

DOI: 10.28934/jwee26.12.pp218-242

JEL: A22, I23, J12, L26

ORIGINAL SCIENTIFIC PAPER

# An Analysis of the Influence of Entrepreneurship Education and the Family Context on Entrepreneurial Intentions among Higher Education Students



Roni Wiranata<sup>1</sup> 

Susanti<sup>2</sup> 

Siti Sri Wulandari<sup>3</sup> 

State University of Surabaya, Faculty of Economics and Business, Department Post  
Doctoral Economic Education, East Java, Indonesia

## ABSTRACT

*Entrepreneurial interest remains underdeveloped in developing countries, making it crucial to foster it among students. This study examines the influence of entrepreneurial learning and the family environment, particularly parental roles, on students' entrepreneurial interest. The study involved 312 undergraduate students from education departments at several universities in East Java, Indonesia, who were selected using a purposive sampling technique. A questionnaire was used as the research instrument. Descriptive statistics and multiple linear regression were employed to analyze the data and examine variable relationships. The results show that entrepreneurship education and the family environment have a positive and significant effect on students' entrepreneurial interest, with the model explaining 63.3% of the variance ( $R^2 = 0.633$ ). These findings suggest that lecturers should carefully select and implement*

<sup>1</sup> Corresponding author, e-mail: 25081646001@mhs.unesa.ac.id,

<sup>2</sup> E-mail: susanti@unesa.ac.id

<sup>3</sup> E-mail: sitiwulandari@unesa.ac.id

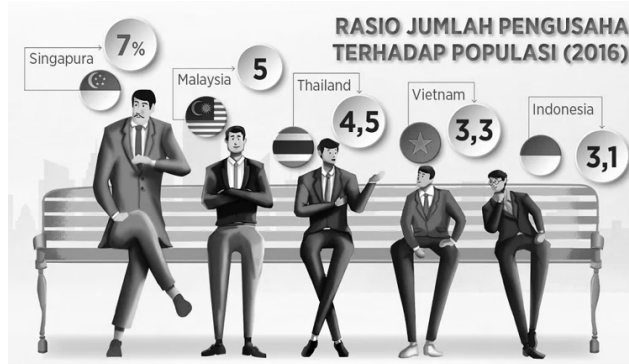
*entrepreneurship learning models, while parental support remains essential to enhance students' entrepreneurial interest. This study contributes to entrepreneurship education literature by showing that survey-based learning with direct interaction with business actors connects classroom knowledge to real practice, enhancing students' contextual understanding and strengthening their entrepreneurial intentions. This study highlights the importance of the family environment in shaping prospective entrepreneurs. Its influence is not deterministic but works through entrepreneurial socialization, role modeling, and resource access, which collectively foster entrepreneurial orientation and capabilities. This study provides empirical insights into the relationship between survey-based entrepreneurial learning that directly engages business actors and students' entrepreneurial interest and spirit, highlighting the importance of inclusive learning approaches and university-organized bazaar programs as experiential contexts in entrepreneurship education.*

**KEYWORDS:** *entrepreneurship learning, family environment, interest in entrepreneurship, higher education*

## **Introduction**

While unemployment remains a persistent issue discussed in economic development literature, previous studies have largely focused on macroeconomic policies and labor market dynamics. Less attention has been given to how higher education institutions design learning models that can cultivate students' entrepreneurial orientation and capacity to create employment opportunities. This limitation highlights the need to investigate more contextualized entrepreneurship learning models that integrate academic learning with real-world business engagement. Entrepreneurship has increasingly been recognized as an important driver of job creation and unemployment reduction. Empirical research demonstrates that new venture creation and the expansion of small and medium-sized enterprises significantly contribute to employment generation and local economic development, thereby helping to mitigate unemployment pressures in many economies. The entrepreneurship literature consistently highlights that a growing number of entrepreneurs can enhance job creation and increase labor absorption, thereby helping to reduce unemployment (Audretsch & Thurik, 2001). As stated by Rengganis et al. (2022) the advancement of a nation is contingent upon the proliferation of educated individuals engaged in business endeavors.

*Figure 1: Percentage of Entrepreneurs in Southeast Asian Countries (Singapore, Malaysia, Thailand, Vietnam, and Indonesia)*



*Source: Adapted from Lidwina (2019)*

Given the identified issues, it can be concluded that the total number of entrepreneurs in Indonesia remains relatively small compared to other countries (Figure 1). According to Indah (2024), fostering a greater number of entrepreneurs is crucial, given that entrepreneurship serves as a key catalyst for enhancing economic development and promoting sustainable growth. (Bjørnskov & Foss, 2016). National statistical data shows that entrepreneurs only comprise around 1.65% of Indonesia's population of around 252 million people, which indicates that entrepreneurial participation is still limited compared to the demographic potential in Indonesia (Putra, 2018). Meanwhile, in ASEAN countries such as Singapore, the number of entrepreneurs reaches 8 percent, Malaysia 5 percent, and Thailand have 4,8% entrepreneurs from the total populations (Dihni, 2023). According to Statistics Indonesia (BPS), in August 2019, there were 6.82 million unemployed people (5.10% of 194.78 million labor force), with a significant portion being university graduates. This indicates a mismatch between higher education outcomes and labor market needs, suggesting graduates lack adaptive competencies for competitive employment. Promoting entrepreneurial intention among students is therefore strategic, as it enables job creation rather than job seeking. Entrepreneurship education is expected to foster a mindset of risk-taking, and opportunity recognition. However, evidence from universities in East Java shows low entrepreneurial interest, with few students starting businesses, indicating that current educational approaches are not yet effective in stimulating entrepreneurial engagement.

This study aims to examine the relationship between entrepreneurship learning and the family environment in shaping students' entrepreneurial interest within higher education contexts. The proposed model is theoretically grounded in the Theory of Planned Behavior (Ajzen, 1991), Social Cognitive Theory (Bandura, 1986), and Social Learning Theory (Bandura, 1977), which emphasize that entrepreneurial motivation is influenced by learning experiences, social environments, and role modeling processes.

