



THE EFFECT OF ENTREPRENEURSHIP EDUCATION ON ENTREPRENEURIAL INTENTIONS THROUGH INTERNAL LOCUS OF CONTROL AND INNOVATIVENESS (A Research on Vocational High School Students Majoring in Online Business and Marketing Expertise Program in Malang Raya)

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Abstract

Entrepreneurial intentions are the conscious state of a person's mind that precedes actions to start a business with a strong determination and ability to take risks by creating innovative products and services to have economic value. Therefore, entrepreneurial intentions can determine students who intend to become entrepreneurs. This research examined the effect of entrepreneurship education, internal locus of control, and innovativeness on entrepreneurial intentions. This research sample consisted of 150 students of grade XII majoring in Online Business and Marketing Expertise Programs of all Vocational High Schools in Malang Raya. The data is analyzed using descriptive statistical analysis, multiple linear regression analysis, and path analysis. This research indicated a direct effect between entrepreneurship education, internal locus of control, and innovativeness on entrepreneurial intentions. Moreover, the internal locus of control mediated entrepreneurship education on entrepreneurial intentions, while innovativeness mediated entrepreneurship education on entrepreneurial intentions.

Keywords: Entrepreneurial Intentions, Internal Locus of Control, Innovativeness, Entrepreneurship Education

INTRODUCTION

Indonesia is the world's fourth-most populous country, with around 274.86 million people as of December 14, 2020. High population density will significantly cause various problems, specifically in the economic sector. Therefore, the government should be capable of controlling the economy to remain stable. The unemployment rate has been perceived as a problematic issue in Indonesia. Based on data generated by the Central Bureau of Statistics (BPS, 2021), the unemployment rate in Indonesia as of February 2021 was reported to have increased by 1.82 million people compared to the same period in the previous year.

99% of the Indonesian economy is driven by small, micro, and ultra-micro enterprises, but it has still recorded low growth over the past few decades. Therefore, the younger generation should be capable of performing creative and innovative actions. The current condition of education in Indonesia, especially the vocational education level (in the future referred to as SMK), can potentially encourage graduates aspiring to become entrepreneurs. Vocational High Schools (SMK), both public and private, are currently known to provide more skills to prepare students for the world of work after graduation and become entrepreneurs in the future. However, the Central Bureau of Statistics (BPS) reported that most unemployed people in Indonesia are dominated by graduates of Vocational High Schools (SMK). Referring to the data, the unemployed population with the final vocational education level had reached 11.13% in August 2021. Most SMK graduates have the intention to work immediately, but they cannot all be employed in the business world due to the lack of job opportunities.

The high open unemployment rate (TPT in Indonesian) in East Java indicates that SMK graduates have not fully supplied the demand in the labor market. In contrast, SMK graduates are considered creative and highly competitive in solving this unemployment problem because the skills provided in Vocational High School (SMK) are greater than in other levels of education. However, they are not fully engaged in the labor market due to the limited number of job opportunities. Based on this issue, SMK students are encouraged to have an entrepreneurial spirit to be capable of being employed or creating new jobs in their environment.

Entrepreneurial activities aim to encourage students to have entrepreneurial intentions. Entrepreneurial intentions are influenced by several factors such as needs, values, desires, habits, and beliefs (Bird, 1988; Lee & Wong, 2004; Linan & Chen, 2009). Every Vocational High School (SMK) student has different entrepreneurial intentions, influenced by many factors, including internal locus of control and innovativeness to become entrepreneurs. Students with a high internal locus of control and innovativeness are more likely to have the intention to become entrepreneurs. The research results conducted by Dinis et al. (2013) stated that innovativeness and locus of control significantly correlate with entrepreneurial intentions.

One internal factor influencing entrepreneurial intentions is the internal locus of control (Nasip et al., 2016). Individuals with an internal locus of control tend to believe that they can influence events in life (Altinay et al., 2012). Furthermore, individuals with a high internal locus of control are more likely to have entrepreneurial intentions because they are more oriented toward future achievements (Diaz & Rodriguez, 2003; Altinay et al., 2012).

