

THE IMPACT OF ENTREPRENEURIAL EDUCATION, VOCATIONAL SKILLS AND ENTREPRENEURIAL MOTIVATION TOWARD ENTREPRENEURIAL INTEREST

Meri Yulianti Putri¹, Anni Faridah², Yuliana³, Elida⁴, Asmar Yulastri⁵, Nor Aishah Buang⁶, Fitrika Kumala Dewi⁷

^{1,2,3,4,5} Faculty of Tourism and Hospitality, Universitas Negeri Padang

⁶ Faculty of Education, Universiti Kebangsaan Malaysia

⁷ Faculty of Engineering, Universitas Negeri Padang

email: faridah.anni@fpp.unp.ac.id

ABSTRACT

This research explores the impact of entrepreneurial learning, vocational skills and motivation in entrepreneurship on entrepreneurial interest of tourism, hospitality and engineering students at Universitas Negeri Padang. Using a quantitative research methodology, data was collected using a structured survey involving 43 students. The findings indicate that entrepreneurial interest is significantly and positively influenced by entrepreneurship education, vocational competence, and entrepreneurial motivation. Statistical analysis showed a high level of explanatory power, with a significance level of $p = 0.000$ and an adjusted R^2 value of 0.704, indicating a strong model fit. These results shows that education and skills training are crucial for increasing students entrepreneurial interest. This study underscores the need for higher education institutions, particularly in Indonesia, to strengthen entrepreneurship curricula, enhance vocational training, and foster motivational factors to better prepare students for entrepreneurial careers. By identifying the key drivers of entrepreneurial interest, this research contributes to the design of more effective educational strategies and policy interventions aimed at promoting youth entrepreneurship across different academic fields.

Keywords: *Entrepreneurial education, vocational skills, entrepreneurial motivation, entrepreneurial interest*

Received: 01 Mei 2025

Accepted: 18 Juni 2025

Published: 21 Juni 2025

INTRODUCTION

Despite a growing number of university graduates, youth unemployment in Indonesia remains high, partly due to limited job opportunities and a lack of entrepreneurial initiative among students (Allen, 2016). Studies have shown that many Indonesian students prefer stable employment over starting their own businesses, often due to limited exposure to entrepreneurship education, inadequate practical skills, and low self-confidence (Blesia et al., 2021). This situation reflects a broader challenge in higher education where students are not sufficiently prepared or motivated to pursue entrepreneurial paths, resulting in a workforce that is overly dependent on formal employment (Tambunan, 2022). Addressing this issue requires a strategic focus on entrepreneurship learning, skill development, and motivational support to cultivate entrepreneurial interest and readiness among university students.

In recent years, the global economic landscape has witnessed a burgeoning interest in entrepreneurship as a stimulant for employment and economic expansion. Entrepreneurial education, vocational skills, and entrepreneurial motivation are increasingly recognized as pivotal factors that nurture entrepreneurial interest among individuals (Dude, 2023; Mambali et al., 2024). This triad empowers each student with the necessary knowledge and skills, and instills a proactive mindset essential for entrepreneurial ventures (Locke & Robert Baum, 2014). Understanding the interplay between these elements and their impact on entrepreneurial interest is crucial for policymakers, educators, and aspiring entrepreneurs alike (Nabi et al., 2024).

Entrepreneurial education serves as the foundation for fostering an entrepreneurial mindset. It gives students the conceptual understanding and hands-on abilities needed to manage the business creation (Dewi et al., 2024; Rahayu et al., 2023). According to prior study, entrepreneurial goals and self-efficacy are greatly increased by comprehensive entrepreneurial education programs (Motta & Galina, 2023). These programs often include a blend of theoretical coursework and experiential learning opportunities, such as business simulations, internships, and mentorship, to improve understanding about entrepreneurship and challenges (Musyarofah et al., 2024).

Vocational skills, on the other side, provide the technical proficiency necessary for the execution of entrepreneurial activities. These skills cover span various abilities, such as technical expertise and craftsmanship to advanced technological expertise (Williams, 2020; Zhang et al., 2014). Research indicates that individuals with strong vocational skills are better able to recognize market opportunities and creat creative solutions, according to research (Kuratko, 2011). Furthermore, vocational training programs that incorporate entrepreneurial components have been found to significantly increase participants' likelihood of starting their own businesses (Mambali et al., 2024).

Entrepreneurial motivation is the psychological driver that propels individuals towards entrepreneurial. This motivation can stem from various sources, including

the desire for autonomy, financial independence, and personal fulfillment (Locke & Robert Baum, 2014). Studies suggest that high entrepreneurship level motivation correlates with a greater propensity to get involved in entrepreneurial activities (Nowiński et al., 2019). Motivational factors have a significant impact on the decision to launch a business, as well as on the persistence and toughness needed to address the inevitable challenges of entrepreneurship (Carsrud & Brännback, 2011).

