

The Effect of Entrepreneurship Education and Entrepreneurial Motivation on ARO Gapopin's Student Interest in Entrepreneurship

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Abstract - Indonesia has a problem related to entrepreneurship motivation and interest that must be triggered since younger age. The research aimed to determine the effect of entrepreneurship education and entrepreneurial motivation on the entrepreneurial interest of ARO Gapopin students. The population consisted of students of ARO Gapopin. The research applied a quantitative approach through a questionnaire as an instrument for 195 respondents. Data were analyzed using SPSS 16. The findings indicate the importance of entrepreneurship education and entrepreneurial motivation to increase interest in entrepreneurship for ARO Gapopin students. Interest in entrepreneurship needs to be increased by a good preparation process as a way to form and develop aspiring entrepreneurs. Some ways to form aspiring entrepreneurs include identifying entrepreneurial attitudes and behaviors, forming entrepreneurial characteristics, identifying possible factors of success and failure in entrepreneurship, and overcoming myths about entrepreneurship.

Keywords: entrepreneurship education, entrepreneurial motivation, entrepreneurial interest, entrepreneurial mentality

I. INTRODUCTION

The problem of unemployment is always faced by every country. Indonesia deals with the such problem every year due to the imbalance between the high population growth and the available employment opportunities. This occurs due to the lack of the ability of universities to produce graduates who can create jobs. In fact, graduates tend to prefer to look for available jobs from both government and private

agencies rather than creating a business for themselves and others (Looney & Kleppe, 1996; Dobioli et al., 2010; Mani, 2018).

Educational institutions need to realize that the progress and decline of a nation's economy are largely determined by the presence of entrepreneurs (Luis-Rico et al., 2020; Li, 2010b; Li, 2010a). The development of entrepreneurship in Indonesia currently remains very low when compared to other Asian countries. ARO Gapopin understands that institutions need strategic steps to create entrepreneurs in the field of optics (Doringin et al., 2020).

ARO Gapopin, taking the strategic steps needed now is how to produce young people to become reliable entrepreneurs. The efforts made must lead to entrepreneurship education by providing encouragement and motivation to foster an entrepreneurial mentality in the younger generation, so they have a strong interest in entrepreneurship. The important role of the institution is to provide entrepreneurship courses that aim to make college graduates not confused and awkward in entering society, and high motivation to become entrepreneurs and to become a bridge between prospective entrepreneurs (students) and the Gapopin association in guiding aspiring entrepreneurs (Reagle et al., 2017; Dobioli et al., 2010). The main objective of ARO Gapopin is to provide entrepreneurial knowledge to produce creative and innovative entrepreneurs.

Student interest in entrepreneurship cannot be separated from the influence of the interest that grows in him. Interests are a source of motivation that encourages someone to do whatever they want to do when they are free to choose. Interests are not permanent but temporary or can change. Interest in entrepreneurship must be cultivated from an early age in students. Interest is the tendency to feel paying

attention and liking some things or activities, interest in something learned first and influencing subsequent learning, and influencing subsequent interests. Encouragement by educators in educational institutions that provide practical and interesting subjects can arouse students' interest in entrepreneurship (Fadillah & Thamrin, 2019; Perkasa et al., 2019).

The research aims to determine: 1) the effect of entrepreneurship education on entrepreneurial interest in ARO Gapopin students; 2) the effect of entrepreneurial motivation on entrepreneurial interest in ARO Gapopin students. 3) the effect of entrepreneurship education and entrepreneurial motivation on ARO Gapopin's student interest in entrepreneurship.

Entrepreneurship education is the education that aims to create new goods and or services that can produce higher economic value (Zhong, 2010; Perkasa et al., 2020). The entrepreneurship programs have the main objective to build skills, knowledge, and character which are important for entrepreneurial creativity. Zhong (2010), Hasleberg et al. (2019), and Drucker (2016) assert that entrepreneurship is a pattern of behavior, not a personality trait, and it is reasonable to assume that a person can learn how to behave entrepreneurially (Drucker, 2016; Zappe et al., 2012).

In general, motivation is a process that encourages or influences someone to get or achieve what they want, either positively or negatively. Motivation will give a person change that arise as a result of feelings, souls, and emotions to encourage action due to these needs, desires, and goals. Motivation can become a force, energy, or also power. It becomes a complex situation and readiness in the individual to move towards a certain goal, whether consciously or unconsciously (Cole et al., 2018; Chang et al., 2016).

