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The impact of intrinsic determinants influencing entrepreneurial intentions
among Vietnamese university students

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THE LIST OF PUBLICATIONS RELATED TO THE DISSERTATION

1. Developing a Scale for Perceived Entrepreneurial Value among University Students in Vietnam, *Journal of Economic and Financial Research* (Online), Issue 203,

<https://nghiencuu.tapchikinhjetaichinh.vn/phat-trien-thang-do-gia-tri-cam-nhan-doi-voi-khoi-nghiep-cua-sinh-vien-dai-hoc-tai-viet-nam-149488.html>

2. The Impact of Intrinsic Factors on Entrepreneurial Intention: Preliminary Evidence from Vietnamese University Students, *Journal of Economic and Financial Research* (Online), Issue

204, <https://nghiencuu.tapchikinhjetaichinh.vn/tac-dong-cua-cac-yeu-to-noi-tai-den-y-dinh-khoi-nghiep-ket-qua-nghien-cuu-so-bo-tu-sinh-vien-dai-hoc-viet-nam-149862.html>

3. The Impact of Perceived Value and Altruistic Motivation on Entrepreneurial Intention: Evidence from Students in Dong Nai Province, *Journal of Economic and Financial Research* (Online), Issue 301,

<https://nghiencuu.tapchikinhjetaichinh.vn/tac-dong-cua-gia-tri-cam-nhan-va-dong-co-vi-tha-den-y-dinh-khoi-nghiep-truong-hop-cac-sinh-vien-tai-dong-nai-150695.html>

CHAPTER 1: OVERVIEW OF THE RESEARCH TOPIC

1.1 Rationale for the Study

Entrepreneurial intention (EI) is considered a cognitive state that reflects an individual's deliberate plan to establish a business in the near future. Therefore, EI is a direct antecedent of entrepreneurial behaviour and an important "intervention point" for entrepreneurship education programs, support mechanisms, and policies aimed at promoting entrepreneurship (Silva et al., 2024; Baber et al., 2025). Recent systematic reviews indicate that: (i) research on EI has expanded rapidly and has moved into new topics such as sustainable entrepreneurship, digital entrepreneurship, and social entrepreneurship; (ii) the explanatory variables of EI have become increasingly diverse; and (iii) the need to standardize measurement scales, multi-level models, and longitudinal tracking has become more evident (Ismail et al., 2024; Maheshwari et al., 2023; Pérez-Macías et al., 2022; Soria-Barreto & Novoa-Hernández, 2025; Loi et al., 2024; Paiva et al., 2023).

In the context of an entrepreneurial ecosystem that remains uneven across regions and is constrained by infrastructural and institutional capacity, studying intrinsic factors such as competence beliefs, motivation, value orientation, and personal dispositions that influence EI among Vietnamese students has clear practical significance. Such research helps explain why, under the same policy and opportunity environment, only some students develop strong EI and are ready to move toward entrepreneurial action. It also provides a basis for higher education institutions (HEIs) and local authorities to design specific actions to develop entrepreneurship in accordance with students' characteristics and local conditions (Mack & Mayer, 2016; Tung et al., 2020).

Empirical studies show that entrepreneurship education can enhance students' entrepreneurial self-efficacy and EI, especially when it is designed to strengthen personal capabilities and practical experience (Maheshwari & Kha, 2022; Nguyen & Nguyen, 2023; Khalil et al., 2024). However, much of this impact remains at the level of cognition and short-term intention, whereas the transformation into actual entrepreneurial behaviour remains limited (Nabi et al., 2017; Liñán & Fayolle, 2015).

In addition, research on EI explains only a relatively modest proportion of the variance in actual entrepreneurial behaviour, which means that “intention” is not sufficient for “action” (Roos & Botha, 2022; Tsou et al., 2023; Martínez-Cañas et al., 2023; Bergner et al., 2023; Maheshwari et al., 2023; Xanthopoulou & Sahinidis, 2024). Other studies also point out the lack of models and research designs capable of explaining the process from EI to entrepreneurial action (Ismail et al., 2024; Maheshwari et al., 2023; Pérez-Macías et al., 2022; Loi et al., 2024; Silva et al., 2024; Neupane et al., 2025; Caputo et al., 2025). In particular, there remains a shortage of studies describing and testing the effects of intrinsic factors on EI (Leiva et al., 2021; Olarewaju et al., 2023; Hoda et al., 2021; Jovanov et al., 2024; Wang & Huang, 2022; Xu et al., 2023; Hou, 2025; Licznarska & Ziemianski, 2022; Baber et al., 2025).