The article's main goal is to analyze the impact of entrepreneurial education, vocational skills, and entrepreneurial motivation, on entrepreneurial interest. By examining the interconnections between these elements, the objective of this article is to understand the subject matter they collectively influence individuals' inclination towards entrepreneurship (Piperopoulos & Dimov, 2015). This understanding is vital for developing targeted strategies that enhance entrepreneurial capacity and drive sustainable economic development (Mambali et al., 2024). Additionally, the article seeks to inform policymakers and educators about effective approaches to foster a robust entrepreneurial ecosystem that supports aspiring entrepreneurs in their journey from ideation to business creation.

Based on this background, this study seeks to prove the extent to which entrepreneurial education, vocational skills, and entrepreneurial motivation contribute to student interest. The purpose of this study is to provide knowledge to the readers whether it is students, educators, or institutions about the interaction between these variables. This study presents a conceptual framework with entrepreneurial education, vocational skills, and entrepreneurial motivation as independent variables, and entrepreneurial interest as the dependent variable, as illustrated in Figure 1.

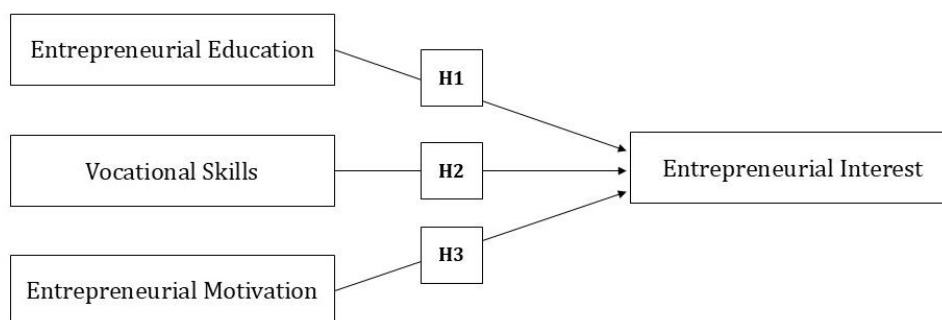


Figure 1.

Research Framework

Based on the research framework above, it can be concluded that this research has four hypotheses, namely.

H₁: Entrepreneurial education has a significant positive effect on entrepreneurial interest.

H₂: Vocational skills have a significant positive effect on entrepreneurial interest.

- H₃: Entrepreneurial motivation has a significant positive effect on entrepreneurial interest.
- H₄: Entrepreneurial education, vocational skills, and entrepreneurial motivation collectively have a significant effect on entrepreneurial interest

RESEARCH METHOD

This study is causal in nature, aiming to examine the cause-and-effect relationship between variables (Zhang, 2022). The data used is quantitative, collected through a structured questionnaire prepared based on validated theoretical indicators. The research location is the Faculty of Tourism and Hospitality and the Faculty of Engineering, Padang State University, conducted from February to April 2025.

The research population amounted to 83 active students in 2019-2025 who had taken entrepreneurship courses. The purposive sampling technique was used to obtain 43 respondents who met the criteria. Although the sample size is relatively small, it is considered representative based on the regression analysis approach which does not require a large sample as long as statistical assumptions are met (Cohen, 2013; Hair, 2011).

This research instrument uses 39 statement items divided into four variables, namely entrepreneurial education (10 items), vocational skills (9 items), and entrepreneurship motivation (10 items) as independent variables, and entrepreneurial interest (10 items) as the dependent variable. Indicators for entrepreneurial education variables are quoted from (Lekoko et al., 2012), which emphasizes entrepreneurial orientation, increased self-confidence, and relevant learning experiences. Vocational skill indicators are based on the latest literature on vocational education, which emphasizes the importance of technical skills, adaptability, and readiness to enter the world of work (Bahl & Dietzen, 2019; Billett, 1994). The entrepreneurial motivation variable refers to (Venesaar et al., 2006), with a focus on the drive for independence (ambition for freedom) and the desire for self-realization. The entrepreneurial interest indicator is compiled based on the theory of interest and entrepreneurial intention from (Krueger et al., 2000; Souitaris et al., 2007). All statements are constructed using a five-point Likert scale and are designed to reflect each construct in a clear and measurable way.

The research instrument trial was conducted on 30 students of the Faculty of Tourism and Hospitality, and the Faculty of Engineering, Padang State University who were not included in the main sample of the study. Based on the validity test results using the SPSS version 26 application, all statements in the instrument were declared valid because the calculated r_{value} was greater than r_{table} (0.361). Meanwhile, the reliability test results show that the instrument has a high level of reliability, with a Cronbach's Alpha value of 0.951 for variable X₁, 0.953 for variable X₂, 0.950 for variable X₃, and 0.944 for variable Y. All of these values exceed the minimum limit of 0.6, so the data is declared reliable. To test the research hypothesis, researchers used multiple linear regression analysis involving normality test, multicollinearity test, and heteroscedasticity test.