Motivation is influenced by intrinsic factors and extrinsic factors. Intrinsic motivation is defined as the motivation that comes from factors within oneself. Intrinsic factors include encouragement, self-desire to know information and understanding, opinion on certain skills, develop attitudes, enjoy life, and others. Meanwhile, extrinsic motivation is a form of motivation that comes from outside the individual that is difficult to control and can quickly disappear because it is influenced by other people's suggestions. Elliot et al. (2003) exemplify the values, gifts, and/or awards that are used to stimulate someone's motivation.

Motivation comes from the word "motive". The word is defined as an important effort of someone that encourages them to do something. Motivation can also be defined as a driving force from within and within the subject to do certain activities and push someone to achieve their goal (Sardiman, 2006). Motivation is a condition in a person that encourages the individual's desire to carry out certain activities to achieve goals (Handoko, 2003; Doringin & Sasmoko, 2017; Chang et al., 2016).

Regarding entrepreneurial interests, the research provides the general definition of interest

which is related to the movement style that encourages someone to face or try to deal with people, objects, activities, experiences that are stimulated by the activity itself (Djaali, 2009). Interest is the tendency to prefer and feel attracted to something or activity, without any external coercion. The feeling of attraction is not due to compulsion but high awareness. Someone has a strong desire to achieve goals. Aspects of interest generate interest which is formed by two aspects, namely cognitive and affective aspects, in the form of attitudes, individual awareness, feelings of pleasure, the direction of individual interests, the existence of interest that arises from within, and participating in what is desired. Meanwhile, entrepreneurial interest is the desire, interest, and willingness to work hard or be strong-willed with a focus on trying to fulfill his life's needs without feeling afraid of the risks to be faced. Entrepreneurial interests include general attitudes towards entrepreneurship, specific awareness of liking entrepreneurship, feeling comfortable with entrepreneurship. To become a successful entrepreneur, one must work hard, have high enthusiasm, and believe in his abilities as an entrepreneur (McFadden, 2013).

Ariyanti (2018) shows that the entrepreneurial motivation and mentality of students would be based on students' interest in entrepreneurship (Ariyanti, 2018).

Ramadhani and Nurnida (2017) mentions that the entrepreneurial course influences directly the interest of students in entrepreneurship. The students can increase their interest in entrepreneurship because of their attendance in entrepreneurial classes. However, the way of delivering the material does not directly affect the interest in entrepreneurship (Ramadhani & Nurnida, 2017). Fahmi and Amanda (2017) show that there is a significant influence of entrepreneurship learning on students' interest in entrepreneurship.

The research plans to solve the problem of the low interest of the youth in entrepreneurship that gives an impact on the economic development of the nation. Specifically, the research sees the influence of entrepreneurship education and its process, including efforts of giving motivation to students in ARO Gapopin campus. The research and its process can give an impact on the increase of the interest of students to become entrepreneurs and improve the economic growth of the nation.

The researchers distribute the questionnaire to the ARO Gapopin students and analyzed it using SPSS software. The researchers also completed the efforts with the observation and documentation. The hypothesis are formulated:

H_1 : Entrepreneurship education has a positive effect on the entrepreneurial interest of ARO Gapopin students.

H_2 : Entrepreneurial motivation has a positive effect on the entrepreneurial interest of ARO Gapopin's students.

H_3 : Entrepreneurship education and entrepreneurial motivation have a positive effect on the entrepreneurial interest of ARO Gapopin students.

II. METHODS

The research is conducted at ARO Gapopin as the location. The research applies a descriptive quantitative approach to describe the effect of entrepreneurship education and entrepreneurial motivation on ARO Gapopin's student interest in entrepreneurship. The population in the research includes 195 students of the DIII Optisi Refraction ARO Gapopin study program, batch 2016-2017.

Data collection is a systematic procedure and natural standards for determining research data. The techniques used for the research are: 1) observation, 2) documentation, and 3) questionnaire.

Observation is a data collection method that uses observations of the object of research because of a symptom or movement of the object of research. Observation is used to obtain data about the state of the campus, learning places, and activities in the ARO Gapopin campus, which supports research (Sugiyono, 2017).

The documentation is the collection of data regarding things or variables in the form of written notes such as books, letters, photos, and documents regarding the description of the research object. This documentation will later be used to determine ARO Gapopin's organizational structure, infrastructure, the condition of students, lecturers and staff, and student learning achievements, especially entrepreneurship education courses.

The questionnaire functions to obtain primary research data about entrepreneurial motivation and interest in entrepreneurship. The questionnaire needed is a closed questionnaire with alternative answers available, and the respondent only needs to give a mark on the answer chosen according to the Likert scale.