Specifically, this study seeks to analyze how the formal educational context, represented by entrepreneurship learning, and the informal social context, represented by the family environment, are associated with variations in students' entrepreneurial interest. By integrating these two contexts into a single analytical framework, this research addresses a gap in previous studies that have often examined educational factors and family influences separately rather than as complementary components shaping entrepreneurial interest among university students.

Entrepreneurship has been widely recognized as a key driver of economic development, particularly through its role in job creation and innovation. In developing countries such as Indonesia, however, entrepreneurial participation remains relatively low compared to its demographic potential. This condition highlights a structural challenge in higher education, where graduates are still predominantly oriented toward job-seeking rather than job creation. Consequently, fostering entrepreneurial interest among university students has become a strategic priority.

Previous studies have consistently emphasized the role of entrepreneurship education in shaping entrepreneurial intention. Empirical evidence suggests that entrepreneurship education positively influences students' knowledge, skills, and self-efficacy (Bae et al., 2014; Nabi et al., 2017; Nguyen & Nguyen, 2023). However, the magnitude of its effect on entrepreneurial intention is often modest, indicating that education alone may not be sufficient. Other studies highlight the importance of contextual factors, particularly the family environment, in shaping entrepreneurial attitudes and behaviors (Laspita et al., 2012; Sieger et al., 2021). Family support, role modeling, and access to resources have been shown to play a crucial role in fostering entrepreneurial orientation.

Despite substantial progress in entrepreneurship research, the existing literature remains theoretically and empirically fragmented. Prior studies have predominantly examined entrepreneurship education and family

environment as separate antecedents of entrepreneurial interest, offering a limited understanding of how these formal and informal contexts interact in shaping students' entrepreneurial aspirations. Moreover, empirical findings concerning the magnitude and consistency of these relationships remain inconclusive, particularly in developing economies, where socio-cultural and institutional contexts may differ significantly from those of developed countries. Another limitation lies in the heavy reliance on the Theory of Planned Behavior, while the integration of complementary perspectives, such as Social Cognitive Theory, Social Learning Theory, and Human Capital Theory, has received comparatively limited scholarly attention.

Addressing these gaps, this study aims to examine the simultaneous influence of entrepreneurship learning and family environment on students' entrepreneurial interest in higher education. By integrating formal educational factors and informal social contexts, this study provides a more comprehensive understanding of how entrepreneurial interest is formed.

This study contributes to the literature in three main ways. First, it develops an integrative model that combines entrepreneurship education and family context. Second, it provides empirical evidence from a developing country context, which remains underexplored. Third, it extends theoretical understanding by incorporating multiple perspectives, including the Theory of Planned Behavior, Social Cognitive Theory, and Social Learning Theory, to explain the formation of entrepreneurial interest among university students.

## **Literature Review**

### **Entrepreneurial Learning**

Entrepreneurship is widely recognized in economic literature as a key driver of economic dynamics through the creation of opportunities, self-employment, and the development of individuals' capabilities in flexible and autonomous activities (Braun & Follert, 2024). Entrepreneurial intention reflects an individual's readiness to engage in business activities and is often shaped by prior learning experiences.

Entrepreneurship education is defined as a systematic process of transferring knowledge, skills, and attitudes that enable students to identify opportunities, plan ventures, and build mental readiness for entrepreneurship (Larsen et al., 2024). Empirical studies show that such

education positively influences entrepreneurial intention, self-efficacy, motivation, and competence. International evidence further indicates that improved competencies strengthen individuals' readiness to start businesses (Nguyen & Nguyen, 2023).

Research also highlights demographic differences, particularly gender, in shaping entrepreneurial intention and learning preferences (Paunović & Musial, 2024). In Indonesia, studies confirm that entrepreneurship education affects entrepreneurial intention both directly and indirectly through self-efficacy (Soelaiman et al., 2026), although its impact may be limited without strong attitudes and behavioral control (Cahyono, 2017).

Overall, the literature suggests that entrepreneurship education is most effective when competency-based, experiential, and supported by a conducive environment, influencing entrepreneurial intention through mediators such as self-efficacy, motivation, and risk-taking attitudes (Lee et al., 2025)

### **Role of Universities in Entrepreneurship Learning**

Universities play a central role in fostering entrepreneurial intention by designing and implementing entrepreneurship learning processes. Within the framework of the Theory of Planned Behavior (Ajzen, 1991), universities influence students' attitudes, perceived behavioral control, and subjective norms primarily through structured educational experiences. Rather than functioning as separate constructs, the role of universities and entrepreneurship learning is inherently intertwined, as institutional support is operationalized through curriculum design, pedagogical approaches, and experiential learning opportunities (Diepolder et al., 2025). Entrepreneurship education has the potential to enhance students' inclination to pursue entrepreneurial careers as a viable alternative to employment in the private sector, public service, or state-owned enterprises by meaningfully shaping their attitudes, behaviors, and entrepreneurial intentions.

Entrepreneurship education in universities extends beyond theoretical instruction to include experiential learning, business incubation, and mentoring programs, all of which have been shown to enhance entrepreneurial attitudes and intentions (Karunambika & Arthi, 2025). Similarly, Widiyanto et al. (2023) emphasize that entrepreneurship learning models should be designed by considering the characteristics and needs of

specific groups, including women entrepreneurs, in order to make entrepreneurship education more inclusive and effective.

Universities play a key role in equipping young people with the competencies needed to sustain entrepreneurial activities (Frank, 2024) and to address national challenges. Prior studies link university initiatives to entrepreneurial intentions; this study focuses on institutions involved in government poverty alleviation programs. The effort that must be made is to foster entrepreneurial interest by taking entrepreneurship courses in one semester (Barba-Sánchez et al., 2022). The provision of entrepreneurship courses aims to make students have an entrepreneurial spirit, nature, and attitude, and foster their interests and talents (Martínez-Gregorio et al., 2021). With an understanding of entrepreneurship and the characteristics of entrepreneurs, it is expected that they will be able to create jobs (Decker et al., 2014). Accordingly, a growing cohort of university graduates who pursue entrepreneurial ventures has the potential to mitigate unemployment rates by generating new employment opportunities.