The data analysis methods used include simple and multiple linear regression. Simple linear regression is applied to test the effect of each independent variable separately on the dependent variable, while multiple linear regression is used to see the collective influence of several predictors. The selection of linear regression was based on the research objective of evaluating linear and causal relationships between variables, in accordance with the approach commonly used in consumer behavior and tourism studies (Creswell & Creswell, 2017; Sugiyono, 2021).

RESULTS AND DISCUSSION

RESULTS

Following the validation and reliability testing of the questionnaire, the subsequent phase involved performing the necessary analytical tests, which encompassed.

Normality Test

The normality test is shown in table 1.

Table 1.

Result Data of Normality Test

Unstandardized Residual	
Kolmogorv-Sminov	0,806
Z	
Asymp. Sig. (2-tailed)	0.2

Pursuant to the finding of the normality test (see table 1), it has been ascertained that the value of the significance is greater than 0.05 and less than 0.2. This leads to the conclusion that every variable has a normal distribution in this research. The Kolmogorov-Smirnov test was employed to assess the normality of the data distribution, with a significance level greater than 0.05 signifying a normal distribution.

Linearity Test

An examination of the finding of the linearity test reveals that they are presented in table 2.

Table 2.

Linearity Test Result Data

No.	Variable Relationship	Sig.	Description
1.	Entrepreneurial Interest* Entrepreneurship Education	0,332	Linear
2.	Entrepreneurial Interest* Vocational Skills	0,088	Linear
3.	Entrepreneurial Interest* Entrepreneurial Motivation	0,852	Linear

As demonstrated in table 2, the outcomes of the linearity test indicate that entrepreneurship education and entrepreneurial interest are related with a value of

0.332 that is greater than 0.05. The relationship between vocational aptitude and entrepreneurial inclination exhibits a significance value of 0.088, which exceeds the 0.05 threshold, thereby indicating a statistically significant relationship. From these three results it can be concluded that each independent variable has a linear relationship with the dependent variable.

Multicollinearity Test

The findings of the multicollinearity test are presented in table 3.

Table 3.

Result Data of Multicollinearity Test

Variable	Tolerance	VIF	Description
Entrepreneurship Education	0,803	1,245	No multicollinearity
Vocational Skills	0,457	2,186	No multicollinearity
Entrepreneurial Motivation	0,465	2,149	No multicollinearity

Based on the multicollinearity test results in table 3 above, it shows that all variables have a tolerance value of more than equal to 0.10, namely entrepreneurship education 0.803, vocational skills 0.457 and entrepreneurial motivation 0.465. In addition, all variables have a VIF value less than equal to 10, namely entrepreneurship education 1.245, vocational skills 2.186 and entrepreneurial motivation 2.149. Therefore, it is evident that multicollinearity is not a concern in this study.

Heteroscedasticity Test

The findings of the heteroscedasticity test are presented in table 4.

Table 4.

Result data of Heteroscedasticity

Variable	Sig.	Description
Entrepreneurship Education	0,095	No heteroscedasticity
Vocational Skills	0,421	No heteroscedasticity
Entrepreneurial Motivation	0,737	No heteroscedasticity

According to the findings presented in table 4, finding of the heteroscedasticity analyses indicate that entrepreneurship education has a significance value of 0.095, vocational skills of 0.421 and entrepreneurial motivation of 0.737. It can be inferred that the three variables have a significance value of more than 0.05, so it can be said that this study has heteroscedasticity.

Effect of Entrepreneurship Education on Entrepreneurial Interest of Tourism and Hospitality Students and Engineering Students

Entrepreneurship education has a positive and significant effect on entrepreneurial interest of Tourism and Hospitality Students and Engineering

Students of Padang State University is the first hypothesis in this study. The hypothesis is done by simple linear regression as shown in table 5.

Table 5.

Hypothesis 1 Test Results

Regression Model	Description	Regression Coefficient	t _{count}	Sig.
1	Constant	26,792	6,068	0,000
	X ₁	0,309	2,830	0,007
	r ² = 0,163			

Pursuant to which on table 5, it shows that the coefficient of determination r² 0.163, which means that the entrepreneurial interest variable is influenced by the entrepreneurship education variable by 16.3%, while the remaining 83.7% is influenced by other variables outside this study.

The t-test statistic for the entrepreneurship education variable produces t_{count} 2,830 > t_{table} 1, 977 and a significance value of 0.007 which means less than 0.05 so entrepreneurial interest is significantly influenced by entrepreneurship education. Pursuant to the findings of the conducted tests, the regression equation can be formulated as such:

$$Y = 26,792 + 0,309X_1$$

The equation shows that value of the regression coefficient X₁ is 0.309. This means that if entrepreneurship education increases by one point, it will be followed by an increase in entrepreneurial interest points by 0.309 units. The first hypothesis which states that entrepreneurship education it exerts a favorable and substantial impact on entrepreneurial interest of Tourism and Hospitality students and Engineering Students of Padang State University is accepted because the coefficient of entrepreneurship education is positive and the value is positive; the t_{count} of 2.830 is greater than the tabular value of 1.977, and the sig. value of 0.007 is less than 0.05.