The instrument validity test is conducted to show the validity of the instrument to be used in the research. The measuring instrument is said to be valid if the answers really fits the variables to be measured. Validity also shows the accuracy of the statement with what is stated following the validity coefficient. This validity test uses the Statistical Package for the Social Science (SPSS) program. The next step is to measure r-count with r-table with a confidence level of 95% or $\alpha = 0,1$ with $dk = n-2$ ($dk = 195-2 = 193$). When viewed in the product moment r-values, $r\text{-table} = -0,3$. If $r\text{-count} > r\text{-table}$ then the item is declared valid, and if $r\text{-count} < r\text{-table}$ then the item is declared invalid.

A reliability test is used to determine the permanence of an instrument (measuring instrument) in measuring the same symptoms even at different times. Sugiyono (2014) states that instrument reliability is an instrument that, when used several times to measure the same object, will produce the same data (Sugiyono, 2014). Measurement results that have a high level of reliability will be able to provide reliable results. In the SPSS calculation, to determine the value of data reliability is from the Cronbach's Alpha value. According to Nunnally et al. (2002), a

construct is considered reliable if the alpha coefficient is $> 0,60$.

The normality test is one part of the data analysis requirements test or the classical assumption test, meaning that before the analysis is carried out, the research data must be tested for normal distribution. The basis for the decision from the normality test is if the significance value is greater than 0,05, the data has a normal distribution. Conversely, if the significance value is smaller than 0,05, the data is not normally distributed. The way to do the normality test is to use the Kolmogorov-Smirnov test with the assumption that the Asymp Sig (2-tailed) value is $> 0,05$, so it can be concluded that the data tested is normally distributed.

The multicollinearity test aims to test whether a regression model correlates with independent variables (independent). A good regression capital should not correlate with independent variables. Multicollinearity testing is seen from the VIF (variance inflation factor) and tolerance values. Tolerance is useful for measuring selected independent variables that are not explained by other independent variables. So a low tolerance value is the same as a high VIF value (because $VIF = 1/\text{tolerance}$). The cutoff value commonly used to indicate multicollinearity is a tolerance value $> 0,01$ or equal to the VIF value < 10 (Ghozali, 2012).

The heteroscedasticity test aims to test whether there is an inequality of variants from the residuals of one observation to another in the regression model (Ghozali, 2012). If the variance of the residuals from one observation to another observation remains, it is called homoscedasticity while it is different it is called heteroscedasticity. To find out whether heteroscedasticity occurs is to look at the Plot Figure between the predicted value of the dependent variable, namely ZPRED and the SRESID residual. Heteroscedasticity does not occur if there is no clear pattern, and the dots spread above and below the 0 on the Y-axis.

Multiple linear regression test is a linear relationship between two or more independent variables, namely: Entrepreneurship Education (X1), Entrepreneurial Motivation (X2) on the dependent variable, Entrepreneurial Interest (Y). The test is to determine the direction of the relationship between the independent variable and the dependent variable whether each of them is positively or negatively related. Moreover, it is to predict the value of the dependent variable whether the value of the independent variable has increased or decreased. The multiple linear regression equation is formulated (Ghozali, 2012):

$$Y = a + b_1X_1 + b_2X_2 \quad (1)$$

Where:

Y = dependent variable (Entrepreneurial Interest)

A = Constant

b1, b2 = regression coefficient

X1, X2 = Independent variable (Entrepreneurship)

The coefficient of determination (R^2) aims to measure the ability of the model to explain the variation in the dependent variable. The coefficient of determination is between zero or one. Ghozali (2012) states that there are weaknesses in the determination coefficient/R-squared test so that many researchers recommend using the adjusted R-squared value since will change if there are additional independent variables that are irrelevant (Ghozali, 2012).

Hypothesis testing is a procedure that will produce a decision, namely the decision to accept and reject the hypothesis. The hypothesis is an important part of a study as the research hypothesis becomes more focused. Hypothesis testing must be verified through statistical tests.

Different test t-test is used to test how far the influence of the independent variables used in the research individually in explaining the dependent variable partially. The basis for the decision-making used in the t-test is: (a) If the significance probability value $> 0,05$, the hypothesis is rejected, meaning that the independent variable has no significant effect on the dependent variable; (b) If the significance probability value $< 0,05$, the hypothesis is accepted, meaning that the independent variable has a significant effect on the dependent variable.

The f-test is used to test the truth between the independent variables and the dependent variable in the regression model. F-test analysis is carried out by comparing the f-count with the f-table. Before comparing these f-values, a 95% confidence level must also be determined. If $f\text{-count} > f\text{-table}$ or $p\text{-value} > 0,005$, it is called insignificant, conversely, while if $f\text{-count} < f\text{-table}$ or $p\text{-value} > 0,005$ is called significant.