Based on the theoretical and practical context and the identified research gaps, the author conducts the study entitled “The Impact of Selected Intrinsic Factors on Entrepreneurial Intention among Vietnamese Students” to provide a scientific foundation and propose managerial implications for HEIs in Vietnam to develop appropriate actions that promote and encourage students to view entrepreneurship as an appropriate career choice during and/or after graduation.

1.2 Research Objectives

1.2.1 General Objective

To identify and measure the impact of intrinsic factors on EI among Vietnamese students in order to propose managerial implications that help HEIs in Vietnam develop appropriate actions to promote and encourage students to view entrepreneurship as an appropriate career choice during and/or after graduation.

1.2.2 Specific Objectives

- (1) To identify intrinsic factors influencing EI and their relationships with EI among students.
- (2) To quantify the effects of intrinsic factors on students' EI.
- (3) To evaluate the mediating role of “perceived entrepreneurial value” in the relationship between intrinsic factors and students' EI.
- (4) To assess the effects of demographic and contextual characteristics within the relationships in the research model.
- (5) To propose managerial implications that help HEIs in Vietnam develop appropriate actions to promote and encourage students to view entrepreneurship as an appropriate career choice during and/or after graduation.

1.3 Research Questions

- (1) Which intrinsic factors influence students' EI?
- (2) What is the magnitude of the effects of these intrinsic factors on students' EI?
- (3) Does perceived entrepreneurial value mediate the relationship between intrinsic factors and students' EI?
- (4) How do demographic and contextual characteristics affect the relationships in the research model?

(5) What should HEIs do to promote and encourage students to view entrepreneurship as an appropriate career choice during and/or after graduation?

1.4 Research Object and Scope

1.4.1 Research Object

Research object: entrepreneurial intention and intrinsic factors affecting students' EI.

Survey subjects: students currently enrolled at HEIs in Vietnam.

1.4.2 Research Scope

- Spatial scope: HEIs in Vietnam.
- Temporal scope: secondary data were collected during 2020-2025; primary data were collected in 2025.

1.5 Research Methodology

1.5.1 Qualitative Research Method

The author reviewed and systematically synthesized related studies, including foundational theories and domestic as well as international research. Based on this review, the research concepts and their relationships were identified, thereby proposing the research model and constructing the initial measurement scales. The author then organized expert focus-group discussions to identify new factors and to refine and supplement the concepts, research model, and measurement scales in line with the practical context. Based on the discussions and expert feedback, the research model and measurement system were further developed and completed, forming the official scale system for the quantitative phase.

1.5.2 Quantitative Research Method

The study adopted an exploratory sequential mixed-methods design, beginning with the qualitative phase to develop and refine the scales. The author

conducted focus-group discussions with nine experts to identify concepts, adjust the wording of indicators, and build preliminary scales. A pilot survey of 200 students was then conducted at selected HEIs in Ho Chi Minh City, Dong Nai, and Can Tho. Among these, 116 valid observations were used to assess reliability, validity, and the structure of the lower-order measurement model. Items that did not meet the required criteria were removed, and the questionnaire was finalized for the official survey. In the official quantitative phase, 649 valid observations were analyzed using PLS-SEM to test the lower-order measurement model, the higher-order model, and the structural model simultaneously; PLS-MGA was also conducted to explore differences by demographic and contextual characteristics.

1.6 New Contributions of the Dissertation

1.6.1 Scientific Contributions

First, the study positions the theoretical approach to EI in a “value-motivation” direction, shifting the focus from competence-belief structures, typically represented by entrepreneurial self-efficacy (ESE), to an integrated value-evaluation structure, represented by perceived entrepreneurial value (PV). Instead of viewing intention mainly as formed from attitude and perceived behavioural control in TPB or from self-efficacy in SCCT, this study demonstrates that value evaluation functions as a central mechanism that transforms intrinsic resources into EI. By empirically testing the mediating role of PV, the dissertation extends the TPB/SCCT framework by integrating value and enriching the expectancy-value foundation in entrepreneurship research.

Second, the study contributes conceptually by structuring PV as a multidimensional construct comprising emotional value, economic value, social value, epistemic value, and “value risk.” The inclusion and testing of the value-

risk dimension indicate that EI formation is not based only on benefit evaluation but also on students' consideration of costs and uncertainties. This approach clarifies the dual benefit-cost nature of entrepreneurial evaluation and contributes to standardizing the measurement of PV in the higher education context.