The Effect of Vocational Skills on Entrepreneurial Interest of Tourism and Hospitality Students and Engineering Students

This study posits a secondary hypothesis that asserts the positive and significant impact of vocational skills on entrepreneurial interest of tourism and hospitality students and engineering students at Padang State University. To test this hypothesis is done by simple linear regression analysis so that the results of the simple linear regression analysis are presented in table 6 below.

Table 6.

Hypothesis 2 Test Results

Regression Model	Description	Regression Coefficient	t _{count}	Sig.
2	Constant	23,964	10,366	0,000
	X ₂	0,449	6,859	0,000
	r ² = 0,534			

Based on table 6, it shows that the coefficient of determination r^2 0,534 which means that the entrepreneurial interest variable is influenced by the entrepreneurship education variable by 53.4% while the remaining 46.6% is influenced by other variables outside this study.

The t-statistic test for the Vocational Skills variable yields t_{count} 6,859 > t_{table} 1,977 and a significance value of 0.000 which means less than 0.05 so it can be concluded that the dependent variable entrepreneurial interest is significantly influenced by the independent variable vocational skills. Based on the test results that have been done, the regression equation can be written as follows.

$$Y = 23,964 + 0,449X_2$$

The regression coefficient X_2 is 0.449. This means that a one-point increase in vocational skills will be followed by a one-unit increase in entrepreneurial interest. The second hypothesis which states that vocational skills have a positive and significant effect on entrepreneurial interest of Tourism and Hospitality students and Engineering Students of Padang State University is accepted because the coefficient of entrepreneurship education is positive and has a positive value. t_{count} 6,859 > t_{table} 1,977 and the significance value 0,000 < 0,05.

The Effect of Entrepreneurial Motivation on Entrepreneurial Interest of Tourism and Hospitality Students and Engineering Students

The third hypothesis in this study is that entrepreneurial motivation has a positive and significant effect on the entrepreneurial interest of Tourism and Hospitality Students and Engineering Students of Padang State University. To test this hypothesis is done by simple linear regression analysis was conducted to yield the findings presented in table 7 below.

Table 7.
Hypothesis 3 Test Results

Regression Model	Description	Regression Coefficient	t_{count}	Sig.
3	Constant	12,028	2,222	0,032
	X_3	0,654	5,062	0,000
	$r^2 = 0,385$			

As demonstrated in table 7, the coefficient of determination, r^2 , is equal to 0.385. This indicates that the entrepreneurial interest variable is influenced by the entrepreneurial motivation variable to the extent of 38.5%, while the remaining 61.5% is influenced by variables not included in this study.

The t-statistic test for the entrepreneurial motivation variable produces t_{count} 5,062 > t_{table} 1,977 and a significance value of 0.000 which means less than 0.05 so it can be concluded that the dependent variable entrepreneurial interest is significantly influenced by the independent variable entrepreneurial motivation. Pursuant to the empirical evidence derived from the conducted experiments, the regression equation can be formulated as follows.

$$Y = 12,028 + 0,654X_3$$

The regression coefficient of X_3 is represented by the value 0.654, as indicated by the equation, this means that if entrepreneurial motivation increases by one point, it will be followed by an increase in entrepreneurial interest points by one unit. It can be posited that a third hypothesis is in place states that entrepreneurial motivation has a positive and significant effect on entrepreneurial interest of Tourism and Hospitality students and Engineering Students at Padang State University is accepted because the coefficient of entrepreneurial motivation is positive and significant $t_{count} 5,062 > t_{table} 1.977$ and the value in question is less than 0.05, which is statistically significant at the 0.000 level.

The Effect of Entrepreneurship Education, Vocational Skills, Entrepreneurial Motivation on Student Entrepreneurial Interest

Multiple regression is the fourth hypothesis was previously employed as a foundation for the present study, namely entrepreneurship education, vocational skills, entrepreneurial motivation has the phenomenon exhibits a favorable and substantial impact on entrepreneurial interest of Tourism and Hospitality Students and Engineering Students of Padang State University. An examination of table 8 reveals the findings of numerous linear regression analyses.

Table 8.
Hypothesis 4 Test

Description	Regression Coefficient
Constant	22,517
X1	0,495
X2	0,280
X3	1,100
r^2	= 0,704
F Count	= 34,242
Sig F	= 0,000

According to the findings presented in table 8, it can be concluded that the regression model can be utilized to examine the combined impact of the variables of entrepreneurship education, vocational skills, and entrepreneurial motivation on the entrepreneurial interest of Tourism and Hospitality Students and Engineering Students of Padang State University. The model explains 70.4% of the variation in entrepreneurial interest. The remaining 27.5% is due to other factors not included in this study.

