Autonomy in the relationship between education and entrepreneurial intentions of female students

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ABSTRACT

Female students are a potential target that can help the economy develop and grow. Although women starting businesses has become popular, women still face many more challenges than men in the Vietnamese market. Some of them are autonomy, knowledge, and business motivation. Therefore, this study aims to evaluate the impact of entrepreneurship education on female students' entrepreneurial intention through business motivation. At the same time, the research also examines the moderating role of autonomy in relationships. Data were collected from 356 female students at universities in Vietnam and analyzed using SmartPLS 4 software. The results of the study accepted all hypotheses in the model. The study found that business motivation mediates the relationship between entrepreneurship education and entrepreneurial intention. Autonomy has a moderating role in the relationships in the model. Therefore, universities need to improve entrepreneurship education and autonomy so that female students have more motivation to start businesses, thereby increasing the rate of female entrepreneurs in Vietnam.

1. Introduction

Entrepreneurship is essential in solving economic and social problems (Audretsch & Moog, 2022). It is considered a core tool for achieving economic sustainability in countries such as China, Russia, Belgium, etc. (Roseline et al., 2020). However, entrepreneurship is a long and complicated process with many challenges, starting with the entrepreneurial intention (Elnadi & Gheith, 2021). Entrepreneurial intention is important in entrepreneurial activities (Doan et al., 2020). Without it, no entrepreneurial process will get done (Elnadi & Gheith, 2021). Therefore, entrepreneurial intention is a topic of interest to entrepreneurship researchers.

Entrepreneurship is a field that many women choose to participate in to prove their abilities (Guzman & Kacperczyk, 2019). They significantly promote economic development (Laudano et al., 2019). Nevertheless, in this field, they are always at a disadvantage compared to men (Guzman & Kacperczyk, 2019). Females face more disadvantages than men, such as motherhood responsibilities, family and social acceptance (Mauer et al., 2017). Besides, women also have difficulty raising capital from investors (Balachandra et al., 2021). In short, women face more challenges than men during the entrepreneurship process, which causes them to lose business motivation.

Business motivation carries the energy that encourages individuals to take action to achieve their own needs by opening a business (Mahendra et al., 2017). Some researchers

believe that it can be promoted through entrepreneurship education (Barba-Sánchez & Atienza-Sahuquillo, 2018). Hence, to improve women's participation in the field of entrepreneurship, effective entrepreneurship education programs must be applied (Al-Kwifi et al., 2020). Additionally, entrepreneurship education is the top choice to encourage the motivation to start a new project or business, especially for students (Hytti et al., 2010) because it has the role of providing fundamental theories and entrepreneurship concepts as well as thinking to become an entrepreneur and skills for students (Mahendra et al., 2017).

Besides entrepreneurship education, personality traits contribute positively to entrepreneurial intention (Bazkiaei et al., 2020). Therefore, among the research topics related to predicting entrepreneurial intention, the most prominent one mentioned is personality traits (Awwad & Al-Aseer, 2021). On the other hand, entrepreneurship has a long-standing assumption that individuals' unique personalities can predict their entrepreneurial intentions (Laouiti et al., 2022). One of those differences is that personality traits play an important role in forming entrepreneurial intentions in students (Adekiya & Ibrahim, 2016; Bazkiaei et al., 2020).

Personality characteristics from the perspective of the influence of autonomy in Self-Determination Theory (SDT) are one of the factors that strongly impact entrepreneurial intention. Self-determination theory is the leading theory for identifying motivation-related factors (Gilal et al., 2019). In research directions on the role of motivation in entrepreneurship, some studies use this theory to explain the process of creating business motivation (Boldureanu et al., 2020). The decision to focus the analysis on autonomy depends on evidence that it can be considered one of the motivating factors in entrepreneurial intentions (Şahin et al., 2019). However, there are few studies mentioning autonomy as a moderator of relationships in the process of forming entrepreneurial intentions in each person. The study examines autonomy as a moderating variable to fill this overlooked gap.

This study chose students as the research subjects because these are the subjects for whom universities provide advanced learning resources (Qazi et al., 2020) and opportunities to access entrepreneurship education with training courses on entrepreneurial skills and knowledge (Mei et al., 2020). So, they have a high chance of success in this field, but with the challenges that female entrepreneurs face. The research focuses on analyzing the entrepreneurial intentions of female students, who need to be provided with more support in entrepreneurship education to promote confidence and knowledge skills (Westhead & Solesvik, 2016) to enhance their business motivation towards the entrepreneurship sector.