Third, the dissertation contributes by constructing and testing an integrated model of multiple intrinsic factors in the same analytical framework, including creativity, opportunity recognition capability, entrepreneurial skills, entrepreneurial attitude, psychological capital, and perceived value. Unlike studies that adopt single-variable approaches or focus on separate components, this model shows that EI is the result of the interaction among competence, psychological resources, and value evaluation. This integrated structure helps overcome theoretical fragmentation in EI research and enhances the explanatory power of the model.

Fourth, the study extends the application of SDT in entrepreneurship by demonstrating that psychological capital, as a positive psychological resource, affects EI both directly and indirectly through PV. This clarifies the mechanism linking autonomous motivation, psychological resources, and career value evaluation, thereby integrating SDT with TPB and SCCT in a unified analytical framework.

Fifth, multi-group analysis shows that relationships in the model are moderated by year of study, level of understanding, field of study, and family background. This finding strengthens the argument that intention models are not absolutely universal but depend on social capital and accumulated experience. The study therefore contributes to a contextualized approach in EI research.

In summary, the dissertation's key scientific contribution lies in building an integrated theoretical framework that emphasizes the value-evaluation mechanism as a bridge between intrinsic capabilities and EI, thereby extending and restructuring the theoretical foundation of EI in the context of students in a transforming economy.

1.6.2 Practical Contributions

First, the study provides a scientific basis for designing entrepreneurship education programs that place PV at the center rather than focusing only on knowledge transmission or skill development. The results show that PV plays an important mediating role in transforming capabilities and intrinsic resources into EI. Therefore, HEIs need to design training activities that not only improve entrepreneurial skills or self-efficacy but also help students clearly recognize the economic, social, epistemic, and emotional values of entrepreneurship and learn how to evaluate and manage value risk. This has direct significance for innovating course content, teaching methods, and experiential activities.

Second, the study provides managerial implications for stratified and personalized entrepreneurship education. Multi-group analysis shows that the effects of intrinsic factors differ by year of study, level of understanding, field of study, and family background.

Third, the results emphasize the roles of opportunity recognition capability and creativity in forming EI, thereby providing practical grounds for strengthening real-project learning models, enterprise semesters, hackathons, idea incubation, and mentoring programs. These activities help students not only accumulate skills but also directly experience the value-creation process, thereby substantially enhancing PV.

Fourth, the study confirms the role of psychological capital in student entrepreneurship. This can be implemented through soft-skill training, failure-scenario simulations, learning from experience, and building supportive learning communities. Thus, entrepreneurship education management should connect psychological elements with technical and professional elements.

Fifth, the study provides a basis for policymakers to design entrepreneurial ecosystem support mechanisms that reduce the “value risk” perceived by students. Mechanisms such as idea experimentation funds, legal and financial mentoring, co-working spaces, and enterprise linkages can reduce opportunity costs and uncertainty, thereby increasing the likelihood of EI formation. Particularly in the digital transformation context, attention should be paid to developing digital infrastructure and capabilities to ensure that entrepreneurial opportunities are distributed more equitably among student groups.

CHAPTER 2: THEORETICAL FOUNDATION & RESEARCH MODEL

2.1 Foundational Theories

- 2.1.1 Theory of Planned Behavior
- 2.1.2 Entrepreneurial Event Model
- 2.1.3 Social Cognitive Career Theory
- 2.1.4 Self-Determination Theory
- 2.1.5 Value Theory

2.2 Research Concepts

- 2.2.1 Entrepreneurial intention
- 2.2.2 The concept of “intrinsic factors”

2.3 Review of Related Studies

- 2.3.1 Studies on entrepreneurial intention
- 2.3.2 Factors affecting entrepreneurial intention