III. RESULTS AND DISCUSSIONS

Validity testing is carried out by the SPSS program with decision making based on the value of corrected item-total correlation $> 0,3$, so the item/question is considered valid and vice versa. All questions for variables (entrepreneurship education, entrepreneurial motivation, and entrepreneurial interests) have validity coefficients, because the value of corrected item-total correlation $> 0,3$, so these items are worthy of being used as a research measure.

Reliability test is carried out on question items that are declared valid. Reliability test using the Cronbach's Alpha formula and the results obtained show the value of Cronbach's Alpha for variables (entrepreneurship education, entrepreneurial motivation, and entrepreneurial interest) $> 0,60$, meaning that the three independent variables are declared reliable. The normality test uses the Kolmogorov-Smirnov test which states that if the Asymp. Sig. (2-tailed) value is greater than 0,05,

the data is normally distributed. The Kolmogorov-Smirnov test results are provided in Table 1.

Table 1 shows that the Asymp. Sig. (2-tailed) values are 0,063 (X1), 0,578 (X2) and 0,160 (Y) $> 0,05$. It can be considered that the data used in this study are normally distributed.

A multicollinearity test is used to test whether the regression model found a correlation between the independent variables. To determine whether there is a multicollinearity test deviation is to look at the tolerance and variance inflation factor (VIF) values of each independent variable. If the tolerance value $> 0,10$ and the VIF value < 10 , the data are considered free from multicollinearity symptoms. The test results can be seen as provided in Table 2.

Table 2 shows that the tolerance value of each independent variable is 0,666 $> 10\%$ and the variance inflation factor (VIF) for each independent variable is 1,502 $< VIF = 10$, it can be concluded that multicollinearity does not occur between the independent variables.

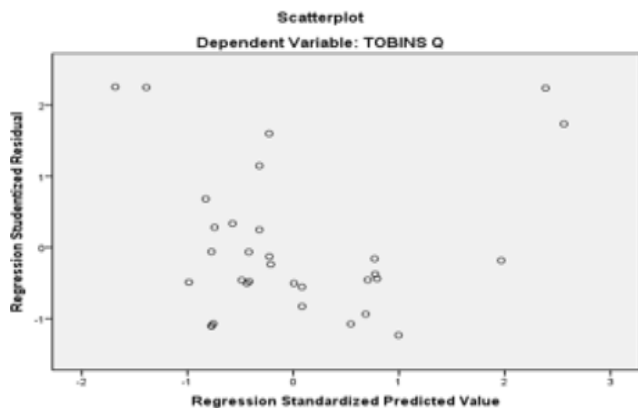


Figure 1 The Heteroscedasticity test result

The heteroscedasticity test results in Figure 1 show that there is no clear pattern and the dots spread below and above the Y-axis. It shows that heteroscedasticity does not occur in the independent variable.

Multiple linear regression analysis is used to measure the effect of more than one predictor variable (independent variable) on the dependent variable. The results of the tests can be seen in Table 3.

Table 3 shows the multiple linear regression equation model formed based on the calculation results is $= 10,784 + 0,360X1 + 0,394X2$. It means: (a) The constant $a = 10,784$, meaning that if there is no entrepreneurship education (X1) and entrepreneurial motivation (X2), then the interest in entrepreneurship (Y) is 10,784; (b) Entrepreneurship education regression (X1) of 0,360 means that every one unit increase in entrepreneurial motivation (X1) will increase entrepreneurial interest by 0,360; (c) Entrepreneurship education regression coefficient (X2) of 0,394 means that every one unit increase

Table 1 One Sample Kolmogorov Smirnov Test

		Entrepreneurship Education	Entrepreneurial Motivation	Interest in Entrepreneurship
N		40	40	40
Normal Parameters ^{a,b}	Mean	38,22	37,80	58,38
	Std. Deviation	4,359	4,295	5,928
Most Extreme Differences	Absolute	0,069	0,104	0,105
	Positive	0,069	0,081	0,105
	Negative	-0,060	-0,104	-0,102
Kolmogorov Smirnov Z		1,316	0,779	1,124
Asymp. Sig. (2-tailed)		0,063	0,578	0,160

a. Test distribution is Normal.

b. Calculated from data.