This article aims to investigate the effects of autonomy in enhancing the role of entrepreneurship education on entrepreneurial intention. In addition, the study contributes to understanding how entrepreneurship education outcomes influence female students' business motivation. Additionally, by focusing on autonomy in the self-determination theory model and considering it as a moderating variable in the proposed model, this research illustrates an option when studying the impact of characteristics on entrepreneurial intention. This research is conducted as follows: First, this section presents the problem that needs to be researched. In the next section, we present the theoretical basis and hypotheses of the study. The measurements are presented in part three. Discussions and conclusions are offered in parts four and five.

2. Literature review

2.1. Entrepreneurial intention

Entrepreneurship activities are growing strongly and becoming increasingly attractive in many countries (Maseda et al., 2022). With its essential role in promoting innovation and

productivity, entrepreneurship has become a measure of an economy's prosperity. Entrepreneurship is considered a crucial factor that positively impacts countries' economic development and prosperity (Praag & Versloot, 2007). Entrepreneurship is a process of intentional and planned behavior (Bird & Jelinek, 1989). Starting a new business requires planning as one of the first steps in the process (Iakovleva et al., 2011). Intentions can indirectly explain why entrepreneurs intend to establish a business or organization before they seek an opportunity (Wang et al., 2016). Entrepreneurial intention is also defined as an individual's intention to start a business (Souitaris et al., 2007). Kuckertz and Wagner (2010) affirmed that entrepreneurial intention originates from recognizing opportunities and taking advantage of available resources and environmental support to create a business. Dohse and Walter's (2012) research has proposed a more concise and closer concept than previous studies on entrepreneurial intention, in which entrepreneurial intention is a state of mind in readiness to execute. Currently self-employed, creating jobs, or establishing a new business. Entrepreneurial intention within the scope of this article's research is also understood from the perspective of Dohse and Walter (2012).

2.2. Entrepreneurship education

Entrepreneurship is a phenomenon of worldwide interest, and its influence spans many fields (Cassia et al., 2014). Youth entrepreneurship is recognized as the key to the country's future success (Wilson et al., 2009). Developing entrepreneurship education in universities has become a priority for many countries worldwide, intending to train students to become the next generation of entrepreneurs (Dou et al., 2019; Lyons & Zhang, 2018). Entrepreneurial intention can be developed through education, not through the innate characteristics of the individual (Hyams-Ssekasi & Taheri, 2022). Many studies have shown the specific role of education in forming and developing entrepreneurial intentions (Ip et al., 2021). Liñán et al. (2011) verified that entrepreneurship education has a positive relationship with entrepreneurial intention; teacher entrepreneurship education is a means effective in inspiring students' intention to start a business (Ambad & Damit, 2016). Isaacs et al. (2007) define "entrepreneurship education" as the purposeful intervention of educators in imparting the knowledge and skills necessary for learners to survive and succeed in the business world.

2.3. Theory of motivation

Motivation has long been recognized as essential in understanding entrepreneurial behavior (Carsrud & Brännback, 2011; Carsrud et al., 2017). Motivation theories are rooted in the belief that behavior drives goal accomplishment (Deci & Ryan, 2000). The theory emphasizes the meaningful association between aims and performance.

The most effective performance appears to be achieved when goals are specific and challenging as they are used to evaluate performance and are linked to feedback on results and create commitment and acceptance. The motivational impact of goals can be influenced by moderating factors such as ability and self-efficacy (Lunenburg, 2011).