2.4 Research Hypotheses

2.5 Proposed Research Model

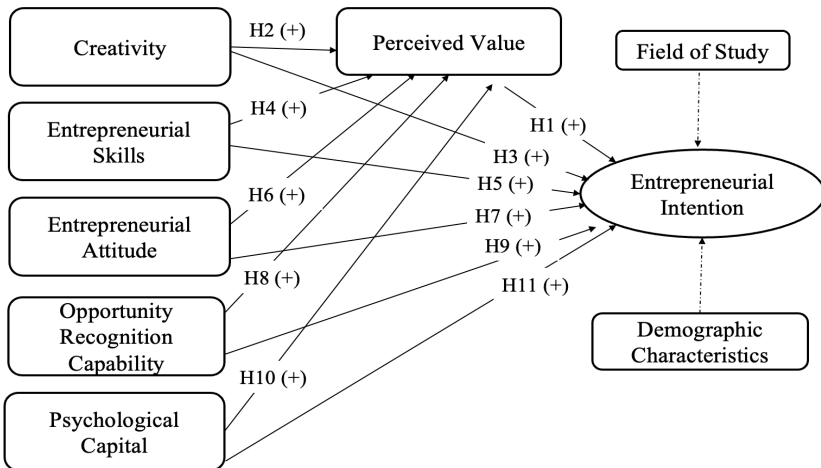


Figure 2.1: Proposed Research Model

CHAPTER 3: RESEARCH DESIGN

3.1 Research Process

3.2 Qualitative Research

3.2.1 Scale Design

To explore, assess, and refine the theoretical model and the measurement scales of the research concepts, the author organized focus-group discussions with nine experts, including:

(i) three lecturers from faculties related to Business Administration, Entrepreneurship and Innovation who have scientific publications related to EI, entrepreneurial behaviour, entrepreneurial capability, psychological capital, creativity, and attitude; specifically, one lecturer from the University of Economics Ho Chi Minh City (UEH), one lecturer from the Ho Chi Minh City Open University, and one lecturer from Thu Dau Mot University;

(ii) three startup founders, especially in the fields of technology, e-commerce, creative services, and high-tech agriculture, because they have direct experience in forming EI, overcoming barriers, developing skills, and psychological capital;

(iii) three experts/coaches/mentors in incubation and startup acceleration programs because they have direct experience training students and young entrepreneurs and understand students' creativity, entrepreneurial skills, and entrepreneurial attitude.

3.2.2 Results of the Focus-Group Discussions

The focus-group discussions indicate that the dissertation's research topic was considered by the experts to be highly necessary and appropriate to the practical and research context of HEIs in Vietnam. The experts also agreed that the relationships among the factors in the proposed research model are

reasonable and supported by both theoretical and practical foundations. However, the discussions also indicated that several observed variables in the preliminary questionnaire had overlapping content and needed to be removed or adjusted to fully reflect and clearly distinguish different dimensions of the research issue. Based on the experts' specific comments and the author's careful consideration, several observed variables were adjusted as presented in Appendix IV, thereby completing the official survey questionnaire.

3.3 Preliminary Quantitative Study

3.3.1 Assessment of Indicator Quality

The results show that all observed variables in the scales have outer loadings greater than 0.7. This confirms that the observed variables meet the requirements for measurement quality and are eligible for more in-depth analysis.

The outer loading values of the observed variables and the path coefficients in the lower-order measurement model (LOC) show that all outer loadings and path coefficients in the LOC model are statistically significant.

3.3.2 Assessment of Scale Reliability and Convergent Validity

The convergent validity analysis shows that all CR values exceed the threshold of 0.8 and all AVE values are greater than 0.6; at the same time, all CR values are greater than their corresponding AVE values. These results confirm that the measurement model meets the requirement for convergent validity.

Table 3.1: Results of Convergent Validity Analysis of the Model

No.	Scale	Composite Reliability (CR)	Average Variance Extracted (AVE)
1	GTCX - Emotional value	0.884	0.686
2	GTKT - Economic value	0.866	0.716
3	GTRR - Value risk	0.898	0.757
4	GTTT - Epistemic value	0.955	0.739

No.	Scale	Composite Reliability (CR)	Average Variance Extracted (AVE)
5	GTXH - Social value	0.894	0.760
6	KNGT - Communication skills	0.842	0.699
7	KNKT - Technical skills	0.873	0.729
8	KNLD - Leadership skills	0.907	0.782
9	NDCH - Opportunity recognition capability	0.916	0.738
10	NLST - Creativity	0.927	0.733
11	TDCX - Affective attitude	0.819	0.736
12	TDKQ - Outcome attitude	0.777	0.818
13	VTL - Psychological capital	0.871	0.664
14	YDKN - Entrepreneurial intention	0.864	0.715

(Source: Author's data analysis results)

3.3.4.3 Assessment of Discriminant Validity

Table 3.2: Results of HTMT Analysis

	GTCX	GTKT	GTRR	GTTT	GTXH	KNGT	KNKT	KNLD	NDCH	NLST	TDCX	TDKQ	VTL
GTKT	0.066												
GTRR	0.140	0.121											
GTTT	0.156	0.133	0.104										
GTXH	0.062	0.082	0.098	0.090									
KNGT	0.174	0.113	0.140	0.060	0.162								
KNKT	0.097	0.102	0.077	0.094	0.053	0.109							
KNLD	0.069	0.079	0.180	0.105	0.102	0.129	0.184						
NDCH	0.120	0.218	0.085	0.055	0.064	0.108	0.153	0.181					
NLST	0.086	0.068	0.076	0.072	0.190	0.116	0.094	0.163	0.091				
TDCX	0.067	0.131	0.109	0.123	0.079	0.141	0.128	0.095	0.192	0.154			
TDKQ	0.108	0.092	0.094	0.118	0.069	0.101	0.094	0.079	0.204	0.061	0.080		
VTL	0.168	0.074	0.089	0.168	0.076	0.101	0.109	0.070	0.113	0.157	0.106	0.135	
YDKN	0.111	0.252	0.091	0.133	0.108	0.158	0.076	0.092	0.170	0.141	0.065	0.095	0.210

