



The Influence of Digital Literacy, Locus of Control and Entrepreneurship Education on Students' Entrepreneurial Intentions at UNNES Class of 2022

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Article Info	Abstract
Article History Received: July, 2025 Revised: July, 2025 Published: August, 2025	<p>This study aims to measure the level of entrepreneurship education, locus of control, and digital literacy, and analyze the influence of these three variables on entrepreneurial intentions, both partially and simultaneously, among students. The research method used was quantitative, with data collection carried out through the distribution of questionnaires to 133 student respondents. The research tool consisted of a questionnaire consisting of 37 statements using a five-point Likert scale. The sampling technique used is purposive sampling. Data analysis included normality, linearity, multicollinearity, heteroscedasticity, multiple linear regression, t-test, F test, and determination coefficient. The results of the normality and linearity test showed that the data was distributed normally and the relationships between variables were linear. Multicollinearity and heteroscedasticity tests showed no problems that could interfere with the validity of the regression model. The results of the partial test (t-test) showed that entrepreneurship education and digital literacy had a significant influence on entrepreneurial intentions, while the locus of control had no significant influence. The results of the simultaneous test (F test) show that the three variables collectively have a significant influence on entrepreneurial intentions. A determination coefficient (R^2) of 46.8% indicates that the variables of entrepreneurship education, locus of control, and digital literacy collectively explain 46.8% of the variation in entrepreneurial intentions, while the rest are influenced by factors outside the scope of this study. This study recommends improving the quality of entrepreneurship education and digital literacy as an effort to increase entrepreneurial interest among students.</p>
Keywords: Digital Literacy, Locus of Control, Entrepreneurship Education, Entrepreneurial Intention	
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INTRODUCTION

The unemployment rate among university graduates remains a serious problem in Indonesia. There is a mismatch between the competencies possessed by graduates and the needs of the workforce, which results in low absorption of graduates into the formal sector (Asri et al., 2024). Therefore, fostering an entrepreneurial spirit among students is very important. Entrepreneurship can be a strategic solution to create new job opportunities and increase economic independence (Hidayati et al., 2023).

Data on the unemployment rate of college graduates between 2022 and 2024 shows that a bachelor's degree no longer guarantees access to job opportunities. In 2022, the Open Unemployment Rate (TPT) of university graduates in Indonesia was recorded at 4.80%. Despite having pursued higher education, graduates still face challenges in the job market. TPT continues to increase, reaching 5.18% in 2023 and 5.25% in 2024 (Central Statistics Agency, 2024). The increase in OUR among highly educated individuals is a serious concern, given that higher education is often considered the primary pathway to getting a good job.

The survey results showed that 76.7% of respondents who were not interested in becoming entrepreneurs preferred to work in government agencies, while the remaining 23.3% did not. This study shows that economics students are less interested in entrepreneurship, due to the lack of entrepreneurial practice in lectures and the dominance of theoretical learning. Students tend to choose stable jobs in the government sector rather than taking risks as entrepreneurs. The authors recommend

innovations in entrepreneurship education to increase students' interest and readiness to become entrepreneurs (Gumilar et al., 2024). Technology-based entrepreneurship or technopreneurship plays an important role in increasing business and national competitiveness by utilizing quality resources and global technology to overcome contemporary challenges (Yuliana, 2021).

Although many studies have analyzed the influence of these variables separately, studies examining digital literacy, locus of control, and entrepreneurship education simultaneously on students' entrepreneurial intentions are limited. Therefore, this study is important to provide a comprehensive overview of the factors that influence students' entrepreneurial intentions.

Literatur Riview and Hypothesis Development

A. Digital Literacy (LD), Locus of Control (LOC), Entrepreneurship Education (PK) and Entrepreneurial Intention (IB)

Digital literacy plays a very important role in influencing students' entrepreneurial intentions in the online sector, because this skill facilitates access to information and promotion of digital products (Asrib et al., 2023). Training through effective digital literacy courses can encourage digital entrepreneurship, so that students are ready to become digital entrepreneurs after completing their studies (Khairunisa & Sabaria, 2023). The use of digital technology in entrepreneurship education is also very important to strengthen students' intention to start a business, which in turn increases the chances of entrepreneurial success (Rahmah & Gufron, 2023). Digital literacy has a positive influence on entrepreneurial interest among students of the Faculty of Economics and Business, Telkom University (Dewi & Susanti, 2021).