2.3.1. External motivation (Business motivation)

Extrinsic motivation involves expecting separable outcomes such as receiving money, pride, and prestige, or even avoiding unemployment. Extrinsic motivation is the motivation to work for something above and beyond the work itself, such as rewards or recognition from others (Deci et al., 1975; Deci & Ryan, 1985). Motivation explains effort and persistence through a specific action (Latham & Pinder, 2005). Business motivation plays a vital role in creating new organizations (Herron & Sapienza, 1992) and influencing the decision to start a

new business (Shane et al., 2003). According to Mahto and McDowell (2018), because entrepreneurship is an action-oriented phenomenon, it is significantly influenced by the motivation of the core actor, the entrepreneur. Johnson (1990) defines motivation as the desire or tendency to systematize, apply and master ideas or organizations as quickly and independently as possible. Schlepphorst et al. (2020) describe intentions as ambitions influenced by a series of motives leading to actual behavior. Accordingly, researchers believe education is important in developing entrepreneurial intention (Anwar et al., 2020; Anwar & Saleem, 2018; Fenton & Barry, 2011; Shapero & Sokol, 1982). According to Nabi et al. (2017), entrepreneurial intention is a direct consequence of entrepreneurship education (Liñán & Fayolle, 2015). Bae et al. (2014) argue that entrepreneurship education can shape an individual's attitude toward entrepreneurship, in which attitude is an essential antecedent of intention (Botha & Bignotti, 2016). Many researchers have noted a strong relationship between entrepreneurship education and the intention to undertake a new business due to the development of individuals' cognitive abilities and the increase in their entrepreneurial knowledge (Krueger & Brazeal, 1994; Souitaris et al., 2007). Another study found that female entrepreneurs demonstrate psychological characteristics such as creativity, risk-taking, achievement motivation, problem-solving, and determination, which constitute the driving factors for entrepreneurship (Singh & Sengupta, 1985). Other studies have shown that entrepreneurial motivation acts as a determinant of the development of entrepreneurial intention (Antonioli et al., 2016; Barba-Sánchez & Atienza-Sahuquillo, 2017; Lang & Liu, 2019; Nabi & Liñán, 2013; Solesvik, 2013).

H1: Entrepreneurship Education positively affects female students' entrepreneurial intention by mediating business motivation

2.3.2. Internal motivation

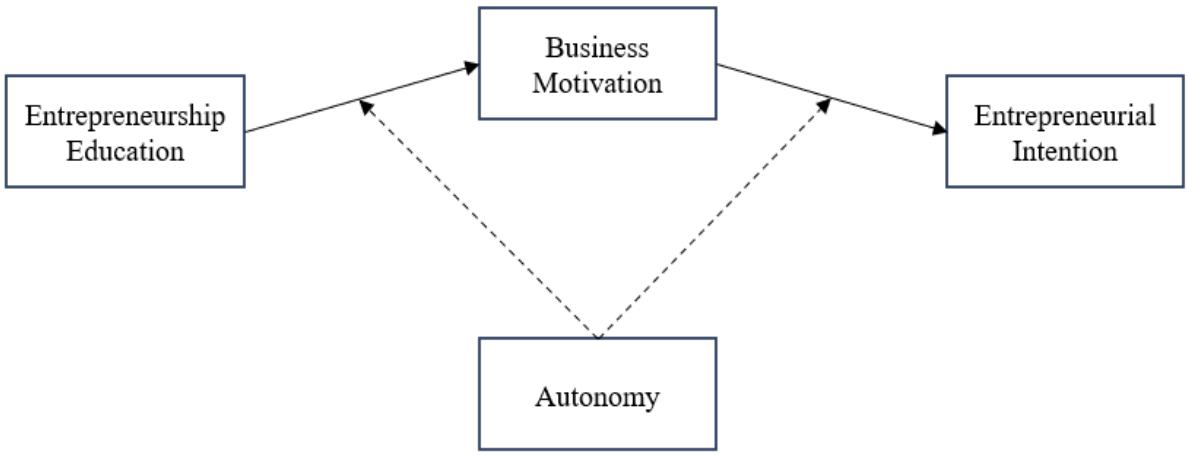
Intrinsic motivation often comes from the individual's sense of positive response to the task itself, such as interest, engagement, curiosity, satisfaction, or positive challenge (Amabile et al.,1996), used as a form of work reward. SDT views motivation as an essential social resource and self-regulation. Motivation is like an energy source, making people persevere and actively perform their behaviors (Deci & Ryan, 2000). Feelings of autonomy, competence, and relatedness to others are at the core of entrepreneurship research but, surprisingly, have received insufficient attention in the literature and are rarely explored in previous entrepreneurship research (Al-Jubari et al., 2019). SDT is a proposition of motivation and progress. SDT views motivation as the core of biological, cognitive, and social regulation and involves energy, direction, and persistence of activation and intention (Deci & Ryan, 2000). It posits that humans have an inherent drive for growth and achievement (Stone et al., 2009) and a naturally motivated tendency and willingness to learn, explore, acquire knowledge, and develop new skills (Ryan & Deci, 2000). Autonomy is a critical job design feature in the job characteristics model (Hackman, 1978). Hackman and Oldham (1980) state that job autonomy means the degree to which the job provides expressive advantages to the freedom, independence, and discretion in arranging work schedules and determining the procedures used to do it.