(Source: Author's data analysis results)

Discriminant validity was assessed through the Heterotrait - Monotrait ratio (HTMT). Table 3.2 shows that the largest HTMT value is 0.252, which is lower than 0.85. Therefore, the research constructs, although correlated, are distinct from one another and do not suffer from conceptual overlap.

3.4 Official Quantitative Study

3.4.1 Data Collection Instrument

In this phase, the author used the survey questionnaire finalized after the preliminary quantitative study. The content and format of the official questionnaire are presented in Appendix VI. The author included the attention-check question “To check your attention, please select level 2 for this item” (Question 46) to filter out low-quality responses from students who answered carelessly without reading the questions. This attention-check item was not used in measuring or analyzing the “economic value” component of perceived entrepreneurial value.

3.4.2 Data Collection Procedure

The dissertation applied purposive convenience sampling in the official quantitative phase. The sample size was determined based on the 10-times rule proposed by Hair et al. (2016), combined with Cochran’s (1977) recommendation, indicating that a sample size of 400 would be required. In this study, the author needed at least 630 valid observations to ensure the reliability of the analysis results. To secure sufficient valid observations, the author planned to survey 1,000 students enrolled at HEIs in Vietnam.

3.4.3 Data Analysis Procedure

3.4.3.1 Assessment of the Higher-Order Measurement Model

3.4.3.2 Assessment of the Structural Model

3.4.3.3 Multi-Group Analysis for Qualitative Variables

CHAPTER 4: RESEARCH RESULTS

4.1 Overview of Student Entrepreneurship in Vietnam

4.2 Data Collection Results

As presented in Section 3.4.2, to ensure sufficient survey data and avoid possible risks, the author selected a target sample size of 1,000 students currently studying at HEIs in Vietnam. Due to resource constraints, the author used a non-probability convenience sampling method. Specifically, in August 2025, through the author's personal and professional networks, the author conducted a direct paper-based survey (500 questionnaires) at universities in the southern region and an online survey through Google Forms linked to a QR code so that colleagues could easily share the survey link with students. For the Google Forms link, the author used Google Analytics to track interactions from different IP addresses to determine how many survey links had been "distributed" and closed the survey when 500 interactions were reached.

In the official survey, among 1,000 questionnaires/links distributed, the author collected 418 out of 500 paper questionnaires (83.6%) and 324 out of 500 Google Forms responses (64.8%), resulting in 742 observations (74.2%). Among these, 93 observations were invalid because respondents failed to select level 2 in the attention-check question "To check your attention, please select level 2 for this item." Thus, 649 valid observations remained, satisfying the minimum sample size requirement. The survey data were coded and analyzed using SmartPLS V4.0.

4.3 Descriptive Statistics of the Sample

The sample structure was relatively balanced by gender and type of institution and diverse by year of study and field of study. This allows the study

to compare students' EI by gender, field of study (e.g., STEM versus Business and Management), year of study, and exposure to entrepreneurship education.

4.4 Assessment of the Measurement Model

4.4.1 Assessment of the Lower-Order Measurement Model

4.4.1.1 Assessment of Indicator Quality

All observed variables in the scales had outer loadings greater than 0.7. This confirms that the observed variables meet the requirements for measurement quality and are eligible for more in-depth analysis.

4.4.1.2 Assessment of Scale Reliability and Convergent Validity

The results of convergent validity analysis show that all CR values are greater than 0.8 and all AVE values exceed 0.6. In all cases, AVE values are lower than their corresponding CR values. These results confirm that the measurement model satisfies the requirements for convergent validity.

4.4.1.3 Assessment of Discriminant Validity

The largest HTMT value was 0.637, which is lower than the recommended threshold of 0.85. Therefore, the research constructs, although correlated to some extent, still demonstrate clear discriminant validity and do not show conceptual overlap. The analysis of multicollinearity among observed variables in the lower-order measurement model also indicates that all VIF values are below 5, confirming that multicollinearity is not present among observed variables in the model.

