

Entrepreneurship Education and Locus of Control: Their Influence on Students' Entrepreneurship Interest

Achmad Zainul Rozikin^{1*}, Endang Sri Suyati²

^{1,2}Universitas Muhammadiyah Palangkaraya, Indonesia,
¹achmadzainulrozikin@gmail.com, ²suyatiendangsri@gmail.com

*Corresponding author

Abstract

A person's interest in entrepreneurship can be influenced by internal factors and external factors. Internal factors include locus of control, while external factors include entrepreneurship education. The purpose of this study was to determine how much influence locus of control and entrepreneurship education had on students' interest in entrepreneurship. The data for the three variables (entrepreneurship education, locus of control, and interest in entrepreneurship) were obtained by distributing questionnaires to the students. The population of this study was 287 students, while the sample was 167 students. The sampling technique used was random sampling technique. The results of this study indicate that interest in entrepreneurship can be influenced by entrepreneurship education and locus of control partially or simultaneously, although the contribution of locus of control is greater than entrepreneurship education.

Keywords: Entrepreneurship, Interest In Entrepreneurship, Locus Of Control, Entrepreneurship Education

Pendidikan Kewirausahaan dan Locus of Control: Pengaruhnya Terhadap Minat Berwirausaha Mahasiswa

Abstrak

Minat seseorang untuk berwirausaha dapat dipengaruhi oleh faktor internal dan faktor eksternal. Ada beberapa faktor internal dimana salah satunya adalah *locus of control*, sedangkan faktor eksternal meliputi pendidikan kewirausahaan. Tujuan penelitian ini adalah untuk mengetahui seberapa besar pengaruh *locus of control* dan pendidikan kewirausahaan terhadap minat berwirausaha mahasiswa. Data ketiga variabel (pendidikan kewirausahaan, *locus of control*, dan minat berwirausaha) didapat dengan membagikan kuisioner ke mahasiswa. Populasi penelitian ini sebanyak 287 mahasiswa, sedangkan sampelnya sebanyak 167 mahasiswa. Teknik pengambilan sampel menggunakan metode teknik *random sampling*. Hasil penelitian ini menunjukkan bahwa minat berwirausaha dapat dipengaruhi oleh pendidikan kewirausahaan dan *locus of control* secara parsial maupun simultan. Hasil penelitian juga menunjukkan bahwa kontribusi *locus of control* lebih besar dari pendidikan kewirausahaan.

Kata kunci: Kewirausahaan, Minat Berwirausaha, *Locus Of Control*, Pendidikan Kewirausahaan

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INTRODUCTION

Unemployment is a problem faced by all countries in the world, from developing countries to developed countries (Shah et al., 2020). The unemployment rate worldwide has been on the rise, mainly due to the recent global crisis (Taha et al., 2017). The increase in

unemployment also occurs in Indonesia. The open unemployment rate in Indonesia comes from the levels of Secondary Education and Higher Education (Badan Pusat Statistik, 2011, 2013, 2015, 2017, 2019, 2021). Since this study only focuses on the level of Higher Education, this article only shows unemployment data at the level of Higher Education. This study focuses on the Higher Education level because Higher Education students are closer to the world of work than those of the secondary school. Therefore, the open unemployment data contained in this article show the unemployment rate at the university level. The following is data on the open unemployment rate for higher education in Indonesia in 2011 - 2020 based on the Central Statistics Agency (Badan Pusat Statistik, 2011, 2013, 2015, 2017, 2019, 2021).

Based on the table above, the open unemployment rate at the tertiary level has increased since 2017 – 2020. According to the data above, in 2017, the number of the unemployed was 618,758, for 2018 it was 740,370, and for 2019 it was 746,354. In 2020, the total unemployment rate increased quite sharply, which was 981,203 (Badan Pusat

Table 1. *The Open Unemployment Rate*

The Open Unemployment Rate (Age)	Total	Level Education
2011	543,216	Higher Education
2012	445,836	
2013	434,185	
2014	495,143	
2015	653,586	
2016	567,235	
2017	618,758	
2018	740,370	
2019	746,354	
2020	981,203	

Source: Badan Pusat Statistik, 2011, 2013, 2015, 2017, 2019, 2021

Statistik, 2017, 2019, 2021). The increase in the unemployment rate from 2017 to 2020 was caused by the recent global crisis (Taha et al., 2017). In addition, factors that affect the unemployment rate are inflation, financial crises, and low levels of public education (Tefaselassie & Wolters, 2018).