In addition to the locus of control, the entrepreneurial intention is also influenced by the personality characteristics of an individual or student in terms of creativity, specifically innovativeness. Innovativeness can significantly predict an individual's entrepreneurial intention (Hwee Nga & shamuganathan, 2010; Leutner et al., 2014; Rauch & Frese, 2007). Furthermore, the learning experience influences the innovation process (Aslan et al., 2016). The learning experience is perceived as a series of student activities to obtain new information and competencies following the desired goals, especially to become an entrepreneur.

METHOD

A quantitative methodology utilizes throughout this investigation. The researchers utilized four types of variables, including one independent variable, namely Entrepreneurship Education (X), and two intervening variables, namely Internal Locus of Control (Z_1) and Innovativeness (Z_2). This research also used one dependent variable, specifically Entrepreneurial Intentions (Y). This research was classified as descriptive and explanatory research, which aims to determine the effect of each variable.

The population in this research was 240 students of grade XII majoring in Online Business and Marketing Expertise Programs of all Vocational High Schools in Malang, namely SMK Negeri 1 Malang, SMK PGRI 2 Malang, SMK Muhammadiyah 2 Malang, and SMK Negeri 1 Turn. The data was collected via a questionnaire via Google form, adapted from various relevant sources with a Likert scale ranging from 1 to 5. Furthermore, 150 students were determined as the samples using the proportional random sampling technique. After that, the data is put through a series of analyses, including path analysis, multiple linear regression analysis, and descriptive statistical analysis.

RESULTS AND DISCUSSION

Based on the validity and reliability test results using a sample of 30 respondents, Valid and reliable information find in 40 of the items. The C_{count} value was greater than R_{table} by 0.361, and the reliability test showed Cronbach's Alpha value of 0.8.

Moreover, the normality test results showed a normal distribution pattern because the data spread around the line and followed the direction of the diagonal line. Based on the results of the heteroscedasticity test, the points spread randomly above and below the number 0 on the Y-axis and did not form a certain clear pattern. Therefore, heteroscedasticity was not identified, and the regression model was feasible. In addition, the results of the multicollinearity test showed that the tolerance of the three variables was more than 0.10, and the VIF value was less than 10, meaning that there was no multicollinearity between the independent variables. Hence, the variables in this research were feasible for the regression model.

Path analysis in this research was used to determine the direct and indirect effect between Entrepreneurial Education (X) variable, Internal Locus of Control (Z_1) variable, Innovativeness (Z_2) variable, and the dependent variable: Entrepreneurial Intention (Y).

The first equation analysis is intended for the regression from variable X to variable Z_1 , and the equation formula is as follows: $Z = \rho_{z1}X + \rho_{z1}\varepsilon_1$

Table 1 The Results of Linear Regression of Variable X to Z_1

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.695	1.343		3.496	.001
	Entrepreneurship Education	.900	.033	.915	27.663	.000

Dependent variable: Internal Locus of Control

R Square: 0.838

Adjust R Square: 0.837

Source: Raw data processed by researchers, 2022

Based on the linear regression output in the first equation, the significance value of the entrepreneurship education (X) variable amounted to 0.000, which was less than 0.05 ($\text{sig} \leq 0.05$). These results indicated that X, based on the regression in the first equation, had a significant effect on Z_1 . The first structural equation model is formulated as follows.

$$\begin{aligned} Z &= \rho_{z1}X + \rho_{z1}\varepsilon_1 \\ &= 0.915 + 0.545 \end{aligned}$$

Table 2 The Results of Linear Regression of variable X to Z_2

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.199	1.803		7.874	.000
	Entrepreneurship Education	.583	.044	.739	13.326	.000

Dependent variable: Innovativeness

R Square: 0.545

Adjust R Square: 0.542

Source: Raw data processed by researchers, 2022

Based on the linear regression output in the first equation, the significance value of the Entrepreneurship Education (X) variable amounted to 0.000, which was less than 0.05 ($\text{sig} \leq 0.05$). These results indicated that X, based on the regression in the first equation, had a significant effect on Z_2 . The first structural equation model is formulated as follows.

$$\begin{aligned} Z &= \rho_{z2}X + \rho_{z2}\varepsilon_2 \\ &= 0.739 + 0.838 \end{aligned}$$

The second equation analysis is intended for regression from variable X to variable Y, from variable Z₁ to variable Y, and variable Z₂ to variable Y. The equation formula is as follows:
 $Y = \rho_{yx}X + \rho_{yz1}Z_1 + \rho_{yz2}Z_2 + \rho_y\epsilon_3$.