Table 8 shows F_{count} (34,242) is more significant than F_{table} (5,109) ($p < 0.0001$). This indicates the entrepreneurial interest variable is influenced by entrepreneurship education, vocational skills, and entrepreneurial motivation. The regression equation is as follows.

$$Y = 22,517 + 0,954X_1 + 0,280X_2 + 1,100X_3$$

The equation shows a constant value of 22.517. If the independent variable is 0 (constant), then the dependent variable is 22.517. The regression coefficient, X_1 , is positive at 0.954, indicating that a 1-point increase in entrepreneurship education will increase entrepreneurial interest by 0.954 points, assuming other variables remain constant. The X_2 regression coefficient is positive at 0.280, meaning that a 1-point increase in vocational skills will decrease entrepreneurial interest by 0.280 points, assuming other variables remain constant. The regression coefficient, X_3 , is positive at 1.100, meaning that a 1-point increase in entrepreneurial motivation will increase entrepreneurial interest by 1.100 points, assuming other variables remain constant. Therefore, the fourth hypothesis, that entrepreneurship education, vocational skills, and entrepreneurial motivation positively affect entrepreneurial interest in Tourism and Hospitality students and Engineering Students of Padang State University, is accepted because each coefficient is positive and significant at the $0.000 < 0.05$ level.

DISCUSSION

Effect of Entrepreneurship Education on Entrepreneurial Interest of Tourism and Hospitality Students and Engineering Students

The results indicate that entrepreneurship education has a positive and significant effect on students' entrepreneurial interest. This finding aligns with studies by Knox (2022); Viaggi et al. (2021), which emphasize that entrepreneurship education enhances students' capabilities in business planning and promotes a positive perception of risk. Özdamlı (2011) highlights key components such as business planning, innovation, and experiential learning. Aranzabal et al. (2022); He et al. (2024) further suggest that practical entrepreneurship education increases self-confidence and risk-taking behavior.

However, compared to Duran-Sanchez et al. (2019), the impact of entrepreneurship education can vary depending on curriculum structure and student cultural contexts. In Padang, students are influenced by Minangkabau cultural values, which encourage independence and trade, potentially amplifying the effects of entrepreneurship education. This suggests that context-based entrepreneurial education rooted in local values may be more effective in fostering entrepreneurial interest.

The Effect of Vocational Skills on Entrepreneurial Interest of Tourism and Hospitality Students and Engineering Students

The findings show that vocational skills significantly influence entrepreneurial interest. This supports Sahut & Peris-Ortiz (2014), who found that vocational training equips individuals with technical capabilities to develop innovative products and services. Gibb (1993) also emphasize the importance of hands-on training in encouraging entrepreneurial intent.

In vocational fields like tourism and engineering, practical training directly connects to real-world business opportunities. In Padang, vocational programs in

hospitality or culinary arts often include local cultural elements, which create distinctive market advantages. Susanto et al. (2022) show that culturally embedded vocational training can strengthen students' entrepreneurial intentions due to perceived market relevance.

One of the factors driving entrepreneurial interest is vocational skills. Vocational skills play a crucial role in fostering entrepreneurial interest by providing the technical and practical abilities needed to run a business. These skills encompass various areas, such as technical skills, craftsmanship, and technological expertise relevant to specific industries. Individuals with strong vocational skills are better positioned to identify market opportunities and development of innovative products or services. Furthermore, vocational training programs that include entrepreneurial components can boost participants' confidence and readiness to start their own businesses. According to research, there is a correlation between the possession of robust vocational skills and higher probability of attaining specific outcomes to explore and take risks in entrepreneurship, making vocational skills a significant driver of entrepreneurial interest.

The Effect of Entrepreneurial Motivation on Entrepreneurial Interest of Tourism and Hospitality Students and Engineering Students

The entrepreneurial motivation is shown to have a significant impact on students' interest in entrepreneurship. This is consistent with Pruthi & Mitra (2017), who found that intrinsic motivation—such as the desire for independence and self-fulfillment—drives entrepreneurial behavior. Baumol (2011) also observed that Indonesian students are often motivated by the need for financial autonomy and personal development.

Compared with Zhang et al. (2014) in China, motivation tends to play a stronger role in contexts where post-graduation employment is uncertain. Similarly, in Padang, students may face limited job opportunities, prompting a greater reliance on entrepreneurship as a career option. Thus, entrepreneurial motivation is not only a personal factor but also shaped by local socio-economic conditions.

One of the factors that drives entrepreneurial interest is entrepreneurial motivation. Entrepreneurial motivation is the psychological drive that drives individuals to engage in entrepreneurial activities. This motivation can arise from a variety of sources, including the desire for autonomy, financial independence, personal fulfillment, and the need for achievement and innovation. High levels of intrinsic motivation correlate with a greater propensity to engage in entrepreneurship, as motivated individuals are more likely to identify and seize business opportunities, persevere through challenges, and remain resilient in the face of setbacks. This intrinsic drive influences not only the decision to start a business, but also the commitment and determination needed to sustain and grow the venture, making entrepreneurial motivation a critical determinant of entrepreneurial interest.