H2: Autonomy has a significant positive impact on the relationship between entrepreneurship education and business motivation

H3: Autonomy has a significant positive impact on the relationship between business motivation and entrepreneurial intention

Figure 1

Conceptual Framework



Source. The Authors

3. Methodology

3.1. Sampling procedures and participants

The data of the study were collected using the convenience sampling method. In order to achieve speed, cost savings, and accuracy when calculating response content, the Google Form platform is used, and the questionnaire will reach respondents through social media. To explain this approach, the project's survey object is students with exceptionally high access to the Internet (Priporas et al., 2020). Therefore, this method is reasonable for synthesizing data effectively. The survey was sent out over a period spanning from May 2023 to July 2023. Liñán and Chen (2009) believe that student samples should be used in research on entrepreneurial intentions because students are currently participating in the career choice process, and that creates favorable conditions for us to examine psychological processes before entrepreneurship innovates as an alternative to working for someone else. Tabachnick et al. (2007) said that 300 - 500 samples for SEM analysis bring excellent results. Therefore, to ensure objectivity in the research context, the number of samples collected for data analysis is 356 female students.

Table 1 shows the demographic characteristics of the students participating in the survey, including academic year (first/second/third/fourth-year student), type of university (public/private university), study location (northern Vietnam/the central of Vietnam/southern Vietnam), and university (64 universities stretch from north to south). Second-year students, public universities, and southern Vietnam dominate Table 1, showing that the information obtained from the survey significantly differs between factors.

Table 1

Demographic Characteristics

Construct	Category	Frequency	Percent (%)
Year	First-year student	41	11.5
	Second-year student	146	41.0
	Third-year student	94	26.4
	Fourth-year student or above	75	21.1

Construct	Category	Frequency	Percent (%)
Type of university	Public university	320	89.9
	Private university	36	10.1
Study location	Northern Vietnam	88	24.7
	The Central of Vietnam	10	2.8
	Southern Vietnam	258	72.5
University	Ho Chi Minh City Open University	80	22.5
	University of Economics Ho Chi Minh City	60	16.9
	Foreign Trade University	23	6.5
	Ho Chi Minh University of Banking	17	4.8
	University of Social Sciences and Humanities	13	3.7
	Ton Duc Thang University	13	3.7
	National Economics University	11	3.1
	Posts and Telecommunications Institute of Technology	7	2.0
	Dong Thap University	6	1.7
	University of Economics - University of Da Nang	4	1.1
	The University of Danang - VN-UK Institute for Research and Executive Education	3	0.8
	Van Lang University	3	0.8
	Others	116	32.6

Source. The data analysis

3.2. Measurement

The survey questionnaire is designed in two parts. Part (1) collects information about student demographics, and part (2) main question includes 17 observed variables constituting three independent variables and one dependent variable is constructed from research around the world, using a 5-point Likert scale, from 1 (Completely disagree) to 5 (Completely agree). Specifically, the scale "Autonomy" (A) belongs to Self-Determination Theory (SDT), including three questions inherited from Al-Jubari's research (2019). "Entrepreneurial Education" (EE) and "Entrepreneurial Intention" (EI) include four questions and five questions, respectively, designed from the proposal of Voda et al. (2019), while the "Business Motivation" (BM) scale is applied from the study of Do et al. (2022) measured with ten observed variables. Next, the questionnaire was edited and translated into Vietnamese to make the questions clear and easy for students to complete the survey.

