

Educational Elements and Entrepreneurial Intention: The Mediating Role of Entrepreneurship Education in Higher Education

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ABSTRACT

This study examines the effects of educational elements, namely entrepreneurship material, teaching methods, and the learning environment, on entrepreneurial intention through entrepreneurship education in the higher education context. A quantitative approach was employed using survey data collected from 104 respondents in higher education institutions. The analysis was conducted to evaluate both the direct effects of entrepreneurship material, teaching methods, and learning environment on entrepreneurship education and the indirect effects on entrepreneurial intention through entrepreneurship education. The findings indicate that relevant entrepreneurship material, interactive teaching methods, and a supportive learning environment significantly enhance entrepreneurship education. Furthermore, entrepreneurship education has a positive and significant effect on entrepreneurial intention and serves as an important mediating mechanism in explaining how educational elements shape entrepreneurial intention. These results suggest that entrepreneurial intention is more likely to develop when entrepreneurship learning is supported by practice-oriented content, participatory instruction, and conducive academic settings. This study highlights the importance of strengthening curriculum quality, instructional strategies, and institutional support to improve the effectiveness of entrepreneurship education in fostering entrepreneurial intention.

Keywords: Entrepreneurship Material, Teaching Methods, Learning Environment, Entrepreneurial Interest, Entrepreneurship Education

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1. INTRODUCTION

Unemployment in Indonesia, particularly in South Sulawesi, remains a serious challenge that requires greater attention. The high unemployment rate is caused by rapid population growth and the mismatch between the number of job seekers and the availability of employment opportunities. In this context, entrepreneurship can serve as an effective solution to reduce unemployment. By creating new businesses, entrepreneurs not only provide employment for themselves but also for others.

Entrepreneurship education plays an important role in shaping students' entrepreneurial interest. Through this education, students are equipped with the knowledge and skills necessary to start and manage a business. Research indicates that well-structured entrepreneurship material, effective teaching methods, and a supportive learning environment can enhance students' entrepreneurial interest. Therefore, it is essential to explore how these three factors interact and contribute to entrepreneurial intention. According to Fayolle et al. (2014), in South Sulawesi, educational institutions such as Makassar State University (UNM) have integrated

entrepreneurship courses into their curriculum. This approach aims to provide practical experience for students and build a positive attitude toward entrepreneurship. The teaching methods employed vary, ranging from project-based learning to interactive discussions, all of which aim to increase student engagement in the learning process.

This study aims to analyze the influence of entrepreneurship material, teaching methods, and learning environment on students' entrepreneurial interest in South Sulawesi through entrepreneurship education. By understanding the relationship among these factors, it is expected that new strategies can be developed to enhance entrepreneurial interest among students, thereby contributing to reducing unemployment rates and regional economic growth.

2. METHOD

Research Model and Hypotheses

This study employs a quantitative approach with several variables whose effects will be examined, producing data in numerical form. Quantitative research is defined as research that tests objective theories by analyzing the relationships among variables (Creswell, 2013). This type of quantitative research always includes descriptive questions regarding dependent and independent variables, as well as questions about how the dependent and independent variables are related (Creswell, 2013). The hypotheses are tested using Path Analysis. The following is the research design.