### **Family Environment**

Community empowerment efforts undertaken by the Ministry of Education and Culture involve restructuring the educational curriculum from secondary to tertiary levels. Among other things, it includes/adds entrepreneurship subjects/courses, which are intended to instill an entrepreneurial spirit in the younger generation (Ramadhan et al., 2022; Chang & Yang, 2024). Universities, as the highest level of formal education, are expected to produce young people who are independent and can encourage students to become job creators rather than job seekers (Ellikkal, 2020).

According to social learning theory, families serve as role models through observation and imitation; witnessing family members engage in entrepreneurial activities can shape entrepreneurial norms and values. This intergenerational transmission of entrepreneurial behavior fosters the perception that entrepreneurship is both achievable and socially respected, highlighting the role of family as a source of social capital in informal entrepreneurial education (Laspita et al., 2012). Families can also help practically, for example through seed capital facilities, social networks, or assistance in marketing early products (Anderson & Jack, 2010). Thus, the role of the family is not only as a passive background, but as an active agent

in forming interest and readiness for entrepreneurship (Cardella et al., 2020).

### **Entrepreneurial Interest**

Entrepreneurial interest refers to an individual's inclination or attraction toward engaging in entrepreneurial activities, reflecting curiosity, enjoyment, or preference for such behaviors. Unlike entrepreneurial intention, which indicates a planned commitment to start a venture, interest represents a motivational precursor that can influence attitudes and perceived behavioral control, consistent with the Theory of Planned Behavior framework. (Batz Liñeiro et al., 2024; Ferreira-Neto et al., 2023). Students with a high interest in entrepreneurship are more likely to choose a career path than working as employees, are future-oriented, and prefer tasks that demand personal responsibility for the outcome (Al-Mamary & Alshallaqi, 2022). Prior research also highlights that entrepreneurial interest may differ depending on gender-related factors such as social expectations, access to resources, and perceived entrepreneurial capability. Efendi et al. (2024) found that gender plays a meaningful role in shaping entrepreneurial interest among Indonesian students, suggesting that social context and gender norms can influence how individuals perceive entrepreneurship as a career option. According to social cognitive theory (Bandura, 1986), individual motivation and interest in specific activities are influenced by environmental factors and learning experiences. In the context of entrepreneurship, a supportive family environment can provide role modeling, encouragement, and resources that shape entrepreneurial self-efficacy, while effective entrepreneurship education can enhance knowledge, skills, and exposure to entrepreneurial tasks (Rae, 2005). Therefore, it is theoretically plausible that family support and educational interventions contribute to the development of interest in entrepreneurial activities, providing a basis for empirical investigation.

The inclination toward entrepreneurship reflects an individual's motivational and cognitive processes, shaping their intentions and readiness to engage in entrepreneurial activities (Virasa et al., 2022). On a broader level, the growth of entrepreneurial interest contributes to the creation of new jobs, which in turn can help the surrounding social environment and promote economic growth (Kritikos, 2024). Previous studies indicate that exposure to entrepreneurship education positively shapes students' entrepreneurial intentions by enhancing their skills, knowledge, and self-

efficacy (Fayolle & Gailly, 2015; Nabi et al., 2017). Similarly, family support, through modeling entrepreneurial behavior and providing resources, has been shown to influence entrepreneurial interest in younger individuals (Zellweger et al., 2012).

## **Hypotheses Development**

Based on the theoretical and empirical literature, entrepreneurship learning plays a significant role in enhancing students' entrepreneurial competencies, self-efficacy, and opportunity recognition, which in turn influence their entrepreneurial interest (Fayolle & Gailly, 2015; Nguyen & Nguyen, 2023).

**H1:** Entrepreneurship education has a positive effects students' entrepreneurial interest.

Family environment also serves as a critical social context shaping entrepreneurial attitudes through role modeling, support, and resource provision (Cardella et al., 2020; Laspita et al., 2012)

**H2:** Family support positively affects students' entrepreneurial interest.

Furthermore, the interaction between formal education and informal social context is expected to jointly influence entrepreneurial interest

**H3:** Entrepreneurship education and family environment simultaneously have a positive effect on entrepreneurial interest

## **Methodology**

This study employs a quantitative approach using a cross-sectional survey design. Data were collected at a single point in time through a structured questionnaire and analyzed using regression analysis to examine the relationships among the study variables. The data were collected directly from respondents using a structured questionnaire administered online by Google Form, with a total of 312 respondents. This research examines how the independent factors of entrepreneurship education and family environment shape students' entrepreneurial interest.

The study involved 312 undergraduate students from education departments at several universities in East Java, Indonesia (Table 2).

Participants were selected using a purposive sampling technique based on specific inclusion criteria: (1) the universities offer Economic Education and Mathematics Education study programs, and (2) the students had completed or were currently enrolled in an entrepreneurship course. These criteria were applied to ensure that the respondents possessed relevant academic exposure to entrepreneurship education, enabling them to provide informed responses related to entrepreneurial learning and interest. This research used a questionnaire. The questionnaire was distributed to students in the economic education and Mathematics education departments, while interviews were conducted with student informants at STKIP PGRI Lumajang. The questionnaire instrument uses a five-point Likert scale ranging from 1 to 5. The indicators assessed in the present research are outlined as follows:

*Table 1: Explanation of Research Variables into Measurement Indicators*

No	Variable	Measurement Indicator	Number of Items	Sources
1.	Entrepreneurship Learning	1. Learning Material Concept 2. Learning Method 3. Quality of teaching staff 4. Facilities	11 Items	Adapted from Fayolle & Gailly (2015) and Suherman (2010)
2.	The Family Environment	1. Family functioning 2. Parental attitudes and treatment 3. Economic status	15 Items	Adapted from Sujai et al. (2020) and Syamsu (2011)
3.	Entrepreneurial Interest	1. Personal 2. Sociological 3. Environment	16 Items	Adapted from Alma (2016) and Bae et al. 2014)

*Source: Authors*

All constructs were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The measurement items were adapted from previously published studies and adjusted to the context of entrepreneurship education among university students. The analysis in this study employs multiple regression techniques. The instrument was tested for validity and reliability using IBM SPSS Statistics 19 with data from 33 respondents. Validity was assessed via item–total correlation, with coefficients ranging from 0.570 to 0.920 (entrepreneurial learning), 0.705 to

0.879 (family environment), and 0.434 to 0.870 (entrepreneurial interest), all exceeding r-table (0.344), confirming validity. Reliability, as measured by Cronbach's alpha, showed strong consistency: 0.940, 0.958, and 0.942, respectively. After confirming validity and reliability, data were analyzed using classical assumption tests, including normality, heteroscedasticity, multicollinearity, and linearity.