According to (Kinicki., 2003), the locus of control is divided into two dimensions: the internal locus of control and the external locus of control. The internal locus of control is more related to the belief that self-control lies with the individual, while the external locus of control is the belief that events are caused by external factors (Ayuni & Kustini, 2020). Individuals with an internal locus of control tend to be more willing to start a business because they believe they have control over the results achieved (Ani & Kurniawan, 2023). Those who have an internal locus of control believe that success is determined by their own efforts and decisions, so they are more motivated to take risks and act proactively in doing business (Ananda & Noviani, 2024). In contrast, students with an external locus of control tend to be passive and less motivated to start a business because they depend on external factors (Putri & Handoyo, 2024).

Entrepreneurship education is one of the external factors that a person needs when starting a business (NAIBORHU & Susanti, 2021). Research conducted by (Reffandi & Sulistyowati, 2024) shows that entrepreneurship education plays an important role in introducing and teaching strategies to become entrepreneurs, as well as providing the knowledge students need to build their own businesses. Individuals who have received entrepreneurial education have higher entrepreneurial intentions, as the education allows them to improve their understanding and development of entrepreneurial ideas (Paray & Kumar, 2020). This is in line with research by (Tanumihardja & Slamet, 2023), which states that entrepreneurship education plays a significant role in increasing students' entrepreneurial intentions.

Based on the literature review, the following hypotheses are formulated:

Ha1. Digital literacy has a positive and significant influence on entrepreneurial intentions.

Ha2. The locus of control has a positive and significant influence on entrepreneurial intentions.

Ha3. Entrepreneurship education has a positive and significant influence on entrepreneurial intentions.

Ha4. Digital literacy, locus of control, and entrepreneurship education have a positive and significant influence on entrepreneurial intentions.

METHODS

This study uses a quantitative research approach. The population that is the focus of this study is all UNNES students of the class of 2022 who have taken entrepreneurship education courses. The research method used is Planned Behavior Theory (TPB), where entrepreneurial intentions are the main predictors of entrepreneurial behavior, influenced by attitudes towards behavior, subjective norms, and perceptions of behavior control (Ajzen, 1991).

According to (Sugiyono, 2016), purposive sampling is a technique for determining samples based on certain criteria. In this study, IBM SPSS Statistics 25 was used, with data collection carried out through the distribution of a questionnaire consisting of 36 questions using a five-point Likert scale. The number of respondents in this study is 133 people, with the following criteria: UNNES students of the class of 2022 who have taken entrepreneurship courses.

RESULTS AND DISCUSSION

A. Result

Normality Test

Tabel 1. Normality Test

One-Sample Kolmogorov-Smirnov Test					
		Entrepreneurship Education	Locus of Control	Digital Literacy	Entrepreneurial Intention
N		133	133	133	133
Normal Parameters ^{a,b}	Mean	29.89	37.23	16.82	26.73
	Std. Deviation	7.783	8.438	3.841	6.732
Most Extreme Differences	Absolute	.044	.062	.075	.057
	Positive	.044	.062	.075	.054
	Negative	-.043	-.061	-.070	-.057
Test Statistic		.044	.062	.075	.057
Asymp. Sig. (2-tailed)		.200 ^{c,d}	.200 ^{c,d}	.067 ^c	.200 ^{c,d}
a. Test distribution is Normal.					
b. Calculated from data.					
c. Lilliefors Significance Correction.					
d. This is a lower bound of the true significance.					

Based on the results of the table above, the decision making is that if the significance value is >0.05 then the research data is declared to be normally distributed, but if the significance value is <0.05 then the research data is declared to be abnormally distributed. The table shows the value of Asymp. Sig. as 0.200 which means more than 0.05. This indicates that the data is distributed normally.

Linearity Test

Decision-making related to the value deviation from linearity. If the deviation value of linearity is greater than 0.05 then the relationship between the independent variable and the dependent variable is linear. Conversely, if the deviation value from linearity is less than 0.05 then the relationship between the independent variable and the dependent variable is non-linear.

Tabel 2. Entrepreneurship Education Towards Entrepreneurial Intention

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Entrepreneurial Intention * Entrepreneurship Education	Between Groups	(Combined)	2793.850	34	82.172	2.526	.000
		Linearity	2021.175	1	2021.175	62.124	.000
		Deviation from Linearity	772.675	33	23.414	.720	.858
	Within Groups		3188.406	98	32.535		
	Total		5982.256	132			

Based on the results of the table above, the linearity test of the entrepreneurial education variable on the intention to become an entrepreneur shown in the Table produced a deviation from linearity value of 0.858 which means >0.05. Thus, it can be concluded that there is a linear relationship between the variables of entrepreneurship education and entrepreneurial intentions.