In fact, various strategies and policies have been used to reduce the unemployment rate (Shah et al., 2020). One alternative is entrepreneurship (Nazri et al., 2016) because entrepreneurship can increase economic growth and the emergence of innovation, and create jobs (Badulescu & Badulescu, 2013; Malebana, 2014; Nabi & Liñán, 2011). Therefore, entrepreneurship has become a popular issue on national and international scales (Suyati & Rozikin, 2021).

Higher education in universities has an important role in developing and strengthening the intellectual capital (IC) of individuals (Bae et al., 2014). University systems generally transfer knowledge and technology to individuals (Centobelli et al., 2016), which are usually referred to as intangible resources (Rae, 2010). Thus, universities are

expected to be able to increase students' interest in entrepreneurship through various means designed to spread a scientific and entrepreneurial culture to support the creation of new start-ups (Fini et al., 2011). One of the methods used in higher education is the existence of Entrepreneurship Education (EE).

Since last two decades, international research in education has advocated entrepreneurship education (Lorz et al., 2013). Entrepreneurship has been used as an education system by developed countries (Paray & Kumar, 2020). Developing countries have also caught up with developed countries by making entrepreneurship in the education system (Arthur et al., 2012). The reason for promoting entrepreneurship-based education is because entrepreneurship education can contribute to the development of students' entrepreneurial attitudes, abilities, and skills as well as the ability to seek new business opportunities, thereby increasing their interest in opening a business (Piperopoulos & Dimov, 2015). Entrepreneurship education in research is establishing innovation and entrepreneurship centers, building a strong network of entrepreneurship educators, integrating technology entrepreneurship courses/programs in university education, and developing evaluation methods that are appropriate for certain types of education (Warda, 2016).

The basic theory in this study is the Theory of Planned Behaviour (TPB) which mentions and explains the factors that influence the variables of human intention and behaviour (Ajzen, 1985). Ajzen (1985) explains that this TPB theory explains how individual behaviour is influenced by intention. In addition, intention is a readiness to engage in certain behaviours, consequences of attitudes towards behaviours, subjective norms, and perceived behavioural control (Ajzen, 1985, 1991). The Ajzen model explains how intentions and behaviours are influenced by these components (Baluku et al., 2018).

As mentioned above, the entrepreneurship education provided at universities indirectly fosters interest in entrepreneurship through the construction of TPB (Vanevenhoven & Liguori, 2013). In more detail, entrepreneurship education introduces the logic, knowledge, challenges, and general procedures of entrepreneurship (Passaro et al., 2018). In addition to the transfer of knowledge about entrepreneurship in general, entrepreneurship education also develops patterns of entrepreneurial culture and provides a network of relationships with others (Passaro et al., 2018) as well as provides research and development (R&D) centers (Valliere, 2017). Research conducted by Sánchez (2013) states that entrepreneurship education has no significant effect on students' interest in entrepreneurship. Meanwhile, research conducted by Fayolle & Gailly (2015) shows that the impact of entrepreneurship education on entrepreneurial interest is influenced by students' initial intentions and previous exposure to entrepreneurship. In addition, the impact of entrepreneurship education on entrepreneurial intention is significantly negatively correlated with the level of initial intention (Fayolle & Gailly, 2015).

Individuals who want to become entrepreneurs can be seen from their behaviours (E. Liguori et al., 2020). Someone who wants to be an entrepreneur will dare to take risks and uncertainty (Uysal et al., 2021). Given this uncertainty, it is important to understand the characters and processes that influence a person's interest in entrepreneurship (Uysal et al.,

2021). Social Cognitive Career Theory (SCCT) (Lent et al., 2002) is one theory that provides a framework for studying the process. Based on Bandura's general social cognitive theory (Heffernan, 1988; Bandura, 2012), SCCT highlights the importance of individual-related cognitive factors such as personality, self-efficacy, expectations, and goals/intentions (Uysal et al., 2021). However, there is limited research applying SCCT to the study of entrepreneurship education (E. W. Liguori et al., 2018).