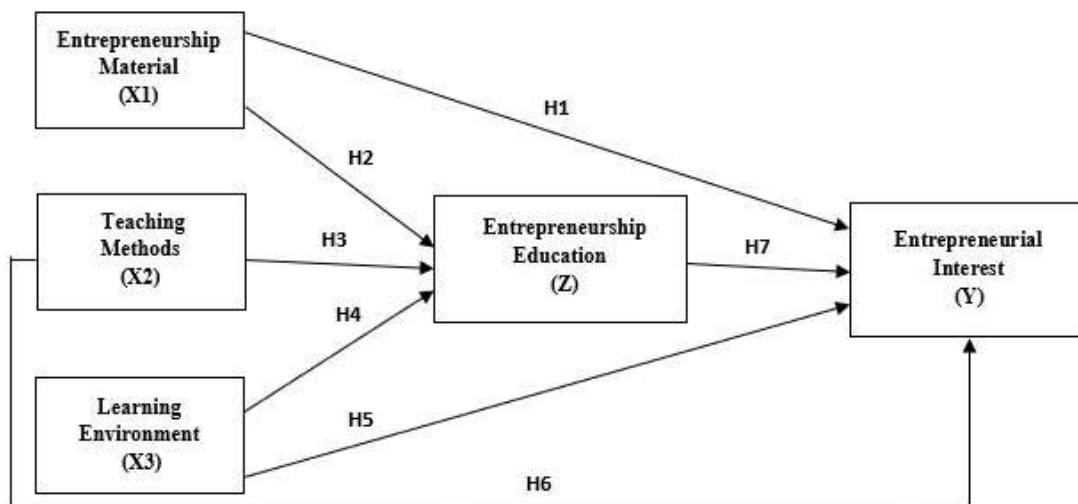


Figure 1: Research Design

Based on Figure 1 above, this research is a descriptive explanatory study, which means it describes the influence among the variables examined. Descriptive refers to explaining and analyzing the research variables, namely Entrepreneurship Material (X1), Teaching Methods (X2), Learning Environment (X3), Entrepreneurship Education (Z), and Entrepreneurial Interest (Y). Meanwhile, explanatory refers to identifying the causal influence among the research variables through hypotheses.

The causal influence includes the direct effects of Entrepreneurship Material (X1), Teaching Methods (X2), and Learning Environment (X3) on Entrepreneurship Education (Z), as well as the indirect effects of Entrepreneurship Material (X1), Teaching Methods (X2), and Learning Environment (X3) on Entrepreneurial Interest (Y) through Entrepreneurship Education (Z) among students in South Sulawesi. This research design is also based on COR theory and JD-R theory, as well as relevant previous studies. Therefore, the researcher is able to formulate direct and indirect effect hypotheses in this study. The summary of the hypotheses can be seen in the table below.

Table 1: Summary of Hypotheses

Hypothesis	Description
H1	Entrepreneurship material has a positive and direct influence on entrepreneurial interest.
H2	Entrepreneurship material has a positive and direct influence on entrepreneurship education.
H3	Teaching methods have a negative and direct influence on entrepreneurship education.
H4	Learning environment has a positive and direct influence on entrepreneurship education.
H5	Learning environment has a negative and direct influence on entrepreneurial interest.
H6	Teaching methods have a positive and direct influence on entrepreneurial interest.
H7	Entrepreneurship education has a positive and direct influence on entrepreneurial interest.
H8	Entrepreneurship material has a positive and indirect influence on entrepreneurial interest through entrepreneurship education.
H9	Teaching methods have a positive and indirect influence on entrepreneurial interest through entrepreneurship education.
H10	Learning environment has a negative and indirect influence on entrepreneurial interest through entrepreneurship education.

Based on Table 1 above, this study consists of 10 hypotheses. These hypotheses will examine the direct influence of entrepreneurship material (X1) on entrepreneurial interest (Y); the direct influence of entrepreneurship material (X1) on entrepreneurship education (Z); the direct influence of teaching methods (X2) on entrepreneurship education (Z); the direct influence of the learning environment (X3) on entrepreneurship education (Z); the direct influence of the learning environment (X3) on entrepreneurial interest (Y); the direct influence of teaching methods (X2) on entrepreneurial interest (Y); the direct influence of entrepreneurship education (Z) on entrepreneurial interest (Y); the indirect influence of entrepreneurship material (X1) on entrepreneurial interest (Y) through entrepreneurship education (Z); the indirect influence of teaching methods (X2) on entrepreneurial interest (Y) through entrepreneurship education (Z); and the indirect influence of the learning environment (X3) on entrepreneurial interest (Y) through entrepreneurship education (Z).