4.4.2 Assessment of the Higher-Order Measurement Model

4.4.2.1 Assessment of Indicator Quality

The results show that all observed variables in the scales have outer loadings greater than 0.7, confirming that they meet the requirements for measurement quality and are eligible for more in-depth analysis.

4.4.2.2 Reliability and Convergent Validity

The convergent validity analysis shows that all Cronbach's Alpha and CR coefficients exceed 0.7, while AVE values are greater than 0.6. In all cases, AVE values are lower than their corresponding CR values. These results confirm that the reflective scales satisfy the requirements for reliability and convergent validity.

4.4.2.3 Discriminant Validity

The largest HTMT value was 0.382, which is lower than the recommended threshold of 0.85. This confirms that the research constructs, although correlated, are clearly distinct from one another and do not present conceptual overlap.

4.5 Assessment of the Structural Model

4.5.1 Assessment of Discriminant Validity of the Variables

The results show that the outer loading of each observed variable on its parent factor is greater than all cross-loadings of that variable on other factors in the model. Therefore, the observed variables satisfy the requirement for discriminant validity and are eligible for more in-depth analysis.

4.5.2 Assessment of Collinearity among Variables in the Structural Model

According to Hair et al. (2014), VIF values of 5 or higher indicate collinearity problems. The collinearity test results for the higher-order measurement model show that all VIF coefficients are below 5, confirming that there is no collinearity among variables in the measurement model. In addition, the SRMR values of both the saturated model and the estimated model are lower than 0.08. These results indicate that the estimated model satisfies the required level of fit between the survey data and the market data.

4.5.3 Assessment of the Effects of Independent Variables

4.5.3.1 Assessment of Adjusted R^2

The R^2 values range from 0.528 to 0.669 and exceed the threshold of 0.35 recommended by Cohen (2013). Therefore, the research model achieves a good level of explanatory power.

4.5.3.2 Assessment of Effect Size between Variables

The assessment of relationships between variables shows that f^2 values range from 0.288 to 0.492.

4.5.3.3 Assessment of Direct Effects

The study applied bootstrapping with 5,000 resamples following the recommendation of Henseler et al. (2015). The official quantitative results show that all hypotheses H1-H11 in the model are accepted with statistical significance ($p < 0.05$). All path coefficients are positive, indicating that intrinsic factors (creativity, entrepreneurial skills, entrepreneurial attitude, opportunity recognition capability, psychological capital, and perceived value) positively affect entrepreneurial intention, which is consistent with the Theory of Planned Behavior (Ajzen, 1991) and previous studies (Krueger et al., 2000; Liñán & Chen, 2009). This demonstrates that the proposed theoretical model has practical value and strong explanatory capability.

4.5.3.4 Assessment of Mediating Effects

The analysis of direct, indirect, and total effects indicates that the importance of the constructs for students' EI is ranked in descending order as follows: entrepreneurial attitude, perceived value, opportunity recognition capability, psychological capital, entrepreneurial skills, and creativity.

4.6 Multi-Group Analysis

4.6.1 Analysis by Gender

The Bootstrap MGA results for differences in path coefficients by gender show a significant difference (two-tailed p -value = 0.038, lower than 0.05) in the relationship between the effect of entrepreneurial skills on job fit and the effect of opportunity recognition capability on perceived value. The effect of opportunity recognition capability on perceived value is stronger among male students than among female students, whereas the effect of opportunity recognition capability on EI among male students is lower (-0.094) than among female students.

4.6.2 Analysis by Year of Study

The Bootstrap MGA results for differences by year of study shows considerable differences in the 11 path coefficients among first-year, second-year, and fourth-year students. Specifically, the path coefficients in the fourth-year group are higher than those in the other two groups. As students approach graduation, they convert positive entrepreneurial attitude, entrepreneurial skills, opportunity recognition capability, and psychological capital into perceived value and EI more strongly. In other words, students become more mature over time and more aware of society and the business environment because they have more opportunities to engage in creative learning activities, scientific research, innovation, and community service, thereby improving themselves and affirming their value to society.

4.6.3 Analysis by Field of Study

The Bootstrap MGA results by field of study show that relationships in the research model differ significantly among students from different fields. This indicates that field of study affects how intrinsic factors, including

entrepreneurial skills, opportunity recognition capability, creativity, entrepreneurial attitude, psychological capital, and perceived value, influence EI.