The Effect of Entrepreneurship Education, Vocational Skills, Entrepreneurial Motivation on Student Entrepreneurial Interest

Together, the three variables—entrepreneurship education, vocational skills, and entrepreneurial motivation—have a substantial collective impact on students' entrepreneurial interest. This aligns with Rosenthal et al. (2021), who highlight the synergistic effect of skills, knowledge, and psychological drive in fostering entrepreneurship. This research also introduces a novel interdisciplinary approach by integrating tourism/hospitality and engineering students.

Such interdisciplinary education is a valuable innovation, especially in preparing students for real-world business challenges that often require cross-sectoral collaboration. Fan et al. (2024); Weng et al. (2022) show that interdisciplinary learning environments enhance creativity, critical thinking, and teamwork—key competencies for future entrepreneurs. This study's novelty lies in demonstrating that students from diverse fields can benefit from shared entrepreneurial learning, reflecting the demands of the modern, interconnected business landscape.

Factors that influence entrepreneurial interest include entrepreneurship education, vocational skills, and entrepreneurial motivation (Somià et al., 2024). Entrepreneurship education provides the knowledge and skills necessary to start and manage a business, and increases confidence and positive perception of risk through practical experiences such as business simulations and internships. Vocational skills provide the technical and practical abilities essential to running a business, enabling individuals to identify market opportunities and develop innovative solutions. Meanwhile, entrepreneurial motivation, stemming from the desire for autonomy, financial independence and personal fulfilment, encourages individuals to take risks, persevere in the face of challenges and commit to their ventures. The combination of entrepreneurship education, vocational skills and entrepreneurial motivation creates a strong foundation for entrepreneurial interest, encouraging more people to pursue and succeed in entrepreneurship.

CONCLUSION

This study shows that entrepreneurship education, vocational skills, and entrepreneurial motivation together have an important role in shaping students' entrepreneurial interest. The three factors complement each other and create a strong foundation for students, especially in tourism, hospitality and engineering study programs, to develop their interest and readiness in entrepreneurship.

Entrepreneurship education provides not only basic knowledge, but also practical experience that builds confidence and professional networks. Vocational skills strengthen students' technical and innovative abilities in creating business opportunities. Meanwhile, entrepreneurial motivation encourages students' passion, perseverance and courage to face challenges in the business world.

The novelty of this study lies in integrating students from diverse academic disciplines—tourism, hospitality, and engineering—offering a cross-disciplinary

perspective rarely explored in previous entrepreneurial intention studies. Furthermore, the research underscores a synergistic interaction between soft competencies (motivation and education) and hard skills (vocational), providing a more holistic view of the factors shaping entrepreneurial aspirations.

Universities should develop interdisciplinary entrepreneurship curricula that blend theoretical knowledge, practical vocational training, and motivational development. Collaborations with industry partners for internships, mentoring, and entrepreneurial incubators are strongly recommended to provide real-world exposure. Policymakers and education stakeholders should support such integrative programs to nurture a new generation of entrepreneurs capable of driving both economic innovation and social transformation.

REFERENCES

- Allen, E. R. (2016). *Analysis of Trends and Challenges in the Indonesian Labor Market*. <https://www.adb.org/publications/analysis-trends-and-challenges-indonesian-labor-market>.
- Aranzabal, A., Epelde, E., & Artetxe, M. (2022). Team Formation on The Basis of Belbin's Roles to Enhance Students' Performance in Project Based Learning. *Education for Chemical Engineers*, 38(December 2020), 22–37. <https://doi.org/10.1016/j.ece.2021.09.001>.
- Bahl, A., & Dietzen, A. (2019). Work-based Learning as a Pathway to Competence-based Education. In *Management* (Issue April). <https://www.mmulder.nl/wp-content/uploads/2011/11/2019-Mulder-Global-Need-for-Competence.pdf>.
- Baumol, W. J. (2011). Economics and Entrepreneurship. In *World Encyclopedia of Entrepreneurship*. Edward Elgar Publishing. <https://doi.org/10.4337/9781849808453.00012>.
- Billett, S. (1994). Searching for Authenticity: A Socio-Cultural Perspective of Vocational Skill Development. *Vocational Aspect of Education*, 46(1), 3–16. <https://doi.org/10.1080/0305787940460102>.
- Blesia, J. U., Iek, M., Ratang, W., & Hutajulu, H. (2021). Developing an Entrepreneurship Model to Increase Students' Entrepreneurial Skills: an Action Research Project in a Higher Education Institution in Indonesia. *Systemic Practice and Action Research*, 34(1), 53–70. <https://doi.org/10.1007/s11213-019-09506-8>.