Table 3 The Results of Linear Regression of Variables X, Z₁, and Z₂ to Y

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.336	1.902		-.177	.860
	Entrepreneurship Education	.219	.097	.217	2.257	.025
	Internal Locus of Control	.475	.103	.464	4.599	.000
	Innovativeness	.333	.077	.261	4.330	.000

Dependent variable: Entrepreneurial Intentions

R Square: 0.785

Adjust R Square: 0.781

Source: Raw data processed by researchers, 2022

The second structural equation model is formulated as follows. Based on the linear regression output in the second equation, the significance value of the Entrepreneurship Education (X) variable amounted to 0.025, which was less than 0.05 ($\text{sig} \leq 0.05$). In contrast, the Internal Locus of Control (Z₁) variable showed a significance value of 0.000, which was less than 0.05 ($\text{sig} \leq 0.05$). Moreover, the significance value of the Innovativeness (Z₂) variable amounted to 0.000, which was less than 0.05 ($\text{sig} \leq 0.05$). These results indicated that X, Z₁, and Z₂, based on the regression in the second equation, had a significant effect on Y.

$$\begin{aligned} Y &= \rho_{yx}X + \rho_{yz1}Z_1 + \rho_{yz2}Z_2 + \rho_y\epsilon_3 \\ &= 0.217 + 0.464 + 0.261 + 0.619 \end{aligned}$$

The effect of path coefficient error can be calculated as follows.

$$\rho_y\epsilon_3 = \sqrt{1 - R^2} = \sqrt{1 - (0.785)^2} = 0.619$$

The effect of the second equation's error is 61.9 percent. As a result, the information contained in the calculation results was able to explain the effect of the variables Entrepreneurship Education (X), Internal Locus of Control (Z₁), and Innovativeness (Z₂) on Entrepreneurial Intentions (Y) by 61,9 percent. The remaining 38.1 percent were influenced by other variables that were not a part of this research.

The results of the Sobel test calculation concluded that the Entrepreneurship education variable in this research had an indirect effect on Entrepreneurial Intentions through the Internal Locus of Control, and the Internal Locus of Control variable was able to mediate Entrepreneurship Education on Entrepreneurial Intentions. The Entrepreneurship Education variable had an indirect effect on Entrepreneurial Intention through Innovativeness, and the Innovativeness variable was able to mediate Entrepreneurship Education on Entrepreneurial Intentions.

DISCUSSION

H1: The Direct Effect of Entrepreneurship Education on Internal Locus Of Control. Entrepreneurial education showed a value of $27.663 > 1.967$, and the significance of t was $0.000 \leq 0.05$. The test showed that these results support this research's first hypothesis (H1). The results showed a direct effect of entrepreneurship education on the internal locus of control. The results of this research are in line with previous research conducted by Hermawan et al.

(2016) and Hsiung (2018). Vocational High School students in Malang Raya were aware of the importance of entrepreneurship learning because it should be applied when they start to run their businesses in the future. In addition, the practice of entrepreneurship could help students to be creative and innovative.

H2: The Direct Effect of Entrepreneurship Education on Innovativeness. Entrepreneurship Education showed a value of $13.326 > 1.967$, and the significance of t is $0.000 \leq 0.05$. The test indicated that these results support this research's second hypothesis (H2). The research results showed that there was a direct effect of entrepreneurship education on innovativeness. Most research on entrepreneurship education focuses on curriculum development and identifies the effect of entrepreneurship education on entrepreneurial intentions. Nevertheless, innovation must highlight in the discussion of entrepreneurship (Wei, Liu, & Sha, 2019). Innovation and entrepreneurship are generally needed to create new leaps so that individuals can develop and compete internationally.