Population and Sample

The population in this study consists of all active students enrolled in public and private universities in South Sulawesi Province in 2024 who have taken or are currently taking entrepreneurship courses. This population includes all students who meet these criteria, regardless of study major, faculty, or university. The sampling technique used is self-selection sampling. This sample consists of students who voluntarily choose to participate in the study. They may have different characteristics from non-participating students, such as higher interest in entrepreneurship, stronger motivation, or greater availability of time.

Data Collection

Data collection was conducted by determining the research subjects, namely active university students in South Sulawesi, using questionnaires. The questionnaire used was a closed-ended questionnaire distributed digitally via Google Forms, while the measurement scale employed was the Likert scale. The Likert scoring scale consisted of five response options: Strongly Disagree: 1, Disagree: 2, Moderately Agree: 3, Agree: 4, and Strongly Agree: 5. The collected data were then analyzed using the Statistical Package for the Social Sciences, now more commonly known as Statistical Product And Service Solutions (SPSS) version 26. The data analysis in this research included descriptive statistical analysis, classical assumption testing, and path analysis.

3. RESULTS AND DISCUSSION

Hypothesis Testing

Hypothesis testing is conducted to examine the direct and indirect effects of exogenous variables on endogenous variables. A hypothesis is accepted or rejected based on the criterion that if the p-value < 0.05, then H_0 is accepted or the obtained regression coefficient is considered significant. The results of the hypothesis testing for both direct and indirect effects can be seen in the following table:

Table 2: Results of Direct Hypothesis Testing
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.081	.678		1.594	.114
	Entrepreneurship Material	.135	.178	.139	.761	.449
	Teaching Method	.286	.170	.303	1.686	.095
	Learning Environment	-.169	.094	-.181	-1.806	.074
	Entrepreneurship Education	.548	.089	.577	6.190	.000

a. Dependent Variable: Minat Berwirausaha (Y)

$$e1 = 1 - R^2 = \sqrt{1 - 0,661} = 0,582$$

$$Y = \beta_4 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_7 Z + e_2$$

$$Y = 0,139 X_1 + 0,303 X_2 + (-0,181) X_3 + 0,577 Z + 0,582$$

The coefficient of determination of 0.582 indicates that the direct influence of Entrepreneurship Material, Teaching Methods, Learning Environment, and Entrepreneurship Education on the variable Y (Entrepreneurial Interest) is 66.1%, while the remaining 33.9% is influenced by other variables outside this model or study.

Tabel 3: Hasil Pengujian Hipotesis Tidak Langsung
Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.831	.743		2.464	.015
	Entrepreneurship Material	.883	.181	.864	4.890	.000
	Teaching Methods	-.286	.189	-.288	-1.512	.134
	Learning Environment	.220	.103	.223	2.129	.036

a. Dependent Variable: Entrepreneurship Education (Z)

To obtain the error influence (e_2), the following formula is used:

$$e_2 = 1 - R^2 = \sqrt{1 - 0,606} = 0,627$$

$$Z = \beta_4 X_1 + \beta_5 X_2 + \beta_6 X_3 + e_1$$

$$Z = 0,864 X_1 + (-0,288) X_2 + 0,223 X_3 + 0,627$$

The coefficient of determination of 0.627 indicates that the direct influence of Entrepreneurship Material, Teaching Methods, and Learning Environment on the variable Z (Entrepreneurship Education) is 60.6%, while the remaining 39.4% is influenced by other variables outside this model or study.

Entrepreneurship Material has a positive and significant influence on Entrepreneurial Interest through Entrepreneurship Education.

$$\begin{aligned} \text{Indirect effect:} &= X_1 \rightarrow Z \rightarrow Y \\ &= \beta_4 \times \beta_7 \\ &= 0,864 \times 0,577 \\ &= 0,498 \end{aligned}$$

Teaching Methods have a negative and insignificant influence on Entrepreneurial Interest through Entrepreneurship Education.

$$\begin{aligned} \text{Indirect effect:} &= X_2 \rightarrow Z \rightarrow Y \\ &= \beta_5 \times \beta_7 \\ &= (-0,288) \times 0,577 \\ &= -0,166 \end{aligned}$$

Learning Environment has a positive and significant influence on Entrepreneurial Interest through Entrepreneurship Education.

$$\begin{aligned} \text{Indirect effect:} &= X_3 \rightarrow Z \rightarrow Y \\ &= \beta_6 \times \beta_7 \\ &= 0,223 \times 0,577 \\ &= 0,128 \end{aligned}$$

H1: The effect of entrepreneurship material on entrepreneurial interest shows a significance value of $0.449 > 0.05$ and a Beta value of 0.139. Based on these results, it can be concluded that H1 is rejected.