4.6.4 Analysis by Type of Institution

The Bootstrap MGA results by type of institution show that three relationships differ significantly between students from public and private universities: (i) entrepreneurial skills -> perceived value, (ii) creativity -> perceived value, and (iii) creativity -> EI. Other relationships do not show substantial differences.

4.6.5 Analysis by Exposure to Entrepreneurship Education

The Bootstrap MGA results by exposure to entrepreneurship education show statistically significant differences in the following relationships: entrepreneurial skills -> perceived value, entrepreneurial skills -> EI, opportunity recognition capability -> perceived value, opportunity recognition capability -> EI, entrepreneurial attitude -> perceived value, and entrepreneurial attitude -> EI.

4.6.6 Analysis by Level of Understanding of Entrepreneurship

The Bootstrap MGA results by level of understanding of entrepreneurship show significant differences in most relationships among latent variables when students are grouped by their level of understanding of entrepreneurial activities.

4.6.7 Analysis by Family Self-Employment/Business Background

The Bootstrap MGA results by family self-employment/business background show statistically significant differences in the relationships opportunity recognition capability -> perceived value, opportunity recognition capability -> EI, psychological capital -> perceived value, and psychological capital -> EI.

4.7 Discussion of Research Results

Taken together, the results confirm that students' EI is formed by the combination of value and capability components, in which perceived value is the

central anchor: it both directly exerts a strong effect on EI and serves as a mediating “value filter” for creativity, entrepreneurial skills, opportunity recognition capability, and psychological capital, while entrepreneurial attitude has the strongest total effect due to its outstanding direct influence. Opportunity recognition capability is notable for its dual-channel mechanism, both directly and indirectly through perceived value, making it a strategic lever for converting opportunity recognition capability into EI. Psychological capital, entrepreneurial skills, and creativity have smaller but stable and meaningful effects when integrated with value-internalization modules.

Multi-group analysis shows that context and academic experience strongly moderate the paths: year of study and level of understanding lead in the breadth and intensity of differences; exposure to entrepreneurship education simultaneously strengthens perceived value and EI; field of study, family business background, and type of institution create different transformation patterns from skills/capabilities to perceived value and then to EI; gender shows directional differences.

At the same time, the results have practical value by proposing a specific intervention-priority framework for HEIs: (i) improve entrepreneurial attitude to generate quick effects on EI; (ii) enhance opportunity recognition capability to exploit the dual effect through perceived value; (iii) build psychological capital as a psychological foundation that strengthens perceived value; and (iv) integrate entrepreneurial skills and creativity with activities that increase perceived value. These findings provide scientific evidence for HEIs to design training, mentoring, and coaching pathways according to students’ developmental stages and levels of understanding, linking practical experience with value-internalization mechanisms to maximize the probability of forming students’ EI.

CHAPTER 5: CONCLUSION AND MANAGERIAL IMPLICATIONS

5.1 Conclusion

The study concludes that EI among Vietnamese students is the result of an integrated process involving personal capabilities, psychological resources, and subjective value evaluation within a specific educational and social context. Two prominent findings should be emphasized: the central role of perceived value and the heterogeneity across student groups. These findings extend EI research toward an approach that highlights the value-evaluation mechanism and supports the design of entrepreneurship education policies that are stratified, personalized, and value-oriented.

5.2 Managerial Implications

5.2.1 Perceived Entrepreneurial Value Should Be Considered a Central Axis in Entrepreneurship Education Design

To promote EI sustainably, it is first necessary to clarify and strengthen the personal value system associated with entrepreneurship, because this value system functions as an internal reference framework that students use to compare, consider, and evaluate the fit between entrepreneurial behaviour and their personal goals, interests, and life meaning.

Therefore, HEIs need to build a system of interconnected activities that substantially, multidimensionally, and continuously enhance perceived value throughout the training process. Specifically, they should develop personal value self-awareness programs that help students actively identify, write down, and reflect on their personal values related to entrepreneurship.

In addition, HEIs should organize practical entrepreneurial simulations in laboratories, studios, or enterprise-semester environments so that students can directly take on entrepreneurial roles, implement real projects, and interact with

businesses or real markets. This helps students not only observe entrepreneurial value but also experience success and failure, learn to make decisions based on intrinsic values, and reflect after each experience.

In particular, activities comparing personal values with real occupational values should be promoted through workshops, forums with real entrepreneurs, value mentoring, and 360-degree feedback from peers, businesses, and lecturers. Such activities help students identify gaps between personal expectations and occupational realities, thereby strengthening and adjusting their value systems appropriately. These solutions help students form awareness of the fit, meaning, and personal benefits of entrepreneurship, thereby increasing intrinsic orientation and EI sustainably.