*Table 2: The socio-demographic and academic profile of the respondents*

<b>Characteristic</b>	<b>Category</b>	<b>Frequency</b>	<b>Percentage</b>
Gender	Male	71	22.8
	Female	241	77.2
Year of Study	2022	191	61.2
	2023	121	38.8
Field of Study	Economic Education	203	65.1
	Mathematics Education	109	34.9
Institution	Public University	218	69.9
	Private University	94	30.1

*Source: Authors*

## **Results and Discussion**

The research process commences with an examination of the classical assumption tests prior to hypothesis testing. These tests consist of several sequential stages that must be satisfied. The following section presents an explanation of each stage of the classical assumption testing procedure:

### **Test of Data Distribution Normality**

The normality assumption of the regression model was evaluated using the Kolmogorov–Smirnov test applied to the unstandardized residuals generated from the regression analysis. Based on the test results (N = 312), the Asymp. Sig. value was 0.250, which exceeds the significance threshold of 0.05, indicating that the residuals are normally distributed and that the normality assumption of the regression model is satisfied. Accordingly, it can be concluded that the residuals associated with all variables follow a normal distribution. This is shown in the normality test table 2 as follows:

Table 3: One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		312
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	5.94484338
Most Extreme Differences	Absolute	.058
	Positive	.046
	Negative	-.058
Kolmogorov-Smirnov Z		1.019
Asymp. Sig. (2-tailed)		.250

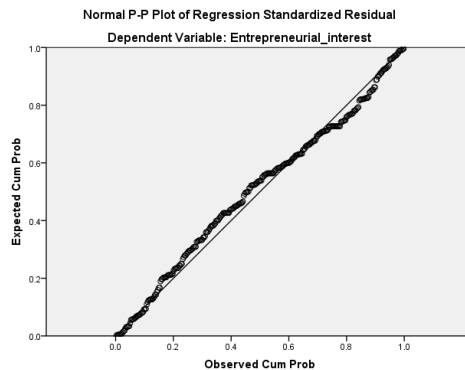
a. Test distribution is Normal.

b. Calculated from data.

Source: Authors

This conclusion is corroborated by the normal probability plot (P-P plot), which shows that the observed points closely align with the diagonal reference line (Figure 2). Accordingly, the findings demonstrate that the residuals are normally distributed, thereby confirming that the normality assumption required for linear regression analysis is satisfied in this study.

Figure 2: The result of the p-plot test

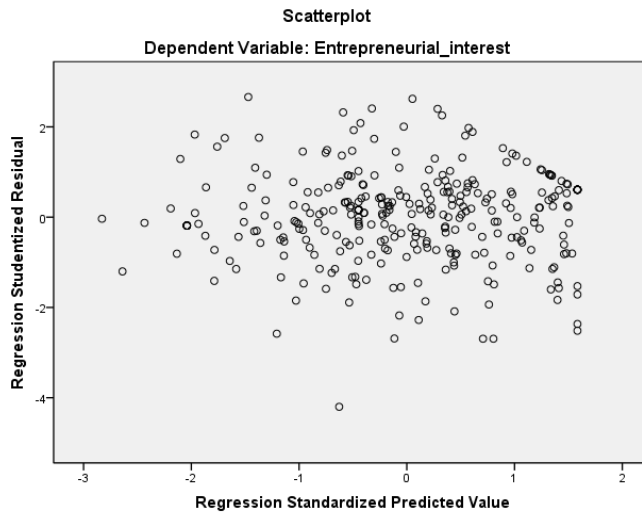


Source: Authors

## Heteroscedasticity Test

The test results show that there is no heteroscedasticity, which is indicated by the dots on the scatterplot test not showing a pattern, such as the results in the picture below, Figure 3:

Figure 3: The result of the scatterplot test



Source: Authors

### Multicollinearity Test

The Variance Inflation Factor (VIP) value of the two variables, namely entrepreneurial learning and family environment, is 1.419, smaller than 10, with a tolerance value of 0.705 greater than 0.1. The analysis indicates that multicollinearity is not present. The results are evidenced in the following Table 4:

Table 4: Coefficients

Independent Variable	Collinearity Statistics	
	Tolerance	VIF
Entrepreneurship Learning	.705	1.419
Family Environment	.705	1.419

Source: Authors

This study explains how entrepreneurship education and family context shape students' entrepreneurial intentions, with a particular focus on those in the Faculty of Education. To facilitate the analytical procedure involving multiple linear regression, the following researchers will present the results of processed data using the computer-assisted IBM SPSS Statistical

Program 19 for Windows. The outcomes of the multiple linear regression analysis are presented in Table 5 below:

The regression model yields a constant of 7459.216, reflecting the measurement of Entrepreneurial Interest (Y) as a composite score from multiple Likert-scale items. This aggregated structure results in a large baseline value, representing entrepreneurial interest when independent variables are zero. The magnitude of the constant does not affect the validity of regression coefficients in explaining variable relationships.

*Table 5: The Result of Multiple Linear Regression Test*

	Coefficients <sup>a</sup>		t	Sig.
	Unstandardized Coefficients	Standardized Coefficients		
	B	Std. Error		
<b>Constant</b>	7459.216	2157.634	3.457	.001
<b>Entrepreneurship Learning (X1)</b>	.293	.052	.230	.000
<b>Family Environment (X2)</b>	.656	.042	.647	.000

a. Dependent Variable: Entrepreneurial Interest (Y)

Source: Authors

Drawing upon the data summarized in the previous Table, the regression model may be expressed as follows:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 \quad (1)$$

$$Y = 7459.216 + 0.293 X_1 + 0.656 X_2 + e \quad (2)$$

The regression equation above shows the relationship between the independent and dependent variables. An examination of the partial effects, based on the results of the equation estimations, indicates that:

- (1) The constant value of 7,459.216 indicates that when the entrepreneurship learning variable and the family environment variable remain unchanged (i.e., X1 and X2 are equal to zero), the level of students' entrepreneurial interest is estimated at 7,459.216.