H2: The effect of entrepreneurship material on entrepreneurship education shows a significance value of $0.000 < 0.05$ and a Beta value of 0.864. Based on these results, it can be concluded that H2 is accepted.

H3: The effect of teaching methods on entrepreneurship education shows a significance value of $0.134 > 0.05$ and a Beta value of -0.288. Based on these results, it can be concluded that H3 is rejected.

H4: The effect of the learning environment on entrepreneurship education shows a significance value of $0.036 < 0.05$ and a Beta value of 0.233. Based on these results, it can be concluded that H4 is accepted.

H5: The effect of the learning environment on entrepreneurial interest shows a significance value of $0.074 > 0.05$ and a Beta value of -0.181. Based on these results, it can be concluded that H5 is rejected.

H6: The effect of teaching methods on entrepreneurial interest shows a significance value of $0.095 > 0.05$ and a Beta value of 0.303. Based on these results, it can be concluded that H6 is rejected.

H7: The effect of entrepreneurship education on entrepreneurial interest shows a significance value of $0.000 < 0.05$ and a Beta value of 0.577. Based on these results, it can be concluded that H7 is accepted.

H8: The effect of entrepreneurship material on entrepreneurial interest through entrepreneurship education shows a Beta value of 0.637. Based on these results, it can be concluded that H8 is accepted.

H9: The effect of teaching methods on entrepreneurial interest through entrepreneurship education shows a Beta value of 0.137. Based on these results, it can be concluded that H9 is accepted.

H10: The effect of the learning environment on entrepreneurial interest through entrepreneurship education shows a Beta value of -0.053. Based on these results, it can be concluded that H10 is rejected.

Tabel 4: Hasil Analisis Jalur

Variable Influence	Effect		Total
	Direct Effect	Indirect Effect	
Effect of X1 → Y	0,139	-	0,139
Effect of X2 → Y	0,303	-	0,303
Effect of X3 → Y	-0,181	-	-0,181
Effect of X1 → Z	0,864	-	0,864
Effect of X2 → Z	-0,288	-	-0,288
Effect of X3 → Z	0,223	-	0,223
Effect of Z → Y	0,577	-	0,577
Effect of X1 → Z → Y	0,139	0,498	0,637
Effect of X2 → Z → Y	0,303	-0,166	0,137
Effect of X3 → Z → Y	-0,181	0,128	-0,053

Based on the structure of this research model, the empirical equations can be formulated as follows:

$$Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_7 Z + e_2$$

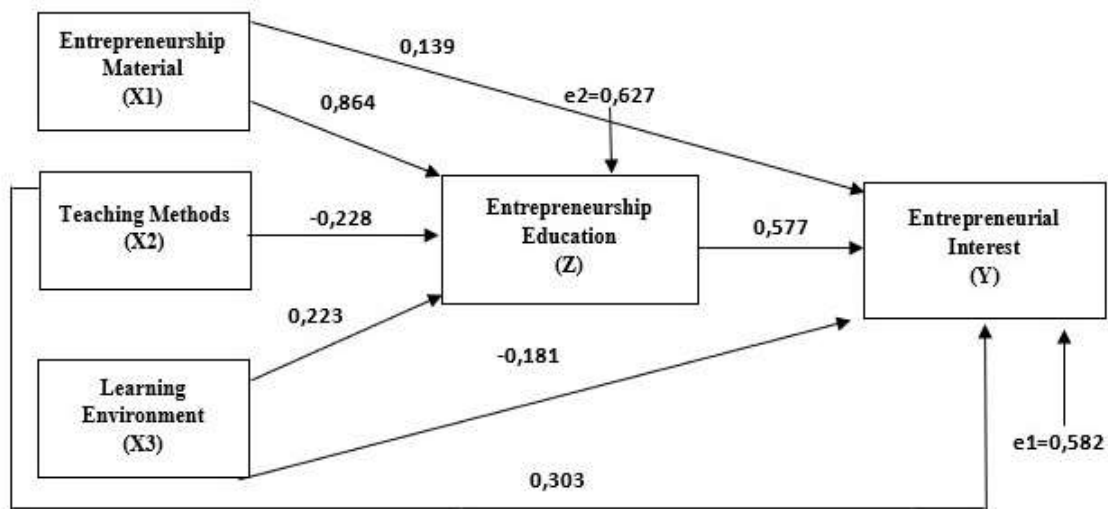
$$Y = 0,134 X_1 + 0,303 X_2 + (-0,181) X_3 + 0,577 Z + 0,627$$