This study aims to measure and understand the impact of entrepreneurship education conducted by the universities on students' interest in entrepreneurship at the University of Muhammadiyah Palangkaraya through the Theory of Planned Behaviour (TPB) framework. This study illustrates the existing research gaps in the relationship between education and intentions at the University of Muhammadiyah Palangkaraya in particular and Indonesia in general, and is of interest to researchers, academics, and policymakers in this country and even throughout the world. In addition, this study also aims to measure and understand the impact of locus of control on students' interest in entrepreneurship through Social Cognitive Career Theory (SCCT). The University of Muhammadiyah Palangkaraya was used as the research object because previous observations showed that the majority the University of Muhammadiyah Palangkaraya students were less interested in becoming entrepreneurs. Therefore, this research aims to measure how much impact education and locus of control influence students' entrepreneurial interest partially or simultaneously. This article is structured as follows. After this introduction, the second part is the research method. The third section contains findings and discussion. The last part, the fourth part, contains the conclusions of this study.

METHOD

This study uses multiple regression analysis which has the variables of entrepreneurship education, locus of control, and interest in entrepreneurship. The dependent variable in this study is the interest in entrepreneurship, while the independent variables are entrepreneurship education and locus of control. Interest in entrepreneurship is the desire of students to open a business. Entrepreneurship education is a course in Higher Education that explains theories about entrepreneurship. Then, locus of control is a person's self-control from events that are around him.

This study is causal associative research because it aims to determine whether there is a relationship between the dependent variable and the independent variables (Sugiyono, 2013) which are included in quantitative research. This research instrument adopts previous research with several developments. The variable instrument of Entrepreneurship Education was adapted from the research of Warda (2016). The indicators of entrepreneurship education in this study are establishing innovation and entrepreneurship centers, building a strong network of entrepreneurship educators, integrating technology entrepreneurship courses/programs in university education, and developing appropriate evaluation methods for certain types of education (Warda, 2016). The variable instrument of locus of control was adapted from the research of Tentama & Abdussalam (2020). The locus of control variable indicators in this study are the ability and effort (Tentama &

Abdussalam, 2020). Then the variable instrument of interest in entrepreneurship was adapted from the research of Suyati & Rozikin (2021). Indicators of the variable of interest in entrepreneurship are choosing a business path rather than working for others, choosing a career as an entrepreneur, being oriented to the future, and planning to start a business (Suyati & Rozikin, 2021). This instrument has 4 Likert scales, namely strongly agree (4 points), agree (3 points), disagree (2 points), and strongly disagree (1 point). This Likert scale applies to all variables in this study (Entrepreneurial Education, Locus of Control, and Interest in Entrepreneurship).

Before conducting the research, the validity and reliability of the instruments were tested on 126 respondents. The 126 student respondents were the only respondents for the validity and reliability tests. The respondents were not only from universities in Palangka Raya City but also from various universities in Indonesia, such as Malang State University, Yogyakarta State University, Brawijaya University, Malang Islamic University, Palangka Raya University, Medan State University, Islamic Institute of Religion Palangka Raya, Malang State Polytechnic, Lambung Mangkurat University, Antasari State Islamic University Banjarmasin, Jakarta State Islamic University, Banjarmasin Health Polytechnic, and Yogyakarta STIPER Agricultural Institute. The validity test and reliability test in this study have the same characteristics, namely 4th-semester students who are taking and have taken entrepreneurship course. This research focused on semester 4 students because at the University of Muhammadiyah Palangkaraya, students receive the Entrepreneurship Education course only in semester 4. This research instruments were distributed at the end of the semester after completing the Entrepreneurship Education course. This study has three hypotheses, namely: (1) there is an effect of entrepreneurship education on students' interest in entrepreneurship, (2) there is an influence of locus of control on students' entrepreneurship interest, and (3) there is an influence of entrepreneurship education and locus of control on students' entrepreneurship interest.

The population of this study consisted of 287 students, with a sample of 167 students. The subjects of this study were students of the University of Muhammadiyah Palangka Raya who had taken entrepreneurship course. The research subjects came from various faculties, such as the Faculty of Teacher Training and Education, the Faculty of Social and