(2) The regression coefficient for entrepreneurship education is 0.293, indicating a positive and statistically significant effect ( $p < 0.001$ ). This result means that for every one-unit increase in entrepreneurship education, entrepreneurial interest increases by 0.293 units, assuming that other variables in the model remain constant.

The regression coefficient for the family environment variable is 0.656, suggesting that the family environment exerts a meaningful and positive effect on students' entrepreneurial interest. This finding indicates that, holding other factors constant, a one-unit increase in entrepreneurial interest.

(3) Table 6 below displays the findings for the coefficient of determination ( $R^2$ ), illustrating the proportion of variance explained by the model:

*Table 6: The Result Coefficient with Model Summary*

<b>Model</b>	<b>R</b>	<b>R Square</b>	<b>Adjusted R-Square</b>	<b>Std. Error of the Estimate</b>
<b>1</b>	.796	.633	.631	5983.77360

Predictor from Family Environment and Entrepreneurship Learning

*Source: Authors*

Based on Table 6, the coefficient of determination indicates that the Adjusted R-Squared value is 0.631. This suggests that approximately 63.1% of the variation in entrepreneurial interest is explained by its statistical association with entrepreneurship learning and family environment included in the regression model. The remaining 36.9% of the variation may be related to other variables not examined in this study.

The regression results show that entrepreneurship learning has a positive and statistically significant effect on students' entrepreneurial interest ( $\beta = 0.293$ ,  $t = 5.600$ ,  $p < 0.001$ ), thereby supporting H1. This indicates that improved quality and implementation of entrepreneurship learning increase students' entrepreneurial interest. In this study, entrepreneurship learning includes material relevance, teaching methods, lecturer competence, and learning facilities. Its strong significance suggests that structured learning enhances students' cognitive and motivational orientation toward entrepreneurship. Nguyen & Nguyen, (2023) confirm that entrepreneurship education shapes intentions through entrepreneurial

capacity. Additionally, practical learning experiences strengthen feasibility perceptions, opportunity recognition, competence, and confidence (Wardhani & Nastiti, 2023). Therefore, the results of this study reinforce the argument that well-designed entrepreneurship learning environments in higher education play an important role in fostering students' entrepreneurial interest.

As the earliest context of learning, the family environment plays a crucial role in shaping children's development and behavior; therefore, this study focuses on parenting practices, family functioning, economic status, and parental attitudes and roles.

*Figure 4: Entrepreneurship Learning Activities in community businesses*



*Sources: pictures taken by students during a survey of business actors*

Figure 4 illustrates an example of entrepreneurship learning activities conducted through direct interaction with community-based business actors. The purpose of presenting this figure is to provide contextual clarification regarding how entrepreneurship learning (X1) is implemented in the educational setting examined in this study. Specifically, the activity shown in the figure reflects a survey-based experiential learning approach in which students observe, interact with, and learn from real business practitioners.

Although the figure does not constitute part of the statistical analysis, it helps to illustrate the practical form of the entrepreneurship learning process measured in the questionnaire indicators, particularly those related to learning methods and the quality of teaching activities. In this way, the figure provides contextual support for interpreting the regression results by demonstrating the type of learning experience that may contribute to students' entrepreneurial interest. Therefore, the figure should be interpreted as descriptive evidence of the learning environment underlying the variable

of entrepreneurship learning rather than as an analytical component of the regression model.

The results of the hypothesis testing reveal that the family environment variable produced a t-value of 15.768, which surpasses the critical value of 1.967, accompanied by a significance level of 0.000, well below the 0.05 criterion, hypothesis (H2) is accepted. This evidence demonstrates that the family environment exerts a statistically significant influence on entrepreneurial interest. Specifically, a more supportive and conducive family environment is associated with a higher level of interest in entrepreneurship.

The empirical evidence from this study is in agreement with the argument suggested by Luis-Rico et al. (2020), who states that one of the factors that influences entrepreneurial interest is the encouragement and upbringing of parents to become entrepreneurs. The family constitutes the primary and most influential environment shaping children's development and behavioral patterns. The family environment has a significant influence on a child's career or work choices. Suherman (2011) argues that parents and the family environment form the foundation of children's development; entrepreneurial interest emerges when parents provide direction and positive encouragement toward entrepreneurship.

*Table 7: The Result of F Anova*

<b>Model</b>	<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
<b>Regression</b>	1.911E10	2	9.554E9	266.828	.000 <sup>a</sup>
<b>Residual</b>	1.106E10	309	35805546.54		
<b>Total</b>	3.017E10	311			

*Source: Authors*

In the hypothesis (H3 accepted), the statistical analysis (Table 7) indicates that the calculated F-value (266.828) exceeds the critical F-value (3.025), demonstrating a significance level ( $p < 0.05$ ), as reflected by a p-value of 0.000. These results demonstrate that entrepreneurship learning and the family environment have a statistically significant influence on entrepreneurial interest. Entrepreneurial interest develops through the interaction of several key factors, including: 1) Personal factors, which encompass individual personality traits and inherent psychological characteristics; 2) Environmental factors, which relate to the surrounding

physical conditions and contextual settings; 3) Sociological factors, which pertain to social interactions and relationships, including those within the family and broader social networks. According to Jati et al. (2021), entrepreneurial interest is influenced by a set of factors that can be broadly organized into two main dimensions. First, intrinsic factors encompass internal drivers such as the need for income, personal motives, self-esteem, a sense of enjoyment, and individual attention toward entrepreneurial activities. Second, extrinsic factors consist of external influences, including the family context, social and community environment, available opportunities, and educational background. The findings of this study indicate that entrepreneurship learning and the family environment are both positively associated with students' entrepreneurial interest when considered simultaneously. These results provide empirical support for theoretical perspectives suggesting that entrepreneurial interest develops through the interaction between educational experiences and social contexts, particularly the family environment. Rather than definitively proving the theory, the present findings contribute additional empirical evidence that is consistent with prior theoretical and empirical studies emphasizing the role of educational and familial influences in shaping entrepreneurial motivation among university students.

