

## Creativity and entrepreneur knowledge to increase entrepreneurial intent among vocational school students

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### ABSTRACT

One way to overcome the problem of unemployment is to change the mindset that in meeting the needs of life, one does not have to work as an employee or employee, but is able to play a role as a business pioneer. This study aims to find out the contribution level of entrepreneurship education and creativity taking into account factors that support entrepreneurs' intents. This type of investigation was ex post facto with a quota sampling technique of 76 vocational high school students. The data collection was done through tests to measure entrepreneurial knowledge and instruments to measure entrepreneurial intentions. The data analysis technique employed a regression test to determine the relationship and the magnitude of the influence between variables. The study has found that there is a positive correlation between entrepreneurial education and students' intent in entrepreneurship. The contribution of change in entrepreneurship education partly to intent in entrepreneurship was 32.60%. There is a positive contribution to creativity in students' intents in entrepreneurship. The contribution to allow for creative change in entrepreneurial intent is partially 18.40%. There is a positive contribution between entrepreneurship education and creativity in students' intent in entrepreneurship. Other supporting factors are self-efficacy and locus of control.

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## 1. INTRODUCTION

Vocational education in general prepares graduates who are ready to work in the field and specifically able to create new jobs [1]. One way to overcome the problem of unemployment is to change the mindset that in meeting the needs of life, one does not have to work as an employee or employee, but is able to play a role as a business pioneer [2]. Hendro [3] analogized that if one person becomes an entrepreneur, he will invite one of his friends as a partner and another person to become an employee. So that it can be elaborated broadly, if 10% of vocational high school (VHS) graduates become entrepreneurs, who will join up to 20%, so as much as 30% of the number of unemployed can be reduced. If the majority of VHS graduates have such a mindset, then it can be an alternative solution to the problem of unemployment in Indonesia [4].

The government continues to strive in order to create young entrepreneurs through the subjects and programs of Entrepreneurship [2]. Mila argued [5] somethings learned in entrepreneurship education include: forming a mindset to work without having to rely on other parties, line of business to be undertaken, preparation as initial activity in business, how to obtain capital, and marketing techniques. This is supported

by the results of research [6] which concludes that entrepreneurship education has a positive impact on entrepreneurial intent and is able to increase knowledge in the entrepreneurial process and there are initiatives from students that will bridge the gap and change the mindset of graduates from job seekers to job creators. Iacobucci [7] argues that recent research shows that entrepreneurship education plays an important role in promoting entrepreneurial spirit among students. Packham *et al.* [8] note that students who have taken an entrepreneurship course are more likely to start their own business than those who have not. Entrepreneurship education in the fields of science and technology is very important to improve entrepreneurial innovation skills in a dynamic environment. The main capital of an entrepreneur is creativity, tenacity, enthusiasm and unyielding [3]. Creativity is the ability to develop ideas and solutions in solving problems while finding new opportunities [9]. Creative entrepreneurs will be able to provide added value and find new business ideas easily [10], [11].

One of the expertise programs in vocational schools is construction and property engineering (CPE). This expertise program learns about the development of development technology. Especially about building construction. In the era of rapid technological development nowadays, almost all fields must hold development projects. These conditions lead to the large business opportunities for VHS graduates of the CPE expertise program to work. Based on the results of the national socio-economic survey submitted on the East Java Development Planning Agency at Sub-National Level (BAPPEDA) site 2017th, several districts in East Java are classified as regions with a relatively low number of entrepreneurs. East Java in 2017, the percentage of occupations of the population are: agriculture 51.73%, mining and quarrying 1.54%, industry 8.14%, gas electricity and drinking water 0.07%, construction 4.52%, trade, household and accommodation services by 20.98%, transportation, warehousing and communication 2.49%, financial institutions, real estate, rental business and corporate services 0.57%, social, social and personal services 9.95%. In the data it has been mentioned that the type of work is dominated by the agricultural sector.

The number of entrepreneurs in the building sector in East Java is still relatively small. Most of the surrounding communities build a building through mutual cooperation or through the services of contractors outside the area. This should be a great opportunity for VHS graduates of the CPE expertise program in East Java. There are several business opportunities in accordance with the CPE program, namely: buying and selling building materials, building design drawing services, building budget planning services, road, irrigation and bridge construction services, property sector, and simple land surveying or site survey services.

In entrepreneurship, surely one must have a high intent in being able to realize himself as an entrepreneur. Entrepreneurial intent itself is a high or low level of student intent in entrepreneurship. Someone who wants his business to develop must have good social capital. Entrepreneurial knowledge and achievement of learning outcomes obtained by students during teaching and learning activities and the ability to think creatively owned by students can prepare graduates to become entrepreneurs [12]. However, this influence needs to be studied more deeply through research, especially in vocational students in the CPE Expertise program in East Java.