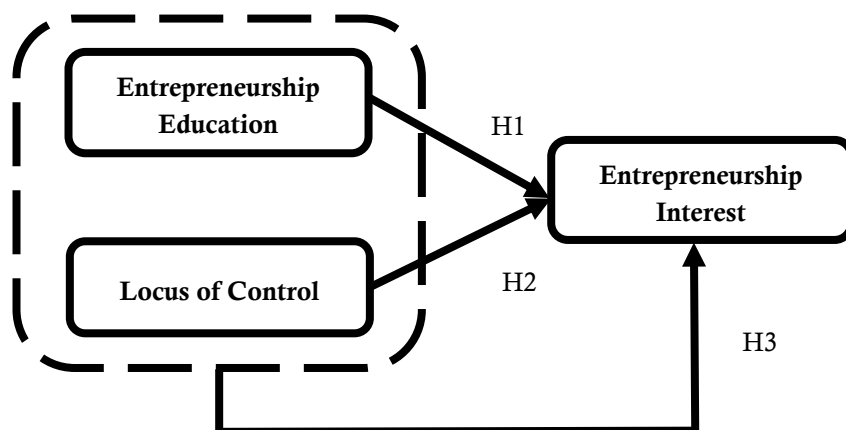


Figure 1. Research Model

Political Sciences, the Faculty of Engineering and Informatics, the Faculty of Islamic Religion, the Faculty of Health Sciences, and the Faculty of Agriculture and Forestry.

FINDING AND DISCUSSION

This research instrument was tested using Confirmatory Factor Analysis (CFA). In CFA, the instrument is considered valid if the value is > 0.50 (Hair et al., 2014). The Kaiser Meyer - Olkin (KMO) test is used to determine whether an instrument is feasible or not. If the index value is high (ranging from 0.5 to 1.0), the factor analysis is feasible. Meanwhile, if the value is below 0.5, factor analysis cannot be carried out (Ghozali, 2013).

Table 2 shows that the Kaiser Meyer–Olkin (KMO) test for the Entrepreneurship Education variable is 0.777 with a significance value of 0.000. The Anti-image Matrices correlation table shows that the 30 items analyzed have a value of more than 0.5 and produce 4 factors. Of the 30 items, there are 2 items that are not valid, so the number of items that are valid and worthy of research are 28 items.

Table 2 shows that the Kaiser Meyer–Olkin (KMO) test for the Locus of Control variable shows the KMO test of 0.859 with a significance value of 0.000. The Anti-image Matrices correlation table shows that the 8 items analyzed have a value of more than 0.5

Table 2. *KMO test and Bartlett's Test of Sphericity*

Variables	Kaiser Meyer – Olkin (KMO)	Bartlett's Test of Sphericity (Sig.)
Entrepreneurship Education	.777	0.000
Locus of Control	.859	0.000
Entrepreneurship Interest	.852	0.000

and produce 2 factors. Of the 8 items, all items are valid, so they deserve to be researched and can be analyzed further.

Table 2 shows that the Kaiser Meyer–Olkin (KMO) test for the Entrepreneurship Interest variable is 0.852, and the significant value is 0.000. The Anti-image Matrices correlation table shows that the 11 analyzed items have a value of more than 0.5 and produce 4 factors. Of the 11 items, there is 1 invalid item, so it cannot be analyzed further. Therefore, the number of items that deserve to be researched and investigated further is 10 items.

After conducting the validity test, the next step is the reliability test. Table 3 shows that the Cronbach's Alpha value of the three variables exceeds the normal limit of 0.70, so that the three variables are considered reliable.

A classical assumption test was also carried out in this study. This test was carried out after the validity and reliability tests, but before the multiple regression test. The classical assumption test in this study is divided into four, namely normality test, linearity test, multicollinearity test, and heteroscedasticity test. The normality test in this study resulted in a significant value of 0.098. The linearity test in this study is indicated by the Deviation

from Linearity (DfL) value. The DfL of the Entrepreneurship Education variable is 0.75, while the DfL of the Locus of Control variable is 0.276.

The multicollinearity test is shown in the Tolerance and VIF columns. Tolerance and VIF on Entrepreneurship Education and Locus of Control variables have the same value,

Table 3. *Reliability Test*

Variables	Normal Limit	Cronbach's Alpha Value	Information
Entrepreneurship Education	.70	.970	Reliable
Locus of Control	.70	.875	Reliable
Entrepreneurship Interest	.70	.947	Reliable

namely 0.545 (Tolerance) and 1.837 (VIF). The heteroscedasticity test for the Entrepreneurship Education variable is 0.774 and 0.082 for the Locus of Control variable. The results of the classical assumption test indicate that the data in this study pass the classical assumption test, so that it can be continued with multiple regression testing.

After conducting the validity test, reliability test, and classical assumption test, the researcher entered the next stage, which was testing the hypotheses.