*Table 8: Percentage Distribution of Measurement Indicators Across Research Variables*

No	Measurement Indicator	Percentage
1.	1. Learning Material Concept	85.7
	2. Learning Method	85.4
	3. Quality of teaching staff	87.7
	4. Facilities	77.3
2.	1. Family functioning	82.9
	2. Parental attitudes and treatment	88.7
	3. Economic status	75.6
3.	1. Personal	82.6
	2. Sociological	79.2
	3. Environment	77.2

*Source: Authors*

The percentage values presented in Table 8 were obtained by transforming the mean scores for each indicator into percentages. Each

indicator was measured using a Likert scale, and the percentage was calculated using the formula:

$$\text{Percentage} = \frac{\text{Mean Score}}{\text{Maximum possible score}} \times 100 \quad (3)$$

This transformation makes it easier to interpret the relative strength of each indicator within the studied variables.

Based on the analysis of each indicator across the research variables, the highest percentage was observed for the parental attitudes and treatment indicator within the family environment variable. This finding indicates that student respondents perceive parental attitudes and the way parents treat their children as crucial in fostering and strengthening students' entrepreneurial interest. Meanwhile, from the study of statement items in the family environment variable, it is known that 180 students agreed with the statement that "parents always guide them not to give up easily when their efforts fail", 160 respondents strongly agreed with the statement that "parents always teach them to dare to take risks", and 142 respondents stated that "parents support entrepreneurship". In the entrepreneurship learning variable, one indicator of teaching quality has the highest percentage. This shows that students can understand the material taught by the instructor in the entrepreneurship course, and they also acknowledge that the instructor has competencies relevant to their knowledge. In addition, students strongly agree with the statement that lecturers provide motivation to continue entrepreneurship. Thus, it can be said that several of the statements that have been traced are consistent with and have an effect on the variable examined is students' entrepreneurial interest. The findings indicate that 61.1% of students reported a very high level of interest in pursuing entrepreneurship as a career path.

## **Conclusion**

The findings indicate a significant statistical association between entrepreneurship education within academic courses and students' entrepreneurial intentions. The findings indicate that entrepreneurial learning plays an important role in fostering students' entrepreneurial interest. In this context, the indicators of entrepreneurial interest, such as students' motivation, intention, and readiness to engage in entrepreneurial

activities, should be systematically integrated into the semester learning plan (SLP). Embedding these indicators in the learning design allows entrepreneurship education to not only deliver theoretical knowledge but also to cultivate students' desire and intention to pursue entrepreneurial careers. The implementation of entrepreneurship learning provided by lecturers is not only the delivery of material but also the practice of surveying business actors. This is done so that students can draw inspiration from business leaders to become young entrepreneurs before and after graduating from college. The empirical findings provide support for the hypothesis that entrepreneurship learning and the family environment are significantly related to students' entrepreneurial interest.

This study has several limitations. The relatively small sample, drawn from a specific educational context, may limit the generalizability of the findings. Additionally, reliance on self-reported questionnaire data may introduce response bias. Despite this, the findings offer important implications: institutions should enhance interactive entrepreneurship learning and practical training opportunities, while parents should provide consistent support and motivation to foster students' entrepreneurial aspirations and long-term engagement. This is because parents play a significant role in shaping children's interest in entrepreneurship. For future research, it is recommended to examine additional determinants of entrepreneurial interest beyond entrepreneurship education and family environment. Potential variables that may provide deeper explanatory power include entrepreneurial self-efficacy, risk-taking propensity, social support, digital entrepreneurial competence, and institutional support. Future studies may also employ theoretical perspectives such as the Theory of Planned Behavior to better explain how attitudes, subjective norms, and perceived behavioral control shape students' entrepreneurial interest.

## **Acknowledgment**

The authors wish to express their sincere appreciation to the faculty members of the Doctoral/Ph.D. Program at the State University of Surabaya, collaborating universities in Lumajang, members of the Lumajang academic community, and the Institute for Research and Community Service (LPPM) of STKIP PGRI Lumajang for their valuable contributions, institutional support, and academic guidance throughout the conduct and completion of this study.

## References

- [1] **Ajzen, I.** (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/https://doi.org/10.1016/0749-5978(91)90020-T)
- [2] **Al-Mamary, Y. H., & Alshallaqi, M.** (2022). Impact of autonomy, innovativeness, risk-taking, proactiveness, and competitive aggressiveness on students' intention to start a new venture. *Journal of Innovation and Knowledge*, 7(4), 100239. <https://doi.org/10.1016/j.jik.2022.100239>
- [3] **Alma, B.** (2016). *Kewirausahaan: Untuk Mahasiswa dan Umum*. Alfabeta.
- [4] **Anderson, A. R., & Jack, S. L.** (2010). *The Role of Family Members in Entrepreneurial Networks: Beyond Boundary of the Family Firms*. 45.
- [5] **Audretsch, D., & Thurik, R.** (2001). *Linking Entrepreneurship to Growth* (OECD Science, Technology and Industry Working Papers, Issue 2001/2). OECD Publishing. <https://econpapers.repec.org/RePEc:oec:stiaaa:2001/2-en>
- [6] **Bae, Tae Jun, Qian, Shanshan, Miao, Chao, & Fiet, James O.** (2014). The Relationship between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review. *Entrepreneurship Theory and Practice*, 38(2), 217–254. <https://doi.org/10.1111/etap.12095>
- [7] **Bandura, A.** (1977). Social learning theory. In *Englewood Cliffs, NJ: Prentice-Hall*. <https://doi.org/10.4337/9781803928180.ch33>
- [8] **Bandura, A.** (1986). Social foundations of thought and action: A social cognitive theory. In *Social foundations of thought and action: A social cognitive theory*. (pp. xiii, 617–xiii, 617). Prentice-Hall, Inc.
- [9] **Barba-Sánchez, V., Mitre-Aranda, M., & Brió-González, J. del.** (2022). The entrepreneurial intention of university students: An environmental perspective. *European Research on Management and Business Economics*, 28(2). <https://doi.org/10.1016/j.iedeen.2021.100184>
- [10] **Batz Liñeiro, A., Romero Ochoa, J. A., & Montes de la Barrera, J.** (2024). Exploring entrepreneurial intentions and motivations: a comparative analysis of opportunity-driven and necessity-driven entrepreneurs. *Journal of Innovation and Entrepreneurship*, 13(1). <https://doi.org/10.1186/s13731-024-00366-8>
- [11] **Bjørnskov, C., & Foss, N. J.** (2016). Institutions, entrepreneurship, and economic growth: What do we know and what do we still need to know? *Academy of Management Perspectives*, 30(3), 292–315. <https://doi.org/10.5465/amp.2015.0135>
- [12] **Braun, E., & Follert, F.** (2024). The calculating entrepreneur — The role of economic calculation in supporting alertness and creative destruction. *Managerial and Decision Economics*, July, 1–11. <https://doi.org/10.1002/mde.4341>
- [13] **Cahyono, A. E.** (2017). Pengaruh Pendidikan Kewirausahaan melalui