Entrepreneurial knowledge is all information or various symptoms that are found and known by humans through the five senses and their minds about an effort to build a value with the ability, courage, determination and creativity and dare to take risks in opportunities to succeed to open businesses in various opportunities with know what are the factors that become the base of success towards success [8]. According to Suryana [9] there are some basic knowledge that must be possessed by an entrepreneur, namely: i) Knowledge of the business that will be initiated; ii) Existing business environment knowledge; iii) Knowledge of roles and responsibilities; and iv) Knowledge of management and business organizations. The four factors can be obtained through entrepreneurship education while students' study in class. Based on the above opinion about entrepreneurial knowledge, it can be concluded that entrepreneurial knowledge is information that is processed through the five senses in the form of memory and understanding of ways of entrepreneurship so as to foster ideas and dare to take risks rationally and logically in opportunities for success to open businesses and knowledge one of them can be obtained through entrepreneurship education.

The results of the study [13] with the title "Impact of Entrepreneurship Education on the Entrepreneurial Intentions of Students in Technical and Vocational Education and Training Institutions (TVET) in Malaysia". The conclusion of the study is that students have a strong intent in entrepreneurship (mean=4.23, SD=0.73) and high levels of entrepreneurial attitudes (mean=4.03, SD=0.47). It also revealed that their social norms (mean=3.82, SD=0.59), entrepreneurial efficacy (mean=3.99, SD=0.59), and entrepreneurial knowledge (mean=3.93, SD=0.55) is at a moderate level.

Ndofirepi's research results [4] with the title "Relationship between entrepreneurship education and entrepreneurial goal intentions: psychological traits as mediators" concludes that there is a positive and significant influence of entrepreneurial knowledge through entrepreneurship education on entrepreneurial intent by mediating psychological factors. The creativity factor also influences and has a positive impact on entrepreneurial intent as the findings of the study [14] under the heading "Creativity, proactive personality

and entrepreneurial intentions: examining the mediating role of entrepreneurial self-efficacy". The author found that creativity has a positive effect on intent in entrepreneurship by being mediated by self-efficacy.

## 2. RESEARCH METHOD

This type of research is ex post facto with a quota sampling technique of 76 students. The population used in this study was 75 vocational students. because the population is <100, the sample is taken from the entire sample. The determination of the quota sampling technique is from non-probability sampling because it does not provide equal opportunities for each element of the population but with a limited number of samples. The research results are then discussed through a literature review on relevant references and research findings so that several factors that support/mediate entrepreneurial intent are found. Relevant reference results include the policies of the Government of the Republic of Indonesia, and books that support entrepreneurship in vocational/vocational education. While the study of relevant research results is a study of several studies related to entrepreneurship education and creativity possessed by a prospective entrepreneur and entrepreneurial intents of vocational students. The data collection technique used in this study was through a test to measure entrepreneurial knowledge and creativity, while a questionnaire was used to measure entrepreneurial intentions. The test instruments and questionnaires were first validated theoretically by experts and followed by empirical validation through limited class trials. The instrument has also passed the reliability test, so that the instrument is ready for research use. The data analysis technique uses a regression test to determine the relationship and the magnitude of the influence between variables.

## 3. RESULTS AND DISCUSSION

### 3.1. Results

Testing the hypothesis of this study using multiple linear regression analysis with two independent variables, namely entrepreneurship education (X1) and creativity (X2). The dependent variable is entrepreneurial intent (Y) as shown in Table 1. Based on the results of the multiple regression test, the regression equation is obtained:  $Y = -6.787 + 0.439 X1 + 0.170 X2$ . Constants = -6.78. Negative constants do not matter, as long as X1 and X2 cannot be equal to zero, and do not approach -1. Coefficient X1 = 0.43. The regression coefficient value of the entrepreneurship education variable is 0.439. This means that if there is an increase and decrease in the value of the variable by 1, then the value of the variable entrepreneurial intent will increase or decrease by 0.439 assuming the other variables are fixed. Coefficient X2 = 0.170. The regression coefficient value of the creativity variable is equal to 0.170. This means that if there is an increase and decrease in the value of the variable by 1, then the value of the variable entrepreneurial intent will increase or decrease by 0.170 assuming the other variables are fixed. The F statistical test basically shows that all independent or independent variables included in the regression model have a joint influence on the dependent variable as shown in Table 2.

Table 1. Multiple linear regression test with intent in entrepreneurship as the dependent variable

Model	Unstandardized coefficients		Standardized coefficients	t	Sig.
	B	Std. error	Beta		
(Constant)	-6.787	5.477		-1.239	0.219
1 Score X1	0.439	0.074	0.516	5.948	0.000
Score X2	0.170	0.042	0.352	4.056	0.000

Table 2. Simultaneous significance test with entrepreneurial intent as the dependent variable

Model	Sum of squares	df	Mean square	F	Sig.
Regression	1403.866	2	701.933	40.600	0.000
Residual	1262.082	73	17.289		
Total	2665.947	75			

In the multiple linear regression test shows that the value of F arithmetic greater than 2 is equal to 40.600 with a significance of  $0.000 < 0.05$  then  $H_0$  is rejected and  $H_a$  is accepted, which means that entrepreneurship education and creativity together influence the intent in entrepreneurship. Test the simultaneous determination coefficient ( $R^2$ ) is used to determine how much influence the variables of education in entrepreneurship and creativity of the intent in entrepreneurship is shown in Table 3.