Table 4. *Classic assumption test*

Variables	Normality	Linierity	Multicollinearity		Heteroscedasticity
	Sig.	Deviation from Linearity	Tolerance	VIF	Sig.
Entrepreneurship Education	.098	.075	.545	1.837	.774
Locus of Control		.276	.545	1.837	.082

Table 5. *Multiple Regressions*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
	(Constant)	3.252	2.253		
Entrepreneurship Education	.075	.032	.157	2.351	.020
Locus of Control	.874	.089	.660	9.868	.000

a. Dependent Variable: Entrepreneur Interest

Table 5 shows that the significant value of the Entrepreneurship Education variable is 0.020, while the significant value of the Locus of Control variable is 0.000. Coefficient or

contribution (Adjusted R Square = $R^2_{X_1X_2Y}$) = 0.596. Then the magnitude of the residual coefficient $\rho_{Y \varepsilon} = \sqrt{1 - 0,596} = 0.63$. From these results, it can be concluded that the contribution of Entrepreneurship Education and Locus of Control is 63%, while 37% is influenced by other variables not examined. The contribution of Entrepreneurship Education affects Entrepreneurship Interest partially by 15.7%, while the contribution of Locus of Control is 66%.

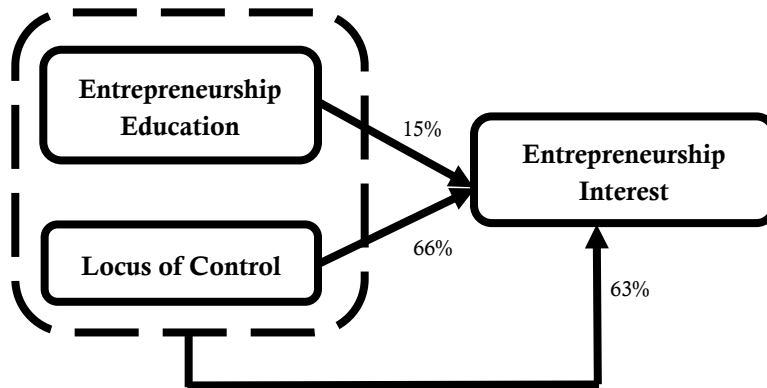


Figure 2. The Results of Research

These results indicate that locus of control has a greater contribution than Entrepreneurship Education. The results of this study are inversely proportional to the research conducted by Kurjono et al. (2020), in which the influence of the locus of control variable on interest in entrepreneurship in his research has a smaller effect than other independent variables, namely the variable daring to take risks and self-confidence. This study is different from the research of Kurjono et al. (2020) because the independent variables of the research are only internal factors (locus of control, risk-taking, and confidence), thus causing the influence of locus of control to be smaller than other independent variables. While our research calculates the influence of factors from within (locus of control) and factors from outside (entrepreneurship education), where our results state that factors from within (locus of control) have a greater influence than factors from outside (entrepreneurship education).

This case is because the strongest influence in increasing an individual's interest to become an entrepreneur is from within a person. Therefore, we show the importance of locus of control that can increase individuals' entrepreneurial interest to entrepreneurial actions (Bernardus et al., 2020) and is supported by the individuals' abilities, efforts, and positive entrepreneurial attitudes (Dinis et al., 2013). The results of this study are following the Social Cognitive Career Theory (SCCT). SCCT views the importance of individual cognition regarding individual intentions and goals (Uysal et al., 2021). Therefore, if individuals want to become entrepreneurs, it can be seen from their behaviours (E. Liguori et al., 2020). If individuals have a strong sense of self-confidence to control themselves and their environment, they can be expected to become entrepreneurs (Karimi et al., 2017). Vice versa, if individuals do not have strong confidence in their environment, it cannot be expected to be entrepreneurial.

Entrepreneurship generally requires individuals who dare to take responsibility for the results of decisions that are often risky (Karimi et al., 2017). Thus, individuals who dare to take risks will choose an entrepreneurial career. In addition, entrepreneurs are individuals who have potential and high achievement motivation (Day et al., 2017) to move forward with an optimistic sense of the ability to solve problems, take risks to build a business, the ability to innovate to turn ideas into reality (Ida Ketut, 2019). An entrepreneur has a visionary perspective and the psychological characteristics to achieve success such as hard work, enthusiasm, tolerance for uncertainty, creative and innovative thinking, and increased entrepreneurial competence (Ida Ketut, 2019). The competencies possessed by an entrepreneur can strengthen self-confidence in one's own ability to manage a business (Ida Ketut, 2019). The entrepreneur's belief in his/her ability to run a business is called locus of control (Ida Ketut, 2019).