5.2.2 Building a Stratified Entrepreneurship Education Pathway by Year of Study

Because entrepreneurial attitude and opportunity recognition capability are two key factors in transforming behaviour, HEIs need a clearly stratified education pathway by year of study to optimize the effects of each factor on students.

Students should also be encouraged to reflect after each experience to understand how practical situations reinforce both entrepreneurial attitude and opportunity recognition capability, thereby actively developing personal development plans aligned with their future entrepreneurial journey.

This gradual accumulation of experience not only turns entrepreneurial attitude into a sustainable driver but also transforms opportunity recognition capability into a critical skill that enables students to confidently convert ideas into action. Such a stratified pathway ensures that students at each stage of cognitive development have an appropriate environment and conditions to form

attitudes, accumulate practical experience, and maximize entrepreneurial potential.

5.2.3 Focusing on the Development of Students' Psychological Capital

Psychological capital should be considered an essential psychological foundation for increasing perceived value and creating sustainable intrinsic motivation for students in their entrepreneurial journey. Psychological capital includes self-confidence, hope, resilience, and optimism, all of which have been shown to positively affect both perceived value and EI.

To develop psychological capital substantially, HEIs should implement diverse personalized coaching/mentoring programs in which students are guided to set career goals, build belief in their ability to succeed, develop skills to overcome failure, restructure limiting beliefs, and remain committed to long-term goals despite risks or challenges. In addition, training activities focusing on emotional management, stress control, resilience, and optimism in the face of adversity should be regularly integrated into entrepreneurship education programs.

Furthermore, peer groups or student entrepreneurship communities should be established based on peer-mentoring models, where students can learn from one another, share practical experiences, discuss failure and coping strategies, and support one another in maintaining motivation. These peer groups can provide encouragement, positive feedback, reduce feelings of isolation, and strengthen commitment to entrepreneurial action.

Connecting these groups with real entrepreneur mentors or successful alumni can create a motivational environment in which students not only enhance psychological capital but also learn values, skills, and strategies from predecessors, thereby improving the quality and probability of realizing EI.

5.2.4 Organizing Practical Experiential Activities

Entrepreneurial skills and creativity truly exert their effects on EI only when integrated into value-clarifying contexts. This means that skills and creativity should not be trained merely through independent courses but must be embedded in sequences of activities aimed at solving real problems, personalized to students, and designed to enable continuous self-reflection and personal value evaluation related to entrepreneurial experience.

Therefore, skill-training programs should be designed as connected modules, with each skill-based experiential activity accompanied by feedback and reflection on perceived value. Integrating perceived-value feedback into skills training helps students better recognize the relationship between their capabilities and occupational value. It also encourages them to adjust their development direction, choose an appropriate path, and strengthen their commitment to pursuing entrepreneurship.

As a result, entrepreneurial skills and creativity are not limited to a purely technical or academic scope but become real drivers of EI through the mechanism of personal value internalization and deep reflection on life goals and the role of entrepreneurship for students.

5.2.5 Designing Personalized Entrepreneurship Education Programs for Different Student Groups

HEIs need to design entrepreneurship education programs that are stratified and personalized for different groups of students based on demographic characteristics and starting contexts in order to optimize the development of EI.

These managerial implications not only contribute to improving stratified and personalized entrepreneurship education policies at HEIs but also support the effective implementation of national entrepreneurship ecosystem

development programs such as Government Projects 1665 and 844. They also affirm and enhance the central and proactive role of HEIs in leading, coordinating, and developing the next generation of young entrepreneurs for the country.

5.4 Limitations and Future Research Directions

5.4.1 Limitations of the Study

First, the study uses a cross-sectional design; therefore, it allows testing of causal relationships only at the level of statistical inference and cannot conclusively confirm causality over time.

Second, data were collected through self-reported questionnaires and may therefore be affected by common method bias.

Third, the research sample mainly focuses on students at selected HEIs in Vietnam; therefore, the generalizability of the results to other groups, such as students in other provinces/cities or college students, remains limited.

Fourth, although perceived value is structured as a multidimensional construct and includes the “value risk” component, measurement is still based on subjective perceptions at a single point in time. Students’ value evaluation may change with practical experience, labour - market shifts, or changes in the learning environment, which this research design could not capture.

5.4.2 Future Research Directions

Future studies should focus on three main directions of extension: (i) over time, (ii) across ecosystem levels, and (iii) within digital contexts and international comparisons. Developing these directions will help refine and improve the generalizability of the theoretical framework on intrinsic factors and perceived value in explaining EI.