H3: The Direct Effect of Internal Locus of Control on Entrepreneurial Intentions. Internal Locus of Control showed a value of $4.599 > 1.967$, and the significance of t amounted to $0.000 \leq 0.05$. The test found that these results support this research's third hypothesis (H3). The research results showed that there was a direct effect of internal locus of control on entrepreneurial intention. The results of this research are in line with previous research conducted by Tentaman & Abdussalam (2020), Noor et al. (2021), and Annisa et al. (2021). The entrepreneurial intention of SMK students in Malang Raya can be increased through their willingness to choose an entrepreneurial career. Vocational High School students in Malang Raya were more likely to intend to start entrepreneurship than to become employees of other people.

H4: The Direct Effect of Innovativeness on Entrepreneurial Intentions. Innovativeness indicated a value of $4.440 > 1.967$, and the significance of t amounted to $0.000 \leq 0.05$. The test showed that these results support this research's fourth hypothesis (H4). The results of this research are in line with previous research conducted by Yadav & Kashyap (2017), Law & Breznik (2016), and Dawwas & Al-Haddad (2018). Emerging innovation can be influenced by knowledge and experience in entrepreneurship. Moreover, innovation can also be influenced by entrepreneurship education obtained by individuals.

H5: The Direct Effect of Entrepreneurship Education on Entrepreneurial Intentions. Entrepreneurship Education showed a value of $2.257 > 1.967$, and the significance of t find out to be $0.025 \leq 0.05$. The test showed that these results support this research's fifth hypothesis (H5). The results of this research are in line with previous research conducted by Jena (2020), Li & Wu (2019), Pandit et al. (2018), Odor et al. (2019), and Otache et al. (2019), and Gregorio et al. (2021).

Entrepreneurial intentions are capable of influencing entrepreneurial success. Therefore, the intentions of SMK students in Malang Raya were able to stimulate them to start a business in earnest and willing to make every effort to start running their business. An entrepreneurial educational background also supported their intentions. All Vocational High Schools in Malang Raya had been equipped with sufficient entrepreneurial knowledge and skills. Entrepreneurship education could obtain from school through compulsory subjects. The implementation of entrepreneurship education is expected to be capable of increasing the insight of students.

H6: The Indirect Effect of Entrepreneurship Education (X) on Entrepreneurial Intentions (Y) through Internal Locus Of Control (Z_1). The results of the Sobel test calculation showed a value of $4.547 > 1.967$. Thus, it can conclude that the entrepreneurship education variable had an indirect effect on entrepreneurial intentions through the internal locus of control, and the internal locus of control variable mediated entrepreneurship education on

entrepreneurial intention. The test showed that these results support this research's sixth hypothesis (H6).

H7: The Indirect Effect of Entrepreneurship Education (X) on Entrepreneurial Intentions (Y) through Innovativeness (Z_2). The results of the Sobel test calculation showed a value of $4.271 > 1.967$. Therefore, it can conclude that the entrepreneurship education variable had an indirect effect on entrepreneurial intention through innovativeness, and the innovativeness variable was able to mediate entrepreneurship education on entrepreneurial intentions. The test showed that these results support this research's seventh hypothesis (H7).

CONCLUSION

The following conclusions can draw from the analysis results based on the formulation of the problem and the hypothesis in this research: Entrepreneurship education directly impacted the Internal Locus of Control. Furthermore, Entrepreneurship Education had a direct impact on innovativeness. Internal Locus of Control, on the other hand, had a direct impact on Entrepreneurial Intentions. Entrepreneurial Intentions were directly affected by innovativeness. In addition, Entrepreneurship Education had a direct effect on Entrepreneurial Intentions. Furthermore, Entrepreneurship Education provided an indirect effect on Entrepreneurial Intentions through the Internal Locus Of Control, and Entrepreneurship Education provided an indirect effect on Entrepreneurial Intentions through Innovativeness.

Based on the research results, Vocational High Schools are found to train the mentality of students, especially students who have taken entrepreneurship education programs to be active and able to develop in the entrepreneurial world. Students are expected to be capable of taking risks in starting an entrepreneurial career. Furthermore, the results of this research should also be used as consideration for Vocational High School teachers to grow and develop entrepreneurship education, internal locus of control, and innovativeness, so that students can increase their entrepreneurial intentions. In addition, other researchers are recommended to add variables and research objects related to factors that can influence other entrepreneurial intentions.

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