- Variabel Intervening Teori Perilaku Terencana terhadap Intensi Berwirausaha Mahasiswa Fakultas Keguruan dan Ilmu Pendidikan Universitas Jember. *JURNAL EKONOMI PENDIDIKAN DAN KEWIRAUSAHAAN*, 2(2 SE-Articles), 251–262. <https://doi.org/10.26740/jepk.v2n2.p251-262>
- [14] **Cardella, G. M., Hernández-Sánchez, B. R., & Sánchez García, J. C.** (2020). Entrepreneurship and Family Role: A Systematic Review of a Growing Research. *Frontiers in Psychology*, 10(January), 1–17. <https://doi.org/10.3389/fpsyg.2019.02939>
- [15] **Chang, H., & Yang, P.** (2024). Entrepreneurial spirit: A catalyst on the road to green and sustainable development—A theoretical analysis based on dynamic games and empirical tests from Chinese data. *Journal of Cleaner Production*, 446, 141407. <https://doi.org/10.1016/j.jclepro.2024.141407>
- [16] **Decker, R., Haltiwanger, J., Jarmin, R., & Miranda, J.** (2014). The role of entrepreneurship in us job creation and economic dynamism. *Journal of Economic Perspectives*, 28(3), 3–24. <https://doi.org/10.1257/jep.28.3.3>
- [17] **Diepolder, C. S., Huwer, J., & Weitzel, H.** (2025). Effects of competence-based sustainable entrepreneurship education on secondary school students' sustainable entrepreneurial intention. *Sustainable Technology and Entrepreneurship*, 4(2), 100103. <https://doi.org/10.1016/j.stae.2025.100103>
- [18] **Dihni, V. A.** (2023). *Jumlah Wirausahawan di Indonesia Ganjal Pertumbuhan Ekonomi*. Katadata.Co.Id-JURNALISME DATA. <https://katadata.co.id/analisisdata/6464b3d3c584e/jumlah-wirausahawan-di-indonesia-ganjal-pertumbuhan-ekonomi>
- [19] **Efendi, R., Mulyadi, H., Disman, Purnamasari, I., & Tantri, P. A.** (2024). The Role of Gender in Fostering Interest in Entrepreneurship in Indonesia. *Journal of Women's Entrepreneurship and Education*, 2024(1–2), 141–156. <https://doi.org/10.28934/jwee24.12.pp141-156>
- [20] **Ellikkal, A. S. R.** (2020). Entrepreneurship Mindset Curriculum: A Transformation from Job Seeker to Job Creator. *KICMA-Reach Journal Management*, 6(1), 5–13. <https://www.researchgate.net/publication/359025537>
- [21] **Fayolle, A., & Gailly, B.** (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. In *Journal of Small Business Management* (Vol. 53, Issue 1, pp. 75–93). Wiley-Blackwell Publishing Ltd. <https://doi.org/10.1111/jsbm.12065>
- [22] **Ferreira-Neto, M. N., de Carvalho Castro, J. L., de Sousa-Filho, J. M., & de Souza Lessa, B.** (2023). The role of self-efficacy, entrepreneurial passion, and creativity in developing entrepreneurial intentions. *Frontiers in Psychology*, 14(March), 1–14. <https://doi.org/10.3389/fpsyg.2023.1134618>
- [23] Frank, L. (2024). Sustainable Entrepreneurship Education and the Role of Universities. *Research Gate*, July, 1–7.

- [24] Indah, B. (2024). Kewirausahaan merupakan kunci utama untuk meningkatkan perekonomian negara. *Jurnal Transformasi Bisnis Digital*, 1(1), 1–12. <https://ejournal.arimbi.or.id/index.php/JUTRABIDI/article/view/42%0Ahttps://ejournal.arimbi.or.id/index.php/JUTRABIDI/article/download/42/40>
- [25] Jati, M. N. K., Santi, M., & Sultoni, H. (2021). Faktor-Faktor Yang Mempengaruhi Minat Berwirausaha Mahasiswa Stai Muhammadiyah Tulungagung. *Istithmar : Jurnal Studi Ekonomi Syariah*, 5(1), 69–82. <https://doi.org/10.30762/istithmar.v5i1.18>
- [26] Karunambika, & Arthi. (2025). Fostering Entrepreneurial Spirit: Impact of Incubation Activities on Female Students' Entrepreneurial Intention. *Journal of Women's Entrepreneurship and Education*, 2025(1–2), 155–173. <https://doi.org/10.28934/jwee25.12.pp155-173>
- [27] Kritikos, A. S. (2024). Entrepreneurs and their impact on jobs and economic growth. *IZA World of Labor*, 2(8). <https://doi.org/10.15185/izawol.8.v2>
- [28] Larsen, E. S. H., Haneberg, D. H., & Lakså, S. (2024). Revealing three anomalies: Extending Kolb educator roles profile in experiential entrepreneurship education. *International Journal of Management Education*, 22(3). <https://doi.org/10.1016/j.ijme.2024.101048>
- [29] Laspita, S., Breugst, N., Heblich, S., & Patzelt, H. (2012). Intergenerational transmission of entrepreneurial intentions. *Journal of Business Venturing*, 27(4), 414–435. <https://doi.org/10.1016/j.jbusvent.2011.11.006>
- [30] Lee, H. W., Jang, S. H., & Jeong, J. S. (2025). A literature review on university student entrepreneurship from a Human Resource Development (HRD) perspective. *Human Resources Management and Services*, 7(3), 1–20. <https://doi.org/10.18282/hrms4900>
- [31] Luis-Rico, M. I., Escolar-Llamazares, M. C., de la Torre-Cruz, T., Herrero, Á., Jiménez, A., Val, P. A., Palmero-Cámara, C., & Jiménez-Eguizábal, A. (2020). The association of parental interest in entrepreneurship with the entrepreneurial interest of Spanish youth. *International Journal of Environmental Research and Public Health*, 17(13), 1–16. <https://doi.org/10.3390/ijerph17134744>
- [32] Martínez-Gregorio, S., Badenes-Ribera, L., & Oliver, A. (2021). Effect of entrepreneurship education on entrepreneurship intention and related outcomes in educational contexts: a meta-analysis. *International Journal of Management Education*, 19(3), 100545. <https://doi.org/10.1016/j.ijme.2021.100545>
- [33] Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The Impact of Entrepreneurship Education in Higher Education: A Systematic Review and Research Agenda. *Academy of Management Learning & Education*, 16(2), 277–299. <https://doi.org/10.5465/amle.2015.0026>