Table 2

Summary of Measures

Variables	Items	Measurement
Autonomy	A1	"I feel free to do things my own way"
	A2	"I generally feel free to express my ideas and opinions"
	A3	"I really do what interests me"
Entrepreneurship Education	EE1	"University education encouraged me to develop creative business ideas "
	EE2	"University presents useful knowledge about business: technical (verbal and written communication, organizational skills)"
	EE3	"University presents useful knowledge about business: business management (planning, decision making, marketing, financial knowledge)"
	EE4	"University develops personality traits necessary for an entrepreneur (internal locus of control, proactiveness, innovativeness, risk-taking, persistence, adaptability to changes)"
Entrepreneurial Intention	EI1	"My professional goal is to become an entrepreneur"
	EI2	"I will make every effort to start and run my own firm"
	EI3	"I am determined to create a firm in the future"
	EI4	"I have very seriously thought of starting a firm"
	EI5	"I have the firm intention to start a firm someday"
Business Motivation	BM1	"I run my business to enjoy the excitement"
	BM2	"I run my business because I like challenges"
	BM3	"I run my business to develop myself"
	BM4	"I run my business to get recognized by the public"
	BM5	"I run my business to achieve high income"
	BM6	"I become an entrepreneur to improve my social status"
	BM7	"I start my business to accumulate my wealth"
	BM8	"I want to achieve higher social rank"
	BM9	"I want to be independent"
	BM10	"I become an entrepreneur to take over my family business"

Source. Own elaboration

3.3. Data Analysis

The study analyzed data using the Partial Least Squares-Structural Equation Modeling (PLS-SEM) method through Smart PLS 4 software. The PLS-SEM analysis takes two steps: evaluating the measurement and structural models. The measurement model assessment includes data validity (reliability, convergent, and discriminant validity). For structural model assessment, multicollinearity is checked using the Variance Inflation Factor (VIF), the model's explanatory power with the coefficient of determination (R^2), predictive power with cross-validated redundancy measure (Q^2), and the hypotheses through path and p-value coefficients.

4. Result and discussion

4.1. The measurement model assessment

First, this study tests the scale's reliability. Scale reliability is measured by two coefficients: Cronbach's Alpha (CA) and Composite Reliability (CR). In Table 3, Cronbach's Alpha coefficient ranges from 0.808 to 0.942, much higher than the threshold of 0.7 proposed by Sekaran and Bougie (2010), and the CR coefficient ranges from 0.886 to 0.956 for all more significant variables. Fornell and Larcker (1981) suggested that a CR coefficient of 0.70 or higher is considered reliable and acceptable. From there, it can be seen that the CA and CR values both exceed the required threshold, proving that the variables are reliable.

Table 3

Data Validity

Construct	CA	CR	Loading	AVE
A	0.808	0.886	0.830 - 0.862	0.723
BM	0.930	0.941	0.714 - 0.838	0.617
EI	0.942	0.956	0.885 - 0.927	0.812
EE	0.920	0.943	0.886 - 0.905	0.805

Source. The data analysis

The next step is convergent validity. Hair et al. (2016) said that the outer loading needs to be greater than or equal to 0.708 for the observed variable to be appropriate. From Table 3, the outer loadings range from 0.714 to 0.927, showing that all variables satisfy the conditions, and the latent variables explain over 50% of the observed variable variation. The Average Variance Extracted (AVE) value ranges from 0.617 to 0.812, all above the threshold of 0.5, showing that the scales have achieved convergent validity (Hock & Ringle, 2010).

Finally, the study checks for discriminant validity. This article tests discriminant validity through the Fornell-Larcker criterion and the Heterotrait-Monotrait (HTMT) correlation ratio. According to Fornell and Larcker (1981), the scales are different when the intercorrelation between these variables is less than the square root of the AVE of each variable. As observed from Table 4, the square root of all AVEs (bold numbers) is over their intercorrelations.

Table 4

Fornell-Larcker Criterion (Square Root of AVE)

	A	BM	EI	EE
A	**0.850**			
BM	0.363	**0.785**		
EI	0.370	0.726	**0.901**	
EE	0.193	0.375	0.364	**0.897**

Source. The research's data analysis

Henseler et al. (2015) used simulation studies to demonstrate that discriminant validity is better assessed by the HTMT index they developed. Kline (2018) proposed that discriminant validity between two latent variables is guaranteed when the HTMT is less than 0.85. The results from Table 5 show that all indicators meet the requirements.