$$Z = \beta_4 X_1 + \beta_5 X_2 + \beta_6 X_3 + e_1$$

$$Z = 0,864 X_1 + (-0,288) X_2 + 0,223 X_3 + 0,582$$

Below is the result of the path analysis presented in diagram form.

Figure 2: Path Analysis Result Model



In Figure 2 above, it explains the standardized beta values and the magnitude of both the indirect and direct effects of each variable.

Coefficient of determination: $R^2 = 1 - P e_1^2 * P e_2^2 \dots \dots \dots P e_n^2$.

Interpretation of (R^2) is as follows:

$$R^2 = 1 - (0,582^2) (0,627^2) = 1 - = 0,867$$

Based on the coefficient of determination above, it indicates that the direct and indirect influence is 0.867 or 86.7%, in other words, the information contained in the data (86.7%) is explained by the model. Meanwhile, 13.3% is explained by variables outside the model or this study.

DISCUSSION

The Influence of Entrepreneurship Material on Entrepreneurial Interest of Students in South Sulawesi

The results of the study show that entrepreneurship material has a low influence on entrepreneurial interest among students in South Sulawesi. Entrepreneurship material and its influence on students' interest discusses how educational content can motivate students to be interested and confident in starting a business. Entrepreneurial interest is defined as the desire, involvement, and willingness to work hard to meet life needs without fear of failure risks experienced (Dzulfikri & Kusworo, 2017).

The Influence of Entrepreneurship Material on Entrepreneurship Education of Students in South Sulawesi

The results show a positive and significant relationship between entrepreneurship material and entrepreneurship education among students in South Sulawesi. Entrepreneurship material is the curriculum content designed to teach concepts, skills, and experiences relevant to entrepreneurship. Thus, entrepreneurship can be taught through the cultivation of entrepreneurial values that shape entrepreneurial character and behavior so that learners can become independent in work or business. Entrepreneurship education leads to an understanding of entrepreneurial concepts, entrepreneurial character development, and business management skills (Kusmintarti et al., 2017).

The Influence of Teaching Methods on Entrepreneurship Education of Students in South Sulawesi

The findings show that teaching methods have a low influence on entrepreneurship education among students in South Sulawesi. According to Chen, H., Tang, Y., & Han, J. (2022) entrepreneurial teaching methods involve the reception and response of students through meaning, experience, attitudes, and perceptions of the learning model used to provide knowledge and skills in entrepreneurship. The advancement of entrepreneurship requires an integrated policy approach at macro, mezzo, and micro levels for effective implementation of entrepreneurship teaching and learning (Purnomo, 2015).

The Influence of Learning Environment on Entrepreneurship Education of Students in South Sulawesi

The results indicate a positive and significant relationship between the learning environment and entrepreneurship education among students in South Sulawesi. A supportive entrepreneurship learning environment strengthens students' entrepreneurial skills and motivation. Therefore, the learning environment must contribute to stimulating internal factors within students so that entrepreneurial interest continues to rise and eventually motivates students to create business opportunities (Wahyuningsih, 2020).

