impact of entrepreneurial motivation and perceived university support on students' entrepreneurial intentions and behaviors. Data were collected from a sample of 831 entrepreneurial student across 16 universities in Vietnam. The results reveal that financial motivation and autonomy motivation positively influence students' entrepreneurial intentions. Interestingly, however,

motivation for autonomy has a negative impact on entrepreneurial behavior. The study also confirms that university support plays a crucial role in fostering both entrepreneurial intention and entrepreneurial behavior. Furthermore, the study highlights the mediating role of entrepreneurial intention in the relationship between financial motivation and entrepreneurial behavior, as well as between motivation for autonomy and entrepreneurial behavior. The findings indicate that recognizing perceived university support positively and significantly affects both entrepreneurial intention and behavior. In the context of Vietnam, identifying students' entrepreneurial motivation helps strengthen the perceived university support, enabling the transformation of students' entrepreneurial intentions into concrete actions. This study suggests examining the temporal aspects of entrepreneurial intention and behavior to better define learning objectives and enhance perceived university support. The findings provide valuable insights for universities and government agencies, suggesting a need to adapt and improve methods for teaching entrepreneurship to university students.

## AUTHOR CONTRIBUTIONS

Conceptualization: Ta Huy Hung.  
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## APPENDIX A

Table A1. Questionnaire

No.	Variable	Disagree → Completely agree				
<b>Entrepreneurial motivation</b>						
<b>I. Need independence</b>						
1	Feel satisfied with my work	1	2	3	4	5
2	Cover my personal needs	1	2	3	4	5
3	Have good work relations	1	2	3	4	5
4	Be professionally successful	1	2	3	4	5
5	Gain social prestige	1	2	3	4	5
6	Be independent	1	2	3	4	5
7	Be "the boss"	1	2	3	4	5
<b>II. Financial motivation</b>						
8	Achieve political and social power	1	2	3	4	5
9	Earn a lot of money	1	2	3	4	5
10	Be socially accepted	1	2	3	4	5
11	Have job stability	1	2	3	4	5
12	Be financially secure	1	2	3	4	5
<b>III. Need achievement</b>						
13	Be the best at everything I do	1	2	3	4	5
14	Develop professionally and personally	1	2	3	4	5
15	Be able to change my environment	1	2	3	4	5
16	Contribute to social well-being	1	2	3	4	5
<b>Perceived university support</b>						
<b>I. Education support – My university...</b>						
1	...offers elective courses on entrepreneurship	1	2	3	4	5
2	...offers project work focused on entrepreneurship	1	2	3	4	5
3	...offers internships focused on entrepreneurship	1	2	3	4	5
4	...offers a bachelor or master study on entrepreneurship	1	2	3	4	5
5	...arranges conferences /workshops on entrepreneurship	1	2	3	4	5
6	...brings entrepreneurial students in contact with each other	1	2	3	4	5
<b>II. Concept development support – My university...</b>						
1	...creates awareness of entrepreneurship as a possible career choice	1	2	3	4	5
2	...motivates students to start a new business	1	2	3	4	5
3	...provides students with ideas to start a new business	1	2	3	4	5
4	...provides students with the knowledge needed to start a new business	1	2	3	4	5
<b>III. Business development support – My university...</b>						
1	...provides students with the financial means to start a new business	1	2	3	4	5
2	...uses its reputation to support students who start a new business	1	2	3	4	5
3	...serves as a lead customer of students who start a new business	1	2	3	4	5
<b>Students' entrepreneurial intention</b>						
1	I am ready to do anything to be an entrepreneur	1	2	3	4	5
2	My professional goal is to become an entrepreneur	1	2	3	4	5
3	I will make every effort to start and run my own firm	1	2	3	4	5
4	I am determined to create a firm in the future	1	2	3	4	5
5	I have very seriously thought of starting a firm	1	2	3	4	5
6	I have a strong intention to start a firm someday	1	2	3	4	5
<b>Student entrepreneurial behavior – I have...</b>						
1	Discussed product or business idea with potential customers	1	2	3	4	5
2	Collected information about markets or competitors	1	2	3	4	5
3	Written a business plan	1	2	3	4	5
4	Started product/service development	1	2	3	4	5
5	Started marketing or promotion efforts	1	2	3	4	5
6	Purchased material, equipment, or machinery for the business	1	2	3	4	5
7	Attempted to obtain external funding	1	2	3	4	5
8	Applied for a patent, copyright, or trademark	1	2	3	4	5
9	Registered the company	1	2	3	4	5
10	Sold product or service	1	2	3	4	5