Table 5

Heterotrait-Monotrait (HTMT) Ratio Values

	A	BM	EI	EE
A				
BM	0.419			
EI	0.423	0.774		
EE	0.226	0.399	0.384	

Source. The research's data analysis

4.2. The structural model assessment (12)

The criteria R^2, Q^2, VIF, path coefficient, and P-value evaluate the structural model. The R^2 of EI is 0.554, showing that the independent variables explain 55.4% of the variation in the EI variable, and the remaining 45% comes from systematic errors and other factors outside the model. In addition, the R^2 value of BM is 0.261, showing that the level of explanation is relatively weak. Results from Table 6 show that the Q^2 values of BM and EI are 0.235 and 0.221, respectively, satisfying the condition, which must be positive (Hair et al., 2019).

Table 6

Explanatory Power and Multicollinearity

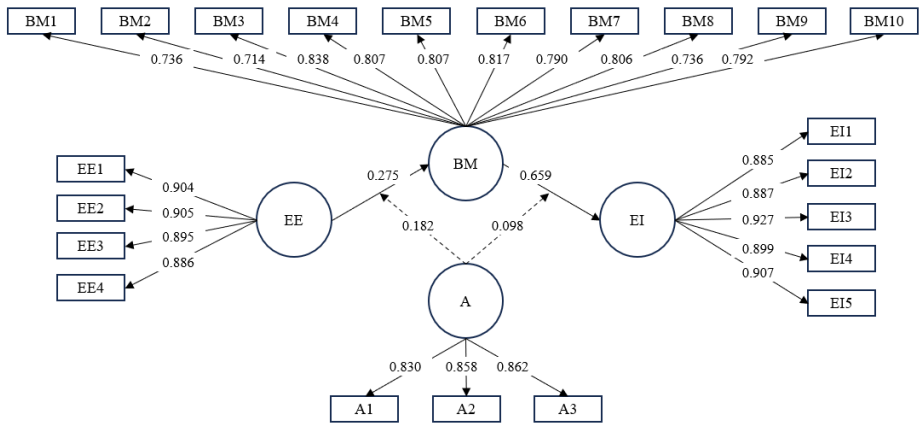
Variables	R^2	Q^2	VIF
Business Motivation	0.261	0.235	2.233 - 3.167
Entrepreneurial - Intention	0.554	0.221	3.172 - 4.556
Entrepreneurship - Education			2.622 - 3.565
Autonomy			1.563 - 1.950

Source. The data analysis

According to Hair et al. (2019), if VIF is 5 or more, the model has a high possibility of multicollinearity. Results from Table 6 show that the VIF indexes are not greater than 5, so the multicollinearity phenomenon does not significantly affect the relationships in the research model (Sarstedt et al., 2016).

Figure 2

SEM Results



Source. The data analysis

Figure 2 shows that the path coefficients are all positive. This shows that the relationships in the proposed model are positively related. Specifically, observe from Table 7 and Table 8. Regarding hypothesis H1, business motivation mediates the relationship between entrepreneurship education and entrepreneurial intention. The study tests this hypothesis according to the following procedure outlined by Baron and Kenny (1986): (1) the dependent variable must be related to the independent variable; (2) the independent variable must be related to the mediating variable; (3) the mediating variable must be related to the dependent variable; (4) the impact of the independent variable on the dependent variable must be reduced after being controlled by the mediating variable.

As shown in Table 7, students' entrepreneurship education has a positive relationship with entrepreneurial intention (Path coefficient = 0.368, p-value = 0.000). Entrepreneurship education has a positive relationship with business motivation (Path coefficient = 0.275, p-value = 0.000). Business motivation positively relates to entrepreneurial intention (Path coefficient = 0.659, p-value = 0.000). After controlling for the mediating factor of business motivation, students' entrepreneurship education has a significant relationship with students' entrepreneurial intention (Path coefficient = 0.181, p-value = 0.000). Therefore, hypothesis H1 is accepted that business motivation mediates the relationship between entrepreneurship education and entrepreneurial intention.

Students who receive education from the university will be motivated to be able to form entrepreneurial intentions. These results contribute to supporting research on Khalili et al. (2014); Farhangmehr et al. (2016); Jakubiak and Buchta (2016); Gina et al. (2014); Yusoff et al. (2015). The university's support, education, and ecosystem can enhance an individual's ability and motivation to undertake entrepreneurial activities (Tomy & Pardede, 2020).