Table 2 VIF Value

Model		Collinearity Tolerance	Statistics VIF
1	(Constant)		Enter
	Entrepreneurial Education	0,666	1,502
	Entrepreneurial Motivation	0,666	1,502

Table 3 Multiple Linear Regression Test

Model	Coefficients				
	Unstandardized B	Coefficients Std. Error	Standardized Coefficients Beta	T	Sig.
(Constant)	10,784	3,845		2,80	0,008
Entrepreneurial Education	0,360	0,108	0,424	3,32	0,002
Entrepreneurial Motivation	0,394	0,113	0,447	3,50	0,001

Dependent Variable: ENTREPRENEURIAL INTEREST

in entrepreneurial motivation (X2) will increase entrepreneurial interest by 0,394.

The results show that the interest in entrepreneurship is affected by entrepreneurial learning and strong motivation to do entrepreneurship. Ways to form an interest in entrepreneurship begin with the stages of understanding theory, case studies, motivation by providing entrepreneurial experience through entrepreneurship learning. Providing this experience can be in the form of entrepreneurial practice to provide students with sufficient skills to start a small business so that it will further increase their interest in entrepreneurship itself.

Hypothesis testing in the research uses the t-test and f-test. The t-test is used to partially prove the effect of the independent variable on the dependent variable, and the f-test is used to prove the effectiveness of the independent variable on the dependent variable simultaneously.

Table 4 shows that the value of $R = 0,774$ and the adjusted coefficient of determination or adjusted R-squared = 0,577 or 57,7% so that it can be interpreted

that entrepreneurship education and entrepreneurial motivation jointly affect entrepreneurial interest by 57,7% while 42,3% ($100 - 57,7\%$) explained by other factors.

Table 4 Determination Coefficient Test

Model	R	R-Squared	Adjusted R-Squared	Std. Error of the Estimate
1	0,774	0,599	0,577	2,492

Based on the results of the hypotheses, it is necessary to have a preparatory process needed to form potential entrepreneur candidates, such as identifying: 1) entrepreneurial attitudes and behaviors, 2) entrepreneurial characteristics, 3) possible factors of failure and success in entrepreneurship, and 4) false myths about entrepreneurship.

Besides, to increase interest in entrepreneurship, it is necessary to have motivation for prestigious

attitudes and work behavior and be able to develop an entrepreneurial spirit in the search for the latest innovations. Through entrepreneurship learning, students are equipped with skills that help someone create good relationships with others in entrepreneurial relationships. Students in learning entrepreneurship will interact a lot with other students both in conducting discussions, presentations, and entrepreneurial practice. These activities aim to increase students' interest in doing entrepreneurship or as entrepreneurs themselves.

IV. CONCLUSIONS

Entrepreneurial education has a positive and significant effect on interest in entrepreneurship. It can be said that the higher the knowledge in entrepreneurship possessed by the students of the DIII study program, Refraksi Optisi dan Optometri ARO Gapopin, the higher the interest in entrepreneurship will be.

Entrepreneurial motivation has a positive and significant effect on interest in entrepreneurship. It is considered that the stronger entrepreneurial mentality in the students of the DIII Study Program Refraksi Optisi dan Optometri ARO Gapopin will increase their entrepreneurial interest.

Both entrepreneurship education and entrepreneurial motivation have a positive and significant effect on interest in entrepreneurship. The increasing entrepreneurial education and entrepreneurial motivation leads to more interest in entrepreneurship among students of the DIII Study Program Refraksi Optisi dan Optometri ARO Gapopin.

The research can contribute to preparing the youth to be aspiring entrepreneurs and can help the educational institution in setting a good entrepreneurship program. The research can also contribute to decrease the poverty rate and help the country to develop the economic status.

The research conveys several suggestions for students of the Optical Refraction DIII study program. The knowledge in entrepreneurship must be improved, especially in encouraging to motivate and provide direction to remain enthusiastic in shaping an entrepreneurial spirit with the support of the ARO Gapopin educational institution. Entrepreneurial motivation in students of the DIII Optic Refraction ARO Gapopin study program must remain a top priority to be developed so that they are full of enthusiasm and optimism to achieve goals in developing an entrepreneurial spirit. With strong entrepreneurial motivation, it will certainly produce individuals who can see business opportunities so it will generate young entrepreneurs full of innovation and creativity. Entrepreneurship in students can be nurtured by providing entrepreneurship education through seminars and guidance from the Gapopin association in opening optical business opportunities.

The research has the limitation in identifying

the role of entrepreneurship education and the motivation of students only in a vocational institution. Further research needs to reach the youth not only in the vocational institution but also in general programs, so there will be wider population of the youth to find ways in increasing the interest in entrepreneurship.

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