- Carsrud, A., & Brännback, M. (2011). Entrepreneurial Motivations: What Do We Still Need to Know? *Journal of Small Business Management*, 49(1), 9–26. <https://doi.org/10.1111/j.1540-627X.2010.00312.x>.
- Cohen. (2013). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Routledge. <https://doi.org/10.4324/9780203774441>.
- Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage publications. <https://psycnet.apa.org/record/1996-97121-000>.
- Dewi, F. K., Yulastri, A., Jalinus, N., Ganefri, & Mardizal, J. (2024). The Impact of Entrepreneurship Education, Emotional Quotient and Parental Support on Students' Entrepreneurial Interest. *Jurnal Pendidikan Ilmu Sosial*, 34(1), 106–117. <https://journals2.ums.ac.id/index.php/jpis/article/view/4869/1574>.
- Dude, S. A. (2023). Psychological Characteristics and Social Entrepreneurial Intentions: A Study among Accounting Education Students in Indonesia. *Jurnal Pendidikan Ilmu Sosial*, 33(2), 152–168. <https://journals2.ums.ac.id/index.php/jpis/article/download/3148/1026>.
- Duran-Sanchez, A., Alvarez García, J., Del Río-Rama, M. de la C., & Ratten, V. (2019). Trends and Changes in the International Journal of Entrepreneurial Behaviour & Research. *International Journal of Entrepreneurial Behavior & Research*, 25(7), 1494–1514. <https://doi.org/10.1108/IJEER-04-2019-0249>.
- Fan, J., Hu, J., & Wang, J. (2024). How Entrepreneurship Education Affects College Students' Entrepreneurial Intention: Samples from China. *Heliyon*, 10(10), e30776. <https://doi.org/10.1016/j.heliyon.2024.e30776>.
- Gibb, A. A. (1993). Enterprise Culture and Education. *International Small Business Journal: Researching Entrepreneurship*, 11(3), 11–34. <https://doi.org/10.1177/026624269301100301>.
- Hair, J. F. (2011). Multivariate Data Analysis: An Overview. In *International Encyclopedia of Statistical Science* (pp. 904–907). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-04898-2_395.
- He, L., Zheng, L. J., Sharma, P., & Leung, T. Y. (2024). Entrepreneurship Education and Established Business Activities: An International Perspective. *International Journal of Management Education*, 22(1), 100922. <https://doi.org/10.1016/j.ijme.2023.100922>.

- Knox, S. (2022). Fostering Student Engagement in Virtual Entrepreneurship Education Environments. *International Journal of Management Education*, 20(3), 100705. <https://doi.org/10.1016/j.ijme.2022.100705>.
- Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing Models of Entrepreneurial Intentions. *Journal of Business Venturing*, 15(5), 411-432. [https://doi.org/10.1016/S0883-9026\(98\)00033-0](https://doi.org/10.1016/S0883-9026(98)00033-0).
- Kuratko, D. F. (2011). Entrepreneurship Theory, Process, and Practice in the 21st Century. *International Journal of Entrepreneurship and Small Business*, 13(1), 8-17. <https://doi.org/10.1504/IJESB.2011.040412>.
- Lekoko, E. M. R., & P, R. (2012). The Effectiveness of Entrepreneurship Education: What Matters Most? *African Journal of Business Management*, 6(51), 12023-12032. <https://doi.org/10.5897/ajbmx12.001>.
- Locke, E. A., & Robert Baum, J. (2014). Entrepreneurial Motivation. *The Psychology of Entrepreneurship*, 93-112. <https://doi.org/10.2307/j.ctvh8r2zz.8>.
- Mambali, E. R., Kapipi, M. S., & Changalima, I. A. (2024). Entrepreneurship Education and Business and Science Students' Green Entrepreneurial Intentions: The Role of Green Entrepreneurial Self-Efficacy and Environmental Awareness. *International Journal of Management Education*, 22(2), 100987. <https://doi.org/10.1016/j.ijme.2024.100987>.
- Motta, V. F., & Galina, S. V. R. (2023). Experiential Learning in Entrepreneurship Education: A Systematic Literature Review. *Teaching and Teacher Education*, 121. <https://doi.org/10.1016/j.tate.2022.103919>.
- Musyarofah, I. N. A., Wulandari, S. S., & Diah, M. L. B. M. (2024). The Effect of Creative Project Learning Outcomes and Entrepreneurship on Entrepreneurial Interest Through Internal Locus of Control. *Jurnal Pendidikan Ilmu Sosial*, 34(1), 1-18. <https://journals2.ums.ac.id/index.php/jpis/article/view/4909/1542>.
- Nabi, G., Walmsley, A., Mir, M., & Osman, S. (2024). The Impact of Mentoring in Higher Education on Student Career Development: A Systematic Review and Research Agenda. *Studies in Higher Education*, 16(2), 277-299. <https://doi.org/10.1080/03075079.2024.2354894>.