- [34] **Nguyen, Q. Do, & Nguyen, H. T.** (2023). Entrepreneurship education and entrepreneurial intention: The mediating role of entrepreneurial capacity. *The International Journal of Management Education*, 21(1), 100730. <https://doi.org/10.1016/j.ijme.2022.100730>
- [35] **Paunović, I., & Musial, J.** (2024). Gender Gap in Entrepreneurial Intention, Reasoning, Self-Efficacy, and Education Preferences Among University Students: an Entrepreneurial Event Theory Perspective. *Journal of Women's Entrepreneurship and Education*, 2024(3–4), 93–111. <https://doi.org/10.28934/jwee24.34.pp93-111>
- [36] **Putra, B. P.** (2018). Peningkatkan Jumlah Wirausahawan Di Indonesia Melalui Kolaborasi Akademisi – Pelaku Usaha – Mahasiswa. *Economicus*, 9(1), 63–71. <https://doi.org/10.47860/economicus.v12i1.147>
- [37] **Rae, D.** (2005). Entrepreneurial learning: A narrative-based conceptual model. *Journal of Small Business and Enterprise Development*, 12(3), 323–335. <https://doi.org/10.1108/14626000510612259>
- [38] **Ramadhan, I., Manisah, A., Angraini, D. A., Maulida, D., Sana, S., & Hafiza, N.** (2022). Proses Perubahan Pembelajaran Siswa dari Daring ke Luring pada Saat Pandemi Covid-19 di Madrasah Tsanawiyah. *Edukatif: Jurnal Ilmu Pendidikan*, 4(2), 1783–1792. <https://doi.org/10.31004/edukatif.v4i2.2200>
- [39] **Rengganis, R. M. Y. D., Mirayani, L. P. M., & Pramanaswari, A. . S. I.** (2022). The Influence of Entrepreneurship Education, Motivation and Family Environment on Interest in Entrepreneurship. *Jurnal Economina*, 1(4), 975–984.
- [40] **Sieger, P., Raemy, L., Zellweger, T., Fueglistaller, U., & Hatak, I.** (2021). *GUESSS Global Report 2021*. 1–28. [http://www.guesssurvey.org/resources/PDF\\_InterReports/GUESSS\\_Global\\_2018.pdf](http://www.guesssurvey.org/resources/PDF_InterReports/GUESSS_Global_2018.pdf)
- [41] **Soelaiman, L., Keni, K., & Chin, T. L.** (2026). *The Effectiveness of Entrepreneurship Education on Students ' Self- Efficacy and Entrepreneurial Intention: A Comparative Study of Major Cities in Indonesia*. 14(1), 75–96.
- [42] **Suherman, E.** (2010). *Desain Pembelajaran Kewirausahaan*. CV TIRTA BUANA MEDIA.
- [43] **Sujai, R. A. D. A., Susanti, N., & Rahmayanti, R.** (2020). The Effects of Entrepreneurship Education and Family Environment on Entrepreneurial Attitudes with Motivation as Intervening Variables to Management Field at University X. *International Journal of Psychosocial Rehabilitation*, 24(02), 3629–3640. <https://doi.org/10.37200/ijpr/v24i2/pr200685>
- [44] **Syamsu, Y.** (2011). Psikologi perkembangan anak dan remaja. Bandung: PT Remaja Rosdakarya.

- [45] **Virasa, T., Sukavejworakit, K., & Promsiri, T.** (2022). Predicting entrepreneurial intention and economic development: A cross-national study of its policy implications for six ASEAN economies. *Heliyon*, 8(5), e09435. <https://doi.org/10.1016/j.heliyon.2022.e09435>
- [46] **Wardhani, P. S. N., & Nastiti, D.** (2023). Implementasi Pendidikan Kewirausahaan Dalam Menumbuhkan Minat Berwirausaha Mahasiswa. *Prima Magistra: Jurnal Ilmiah Kependidikan*, 4(2), 177–191. <https://doi.org/10.37478/jpm.v4i2.2622>
- [47] **Widiyanto, Yulianto, A., Feriady, M., & Nurkhin, A.** (2023). Learning Model of Female Entrepreneurship in Indonesia: Development of Learning Model Based on the Characteristics and Needs of Female Entrepreneurs. *Journal Women's Entrepreneurship and Education*, 1–2. <https://doi.org/10.28934/jwee23.12.pp32-50>
- [48] **Zellweger, T. M., Nason, R. S., & Nordqvist, M.** (2012). From Longevity of Firms to Transgenerational Entrepreneurship of Families: Introducing Family Entrepreneurial Orientation. *Family Business Review*, 25(2), 136–155. <https://doi.org/10.1177/0894486511423531>

*Article history:* Received: December 29, 2025

Accepted: May 14, 2026

First Online: May 15, 2026