Locus of control is a personality trait to identify individuals who control life from within themselves (Hsiao et al., 2016). Entrepreneurs believe that the business performance achieved is determined by the process of self-control behaviour (Mehta & Gupta, 2014). The competitive advantage is created by entrepreneurs by taking control of business management (Bulmash, 2016). With locus of control, individuals will focus on behaviours that produce a positive influence on high achievement and are responsible for their actions (Prakash et al., 2015) to realize entrepreneurial interests (Kusumawijaya, 2018). Interest in entrepreneurship does not only come from within the individuals (locus of control), but also from outside the individuals, such as entrepreneurship education.

These results are in accordance with the Theory of Planned Behaviour (TPB) proposed by Ajzen (1985, 1991). TPB is the most frequently used model to understand the relationship between education and intention (Ajzen, 1991; Schlaegel & Koenig, 2014), suggesting that an individual's future behaviour is the result of the individual's current intention and the individual's attempts to do so (Paray & Kumar, 2020). Previous research, namely the research conducted by Kautonen et al. (2015) reflects the direct impact of TPB on entrepreneurship education. Their research explains that their research supports the relevance of TPB in influencing individual intentions to start a business (Kautonen et al., 2015). TPB has been applied in various studies on entrepreneurial intention with implicit assumptions made about its relevance for predicting subsequent actions which can now be applied with demonstrated validity (Kautonen et al., 2015).

The results of the research conducted by Maresch et al. (2016) also found that entrepreneurship education (EE) is effective for students by regulating TPB to increase entrepreneurial interest. Rauch & Hulsink (2015) in their research also explain that entrepreneurship education (EE) can change aspects of TPB in the educational process because it positively affects individual attitudes and behavioural control. Therefore, entrepreneurship education at universities has an important role in increasing entrepreneurial intentions, especially to the students.

Universities play an important role in the overall development of individuals and the specific development of entrepreneurial intentions (EI) by encouraging existing and inculcating new abilities through entrepreneurial education (Hassan et al., 2021). The

support, education, and ecosystem provided by the universities can play an important role in increasing the ability and motivation of individuals to undertake entrepreneurial ventures (Tomy & Pardede, 2020). Therefore, entrepreneurship education is considered to be able to increase students' interest in entrepreneurship. The results of our study are also in line with previous studies, namely Anwar et al. (2020); Farhangmehr et al. (2016); Hassan et al. (2021) which show that there is a relationship between entrepreneurship education and interest in entrepreneurship.

CONCLUSION

This study aims to determine the effect of entrepreneurship education and locus of control on the entrepreneurial intentions of students at the University of Muhammadiyah Palangkaraya. The results of this study indicate that the effect of locus of control on the interest in entrepreneurship is greater than that of entrepreneurship education. This is because the strongest influence is from within the individuals. As good as any external effect, but the individuals have no interests or efforts to do it, they will not be interested or not interested, in this case, is entrepreneurship.

Although entrepreneurship education has a smaller effect than the locus of control in increasing students' interest in entrepreneurship, entrepreneurship education is considered important to increase interest in entrepreneurship. The existence of entrepreneurship education can provide new knowledge for students to become entrepreneurs, especially students other than the Department of Economics Education. Entrepreneurship education is considered important because, in the learning, there are lecture materials that discuss how to do entrepreneurship properly and correctly. Usually, the material taught is an explanation of entrepreneurship to a SWOT analysis. In their learning, students not only gain entrepreneurial knowledge, but students are guided by lecturers in entrepreneurship courses in opening a business to running a business. Therefore, universities are expected to provide facilities to students who want to open new businesses, so that these universities become universities that create many young entrepreneurs. Therefore, it indirectly contributes to reducing the unemployment rate in Indonesia.

This research has limitations. First, the sample of this research is only students of the University of Muhammadiyah Palangkaraya. Second, this study only examines three variables, namely entrepreneurship education, locus of control, and interest in entrepreneurship. The three variables were chosen because of their suitability with student characteristics and the improvement of entrepreneurship education. Third, students who answer the questionnaires may have different perceptions from students who do not answer the questionnaires, and there is no guarantee that the respondents are representative to the population. Fourth, the entrepreneurship education course that the respondents take is different from the course obtained by students from other universities. Therefore, further researchers can expand the subject and object of research, so that the research results can be used as general conclusions. Further researchers are expected not to research only one university, they are expected to be able to examine students from several universities in Indonesia.

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