Table 3. Simultaneous test results the coefficient of determination ( $R^2$ )

Model	R	R square	Adjusted R square	Std. error of the estimate
1	0.726	0.527	0.514	4.15798

The contribution of pen nurture entrepreneurship and creativity of the intent in entrepreneurship is known from the coefficient of determination adjusted R2 is equal to 0.527 or 52.70%. It means that 52.70% variable intent in entrepreneurship is explained by education entrepreneurship and creativity. While the remaining 0.473 (1-0.527) or 47.30% is explained by other factors outside the model.

Partial determination coefficient test ( $r^2$ ) is used to find out how much percentage of the effect of variable X (entrepreneurship education and creativity) on Y (intent in entrepreneurship). To find out the partial determination coefficient, we need help using the SPSS program in the partial test, which is the coefficients table. The trick is to square the partial correlations in Table 4, then convert them into a percentage.

Based on the partial determination coefficient test shows the magnitude of the contribution of entrepreneurship education variables to the intent in entrepreneurship partially namely  $(0.571)^2 \times 100\% = 32.60\%$ . The amount of creativity towards entrepreneurial intent is partially equal to  $(0.429)^2 \times 100\% = 18.40\%$ . Thus the variable of entrepreneurship education provides a greater influence on entrepreneurial intent compared to the variable of creativity.

Table 4. Test results for partial coefficient determination test X1 and X2 against Y

Model	Unstandardized coefficients		Standardized coefficients	Corelation		
	B	Std. error	Beta			
(Constant)	-6.787	5.477				
1 Score X1	0.439	0.074	0.516	0.648	0.571	0.479
Score X2	0.170	0.042	0.352	0.545	0.429	0.327

### 3.2. Discussion

There are many studies that discuss entrepreneurship education. Referring to Julita and Arianty [15] the courage to form entrepreneurship is driven by education, practical and attractive entrepreneurship education can arouse students' intent in entrepreneurship so they can understand the role of business, profit/weakness, business characteristics, planning, see business opportunities and understand the basic knowledge of entrepreneurship. This result is in line with Linan *et al.* [16] which states that the factors affecting entrepreneurial intent consist of two aspects, namely intrinsic aspects (income, self-esteem, and feelings of pleasure) and extrinsic aspects (family environment, community environment, and educational environment). Intent in entrepreneurship shows a significant positive correlation with entrepreneurship education, personal traits, attitudes, subjective norms, and perceived behavioral control (PBC). Intent in entrepreneurship also has a significant positive correlation with external locus of control, which is consistent with the results of previous studies [17]–[19]. In line with previous research, the findings Dabale and Masese revealed that exposure to entrepreneurship education significantly, and in a positive way, contribute some substantial variance in the intent of the entrepreneurial objectives. The findings corroborate them from studies conducted in a non-Western context that draw similar conclusions [20]–[22]. This finding confirms the usefulness of entrepreneurial intent as an indicator of the effectiveness of entrepreneurship education programs. However, proper consideration must be given to the fact that predictive relationships are observed conditional whether students have previous entrepreneurial exposure or not [23] and whether the program is optional or compulsory [24]. Fayolle and Gailly's [23] study revealed that entrepreneurship education has the opposite effect on the entrepreneurial intents of students who have had substantial prior exposure to entrepreneurship.

Creativity helps entrepreneurs to identify opportunities and generate new and innovative ideas . Therefore, it is considered as one of the important antecedents of entrepreneurship and entrepreneurial intent [25]. In addition, creative people are more likely to be involved in entrepreneurship. Bellò *et al.* [11] found that encouragement by peers positively influenced entrepreneurial intent and strengthened the effect of creativity on entrepreneurial intent.

### 4. CONCLUSION

There is a positive contribution between entrepreneurship education to students' intent in entrepreneurship. The contribution of entrepreneurship education variables partially to entrepreneurial intent is 32.60%. This means that the higher the entrepreneurial intent students have the higher the student's

entrepreneurial knowledge. There is a positive contribution of creativity to students' entrepreneurial intent. The variable contribution of creativity to entrepreneurial intent is partially at 18.40%. This means that the better the creativity will affect the higher student intent in entrepreneurship.

There is a positive contribution between entrepreneurship education and creativity in student intent in entrepreneurship. F statistical test shows that the value of F arithmetic is greater than 2 which is equal to 40.600 with  $0.000 < 0.05$  which means entrepreneurship education and creativity together influence the intent of entrepreneurship. The magnitude of the influence of these two variables on entrepreneurial intent is 52.70% so it can be interpreted that 52.70% of the variable entrepreneurship intent is explained by the variables of entrepreneurship education and creativity, while the remaining 47.30% is explained by other factors outside the model such as self-efficacy and locus of control.




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