The Influence of Learning Environment on Entrepreneurial Interest of Students in South Sulawesi

The study shows a low influence of the learning environment on entrepreneurial interest among students in South Sulawesi. A supportive entrepreneurship learning environment can increase entrepreneurial interest. Students interested in entrepreneurship generally have an environment that supports entrepreneurial learning. The learning environment significantly influences

learning outcomes; the better the learning environment and motivation, the better the outcomes (Sholihah & Kurniawan, 2016).

The Influence of Teaching Methods on Entrepreneurial Interest of Students in South Sulawesi

The results show a low influence of teaching methods on entrepreneurial interest among students in South Sulawesi. Teaching methods in entrepreneurship education are designed to enhance the ability and interest of students in starting a business. Entrepreneurial teaching must be able to change mindsets and motivate students to recognize and start business opportunities (Ripollés, M., & Blesa, A, 2024; Baggen, Y., Lans, T., & Gulikers, J., 2022).

The Influence of Entrepreneurship Education on Entrepreneurial Interest of Students in South Sulawesi

The findings show a positive and significant relationship between entrepreneurship education and entrepreneurial interest among students in South Sulawesi. Rembulan & Fensi (2018) explain that entrepreneurship education in the form of business incubators is essential in supporting business innovation and development. This education helps individuals understand business creation, management, and development, including practical skills such as business planning, financial management, and marketing strategies.

The Influence of Entrepreneurship Material on Entrepreneurial Interest through Entrepreneurship Education of Students in South Sulawesi

The study shows a positive and significant influence of entrepreneurship material on entrepreneurial interest through entrepreneurship education. Entrepreneurship material has a major role in shaping entrepreneurial interest because it provides a comprehensive introduction to entrepreneurial concepts and opportunities. According to Astar (2020), entrepreneurial interest is defined as the desire, motivation, and willingness of an individual to work independently, fulfill economic and personal needs, and engage in productive activities without relying on others. This interest is also reflected in one's courage to face various risks that may arise in business activities, including financial uncertainty, competition, and potential failure.

The Influence of Teaching Methods on Entrepreneurial Interest through Entrepreneurship Education of Students in South Sulawesi

The results show a positive and significant influence between teaching methods and entrepreneurial interest through entrepreneurship education. Teaching methods in entrepreneurship are aimed at not only delivering theoretical understanding but also offering practical business experiences. These methods help shape entrepreneurial character and mindset (Harianti et al., 2020).

The Influence of Learning Environment on Entrepreneurial Interest through Entrepreneurship Education of Students in South Sulawesi

The study indicates a low influence of the learning environment on entrepreneurial interest through entrepreneurship education. A supportive learning environment stimulates curiosity, creativity, and courage to start a business. Entrepreneurship education acts as a reinforcing factor that develops internal motivation, enabling students to increase entrepreneurial interest and eventually start their own businesses (Wahyuningsih, 2020).

4. CONCLUSIONS AND SUGGESTION

CONCLUSION

The findings of this study indicate that entrepreneurship material, teaching methods, and the learning environment each exert different levels of influence on entrepreneurial interest through entrepreneurship education. Entrepreneurship material significantly contributes to shaping entrepreneurship education and increasing students' entrepreneurial interest. Teaching methods show a positive but not significant effect on entrepreneurial interest. The learning environment also demonstrates a positive relationship with entrepreneurship education; however, its influence on entrepreneurial interest remains relatively low. Entrepreneurship education is proven to be a significant mediating factor in enhancing students' entrepreneurial interest. Overall, the results reveal a combined direct and indirect effect of 0.867 or 86.7%, meaning that 86.7% of the information contained in the data is explained by the model, while the remaining 13.3% is influenced by variables outside this study.

SUGGESTIONS

It is recommended that educational institutions continue to develop entrepreneurship materials that are relevant, innovative, and grounded in real-world practice. The implementation of more interactive and technology-based teaching methods should also be enhanced to increase student engagement. Additionally, establishing a supportive learning environment such as providing adequate facilities and academic guidance is crucial in fostering stronger entrepreneurial interest among students.

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