Tabel 3. Locus of Control on Entrepreneurial Intentions

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Entrepreneurial Intention * Locus of Control	Between Groups	(Combined)	833.760	34	24.522	.467	.993
		Linearity	53.398	1	53.398	1.016	.316
		Deviation from Linearity	780.363	33	23.647	.450	.995
	Within Groups		5148.495	98	52.536		
	Total		5982.256	132			

Based on the results of the table above, the linearity test of the locus of control variable on the intention to become an entrepreneur shown in the Table resulted in a deviation from linearity value of 0.995 which means >0.05 . Thus, it can be concluded that there is a linear relationship between the locus of control variable and entrepreneurial intention.

Tabel 4. Digital Literacy for Entrepreneurial Intentions

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Entrepreneurial Intention * Digital Literacy	Between Groups	(Combined)	1561.574	19	82.188	2.101	.009
		Linearity	876.408	1	876.408	22.402	.000
		Deviation from Linearity	685.166	18	38.065	.973	.495
	Within Groups		4420.682	113	39.121		
	Total		5982.256	132			

Based on the results shown in the table above, the linearity test for the digital literacy variable on the intention to become an entrepreneur showed a deviation value from linearity of 0.459 which is greater than 0.05. Therefore, it can be concluded that there is a linear relationship between digital literacy variables and entrepreneurial intentions.

Multicolligiate Test

The decision making of the multicollinearity test is that if the tolerance value is > 0.10 and the VIF value is < 10 , then there is no multicolligality between the free variables in the regression model.

Tabel 5. Multicolligiate Test

Coefficients ^a		
Model		Collinearity Statistics
		Tolerance VIF
1	Entrepreneurship Education	.993 1.007
	Locus of Control	.990 1.010
	Digital Literacy	.995 1.005
a. Dependent Variable: Entrepreneurial Intention		

Based on the results of the table above, it shows that there are no symptoms of multicollinearity in this study. This is evidenced by each independent variable in this study having a tolerance value of >0.10 and a VIF value of <10 . Thus, it can be concluded that the data of this study has no symptoms of multicollinearity so that a regression test can be carried out.

Heteroscedasticity Test

The decision making of the heteroscedicity test is that if the significance value is > 0.05 then there is no heteroscedatity. The decision making of the heteroscedicity test is that if the significance value is > 0.05 then there is no heterosceaticity.

Tabel 6. Heteroscedasticity Test

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.146	1.936		3.175	.002
	Entrepreneurship Education	-.053	.034	-.135	-1.544	.125
	Locus of Control	.007	.031	.020	.225	.822
	Digital Literacy	-.063	.069	-.080	-.921	.359

a. Dependent Variable: Abs_RES

Based on the results of the table above, it shows that this result is not a symptom of heteroscedasticity in this study. This is evidenced by each variable in this study having a significant value of >0.05 namely the entrepreneurial education variable with a sig value of 0.125 the locus of control variable with a sig value of 0.822 and the digital literacy variable of 0.359. Thus, it can be concluded that the data of this study has no symptoms of heteroscedasticity so that a regression test can be carried out.

Multiple Regression Analysis

Test decision making is a hypothesis that is declared acceptable if the significance value is <0.05 .

Tabel 7. Multiple Regression Analysis

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	-1.186	3.131		-.379	.705
	Entrepreneurship Education	.491	.055	.567	8.903	.000
	Locus of Control	.059	.051	.075	1.168	.245
	Digital Literacy	.656	.112	.375	5.886	.000

a. Dependent Variable: Entrepreneurial Intention

Based on the results of the table above, Entrepreneurship Education and Digital Literacy were accepted, the Locus of Control was rejected.

Partial Test (t-test)

The decision making of the partial significance test is to compare the value of t calculated with the t table. The hypothesis is declared accepted if the significance value is <0.05 . If the significance value is >0.05 then the hypothesis is rejected.

Tabel 8. Partial Test (t-test)

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta		
1	(Constant)	-1.186	3.131		-.379	.705
	Entrepreneurship Education	.491	.055	.567	8.903	.000
	Locus of Control	.059	.051	.075	1.168	.245
	Digital Literacy	.656	.112	.375	5.886	.000

a. Dependent Variable: Entrepreneurial Intention

Based on the results of the table above, the test t table is 1.656. Entrepreneurship education t count $>$ t table ($8.903 > 1.656$), locus of control t count $<$ t table ($1.168 < 1.656$), digital literacy t count $>$ t table ($5.886 > 1.656$).