- Nowiński, W., Haddoud, M. Y., Lančarič, D., Egerová, D., & Czeglédi, C. (2019). The Impact of Entrepreneurship Education, Entrepreneurial Self-Efficacy and Gender on Entrepreneurial Intentions of University Students in The Visegrad Countries. *Studies in Higher Education*, 44(2), 361–379. <https://doi.org/10.1080/03075079.2017.1365359>.
- Özdamli, F. (2011). The Experiences of Teacher Candidates in Developing Instructional Multimedia Materials in Project Based Learning. *Procedia - Social and Behavioral Sciences*, 15, 3810–3820. <https://doi.org/10.1016/j.sbspro.2011.04.378>.
- Piperopoulos, P., & Dimov, D. (2015). Burst Bubbles or Build Steam? Entrepreneurship Education, Entrepreneurial Self-Efficacy, and Entrepreneurial Intentions. *Journal of Small Business Management*, 53(4), 970–985. <https://doi.org/10.1111/jsbm.12116>.
- Pruthi, S., & Mitra, J. (2017). Special Issue on ‘Migrant and Transnational Entrepreneurs: International Entrepreneurship and Emerging Economies’. *Journal of Entrepreneurship and Innovation in Emerging Economies*, 3(2), 148–154. <https://doi.org/10.1177/2393957517721992>.
- Rahayu, S., Rizky, M., Ratumbuysang, M. F. N. G., & Hasanah, M. (2023). Improving Innovative Behavior Through Entrepreneurship Education in Economic Education Students Lambung Mangkurat University. *Jurnal Pendidikan Ilmu Sosial*, 33(2), 264–275. <https://journals2.ums.ac.id/index.php/jpis/article/download/3395/1054>.
- Rosenthal, A., Maciel Guedes, A. M., dos Santos, K. M. O., & Deliza, R. (2021). Healthy Food Innovation in Sustainable Food System 4.0: Integration of Entrepreneurship, Research, And Education. *Current Opinion in Food Science*, 42, 215–223. <https://doi.org/10.1016/j.cofs.2021.07.002>.
- Sahut, J.-M., & Peris-Ortiz, M. (2014). Small Business, Innovation, and Entrepreneurship. *Small Business Economics*, 42(4), 663–668. <https://doi.org/10.1007/s11187-013-9521-9>.
- Somià, T., Lechner, C., & Pittaway, L. (2024). Assessment and Development of Coachability in Entrepreneurship Education. *International Journal of Management Education*, 22(1). <https://doi.org/10.1016/j.ijme.2023.100921>.

- Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do Entrepreneurship Programmes Raise Entrepreneurial Intention of Science and Engineering Students? The Effect of Learning, Inspiration and Resources. *Journal of Business Venturing*, 22(4), 566–591. <https://doi.org/10.1016/j.jbusvent.2006.05.002>.
- Sugiyono, S. (2021). The Evaluation of Facilities and Infrastructure Standards Achievement of Vocational High School in the Special Region of Yogyakarta. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 25(2), 207–217. <https://doi.org/10.21831/pep.v25i2.46002>.
- Susanto, S., Muafiah, E., Desrani, A., Ritonga, A. W., & Hakim, A. R. (2022). Trends of Educational Technology (EdTech): Students' Perceptions of Technology to Improve the Quality of Islamic Higher Education in Indonesia. *International Journal of Learning, Teaching and Educational Research*, 21(6), 226–246. <https://doi.org/10.26803/ijlter.21.6.14>.
- Tambunan, T. T. H. (2022). Recent Development of Micro, Small and Medium Enterprises in Indonesia. *International Journal of Social Sciences and Management Review*, 06(01), 193–214. <https://doi.org/10.37602/ijssmr.2022.6112>.
- Venesaar, U., Kolbre, E., & Piliste, T. (2006). Students' Attitudes and Intentions Toward Entrepreneurship at Tallinn University of Technology. *Tutwpe*, May, 97–114. <https://www.researchgate.net/publication/24137730>.
- Viaggi, D., Barrera, C., Castelló, M. L., Dalla Rosa, M., Heredia, A., Hopley, T. J., Knöbl, C. F., Materia, V. C., Xu, S. M., Romanova, G., Russo, S., Seguí, L., & Viereck, N. (2021). Education for Innovation and Entrepreneurship in The Food System: The Erasmus+ Boostedu Approach and Results. *Current Opinion in Food Science*, 42(June), 157–166. <https://doi.org/10.1016/j.cofs.2021.06.001>.
- Weng, X., Chiu, T. K. F., & Tsang, C. C. (2022). Promoting Student Creativity and Entrepreneurship Through Real-World Problem-Based Maker Education. *Thinking Skills and Creativity*, 45(April), 101046. <https://doi.org/10.1016/j.tsc.2022.101046>.
- Williams, P. J. (2020). *Pedagogical Approaches to Vocational Education*. May 2020, 267–282. https://doi.org/10.1007/978-3-030-41548-8_14.
- Zhang, I. Y. (2022). *Causal versus Associative Relations : Do Humans Perceive and Represent Them Differently?* 2709–2715. <https://escholarship.org/uc/item/5mk7j2dv>.

Zhang, Y., Duysters, G., & Cloudt, M. (2014). The Role of Entrepreneurship Education As A Predictor of University Students' Entrepreneurial Intention. *International Entrepreneurship and Management Journal*, 10(3), 623–641. <https://doi.org/10.1007/s11365-012-0246-z>.