Table 7

Relationships in the Model

Relationship	Path Coefficient	T-Value	P-Value	Decision
A → BM	0.308	5.134	0.000	Supported
A → EI	0.142	2.564	0.010	Supported
EE → BM	0.275	5.057	0.000	Supported
BM → EI	0.659	13.104	0.000	Supported
EE → EI	0.368	7.061	0.000	Supported

Source. The data analysis

Hypothesis H2 predicts that autonomy moderates the relationship between entrepreneurship education and business motivation. Results from Table 8 show that the Path Coefficient, T-value, and P-value are 0.182, 2.848, and 0.004, respectively. This proves a positive relationship between autonomy and entrepreneurship education with business motivation. Therefore, hypothesis H2 is accepted. The greater the autonomy, the more significant the impact of entrepreneurship education on business motivation. Female students without autonomy often tend to be dissatisfied and put in less effort than those with autonomy in the educational environment, impacting business motivation.

Similar to H2, hypothesis H3 proposes that autonomy positively impacts the relationship between business motivation and entrepreneurial intention. Table 8 shows this path coefficient = 0.098 and p-value = 0.027, which shows that hypothesis H3 is accepted. In short, autonomy plays a role in moderating the relationship from business motivation to entrepreneurial intention. When students gain autonomy, they tend to increase their business motivation towards their entrepreneurial intentions. The research results on autonomy are supported by the research of Bernstein and Carayannis (2012), according to which autonomy is the top priority driving entrepreneurial intention. Where growth is encouraged and allowed, research shows that autonomy is an important element of new business development and growth (Burgelman, 1983).

Table 8

Hypothesis Testing

Hypothesis	Path Coefficient	T Value	P Value	Decision
EE ⟶ BM ⟶ EI	0.181	4.456	0.000	Supported
A x EE ⟶ BM	0.182	2.848	0.004	Supported
A x BM ⟶ EI	0.098	2.211	0.027	Supported

Source. The data analysis

5. Conclusions

The government and universities in Vietnam always pay attention and invest in the country's economic development. Orser et al. (2019) point out that women have played an essential role in developing business activities and responding positively to the country's economy. Female students are considered a potential subject who can help the country develop. Vietnam has many research articles on student entrepreneurship, but research on female students' entrepreneurial intentions is rare. For men, starting a business is difficult, but starting a business for women is many times more difficult. Women face many challenges. One of them is business knowledge and skills. Therefore, this study is vital to contributing more literature on entrepreneurial intention, replicating the entrepreneurial movement, and narrowing the gender inequality gap for female students.

Intending to understand how university education impacts the entrepreneurial intention of female students at universities across Vietnam, as well as exploring the mediating role of business motivation and the moderating role of autonomy, this study addresses the research gap of the lack of empirical research on the moderating effects of autonomy. The findings prove that business motivation mediates the relationship between entrepreneurship education and entrepreneurial intention. Therefore, universities first need to combine theory and practice into the teaching process by calling for support from organizations, businesses, market experts, technology, and training facilities, creating opportunities for female students to have close access to the reality of business operations and enhance their capabilities. Next, universities must stimulate students' business motivation by organizing start-up competitions to develop creative thinking to motivate female students to realize their start-up plans. Finally, universities must create conditions for students by supporting capital and financial issues so that female students can be bold in starting their businesses.

In addition, this study also adds to the literature on autonomy playing a moderating role in strengthening the relationship between entrepreneurship education and business motivation.

Universities need to seek mentors who can support student autonomy by allowing students to choose their ventures and increasing the degree to which students can negotiate policies toward instructors. Besides, we also found evidence confirming that the moderating role of autonomy positively impacts the relationship between business motivation and entrepreneurial intention. Therefore, universities must give female students the freedom and independence to pursue entrepreneurial activities.

6. Limitations

As is the case with all research, this study also has some limitations that could be considered in the future. First, due to time and resource constraints, this article only collected data from 356 female students. The study has a relatively small sample size, leading to a lack of representativeness.

Besides, data was collected using a convenience sampling method. This method gives us convenience, but it is not random and can biased. Therefore, the sample size significantly differed between demographic variables. The sample is focused mainly on public university students and students from southern universities. Therefore, future studies can consider using probability sampling methods and expanding the survey scope to the whole country and neighboring countries to generalize the research findings. Such research would allow comparisons across student groups and better indicate the overall effectiveness of entrepreneurship education for female students. Regarding relationships in the model, different student groups can expand the diversity of the analyzed groups.

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