Simultaneous Test (F-test)

Simultaneous significance test decision making is an alternative hypothesis that is declared acceptable if the significance value is <0.05 .

Tabel 9. Simultaneous Test (F-test)

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2871.699	3	957.233	39.698	.000 ^b
	Residual	3110.557	129	24.113		
	Total	5982.256	132			
a. Dependent Variable: Entrepreneurial Intention						
b. Predictors: (Constant), Digital Literacy, Entrepreneurship Education, Locus of Control						

Based on the results of the table above, this shows that the significance value is 0.000 which means < 0.05 . Therefore, it can be concluded that the variables of entrepreneurship education, locus of control, and digital literacy can simultaneously affect the variables of entrepreneurial intention.

Determinant coefficient (R²)

Tabel 10. Determinant coefficient (R²)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.693 ^a	.480	.468	4.910
a. Predictors: (Constant), Digital Literacy, Entrepreneurship Education, Locus of Control				

Based on the results of the table above, the influence of entrepreneurship education, locus of control, and digital literacy on entrepreneurial intention of 46.8% and 54.2% was influenced by other variables other than the variables in this study.

B. Discussion

Based on the results of the research conducted, it was found that the data used met the basic assumptions of regression analysis, namely being normally distributed, linear, and showing no symptoms of multicollinearity or heteroscedasticity. Therefore, the regression model applied is valid to test the influence of independent variables on entrepreneurial intentions. In particular, the analysis shows that digital literacy has a positive and significant influence on students' entrepreneurial intentions, so that the first hypothesis (Ha1) is accepted; This means that the higher the digital literacy that students have, the greater their intention to be entrepreneurial.

The locus of control, based on the results of the partial test (T-test), did not show a positive and significant influence on entrepreneurial intention, so the second hypothesis (Ha2) was rejected. This means that an individual's internal factors related to beliefs in controlling their life outcomes have not been the main determinant in increasing entrepreneurial intention among the respondents of this study. These findings are in line with research by (Iqbal Nurdwiratno et al., 2023), which showed an indirect influence between the locus of control and entrepreneurial intention through entrepreneurial attitudes.

Entrepreneurship education has been proven to have a positive and significant influence on entrepreneurial intentions, so the third hypothesis (Ha3) is accepted. This emphasizes the importance of entrepreneurship learning in encouraging students' interest in entrepreneurship. The simultaneous test (F-test) also showed that overall, the three independent variables—digital literacy, locus of control, and entrepreneurial education—significantly influenced entrepreneurial intention, so the fourth hypothesis (Ha4) was accepted. However, a determination coefficient (R^2) value of 46.8% indicates that there are still 53.2% of other factors outside the model that contribute to shaping students' entrepreneurial intentions. These findings practically show the need to strengthen digital literacy and entrepreneurship education in the university environment to increase student readiness and

motivation in entrepreneurship, while the development of locus of control needs to be synergized with other factors to be more effective in encouraging entrepreneurial intentions.

CONCLUSIONS AND SUGGESTIONS

A. Conclusion

The results of the analysis showed that entrepreneurship education and digital literacy had a positive and significant influence on students' entrepreneurial intentions, while the locus of control did not show a significant influence. The relationship between the three independent variables (entrepreneurship education, locus of control, digital literacy) and entrepreneurial intention is linear, without the problem of multicollinearity or heteroscedasticity. Overall, the three variables contributed 46.8% to entrepreneurial intention, while the rest were influenced by other factors outside of this study.

B. Suggestion

Based on the results of the research and discussion that has been described above, the suggestions that can be given by researchers are for UNNES educational institutions and for students. Suggestions for UNNES educational institutions; 1). Develop practical entrepreneurship education programs to increase student interest. 2). Integrate digital literacy in the entrepreneurship curriculum so that students can use technology effectively. 3). Conduct training to improve psychological aspects, such as locus of control, to increase students' confidence in entrepreneurial decision-making. Furthermore, suggestions for students; 1). Increase participation in entrepreneurship programs to strengthen skills and knowledge. 2). Utilize digital literacy as a tool in developing ideas and businesses. 3). Develop a positive locus of control by increasing confidence and responsibility in the face of entrepreneurial challenges.

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