Entrepreneurship Education and Students Entrepreneurial Intention: Does Teacher Creativity Really Matter?

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Abstract: Escalating entrepreneurs is expected to provide more job opportunities that contributes in diminishing social and economic issues. This study aims to analyze the interconnectedness between teacher creativity and entrepreneurial intention as well as investigate the role of entrepreneurship education. This research adopted a descriptive correlational study that aims to analyze the nexus between variables using a quantitative approach study. This current study engaged primary data from an online questionnaire that was performed online to vocational students with five Likert scale choices. Furthermore, the statistical analysis was conducted using partial least squares-structural equation modeling (PLS-SEM) with the use of SmartPLS 3.0 software. The outcomes of this study indicate that teacher creativity takes a crucial role in determining students' intention of being entrepreneurs. These results imply that teachers' creativity in classroom learning to inspire, motivate, and encourage students can support entrepreneurship education as well as students' entrepreneurial intention. The basic rationale is that entrepreneurship education is subjected to several aspects including cognitive, affective and psychomotor.

Keywords: Entrepreneurship education, Entrepreneurial intention, Students' intention, Teacher's creativity

INTRODUCTION

The topic of entrepreneurship has gained recognition among scholars in both developed and emerging countries (Bae et al., 2014; Patriotta & Siegel, 2019). The significance of entrepreneurship can drive economic development, economic growth through establishment job opportunities, and poverty alleviation (Urbano et al., 2019; Fritsch & Wyrwich, 2017). However, encouraging youth entrepreneurship remains a significant challenge worldwide, especially in developing nations. According to the Global Entrepreneurship Index (2019), the proportion of entrepreneurs is lower among youth than the general population. This disparity suggests that additional support is needed to foster entrepreneurship among young people in order to promote economic growth and development. More specifically, the United States (12%) has the highest rate of entrepreneurship, followed by countries such as Japan (11%), China (10%), Singapore (7%), Malaysia (5%) and Indonesia (3.5%).

Dealing with this issue, the Indonesia government has conducted various efforts to boost the number of entrepreneurs. For instance, revitalization of educational curricula for entrepreneurship education in the vocational education. With this effort, the vocational education graduates are forecasted to be entrepreneurs instead of being workers in a company or organization. In fact, in Indonesia, the issue of high unemployment rates is reigned by vocational education graduates. The data from Statistics Indonesia (2020) confirmed that vocational high school (SMK) takes high percentage by approximately 8.49 percent. The open unemployment rate of February 2019 is about 5.01, which implies that out of 100 workers, there are around five unemployed people.

The escalating number of jobless graduates from vocational schools is frequently linked to inadequacies in entrepreneurial education. In particular, entrepreneurship education has not performed with creativity and innovation that are important to become entrepreneurs instead of focusing on theoretical based on text books. This remarks that the appropriate of entrepreneurship education will forecast dramatically affects the intention of vocational education students to become entrepreneurs. The number of preliminary papers remarked that entrepreneurship education has the opportunity to initiate individual intentions being entrepreneurs (Aprilianty, 2013; Marini & Hamidah, 2014), which implies that entrepreneurship education can be enhanced to raise the number of entrepreneurs.

The concept of entrepreneurial intention is closely related to the theory of planned behavior (TPB), developed by Ajzen (1991). TPB is an extension of the Reasoned Action Theory (TRA) proposed by Fishbein and Ajzen. Both of these theories share a focus on an individual's intention to engage in a specific behavior. Drawing from TPB and TRA, intention can be utilized to identify and forecast the factors that motivate and shape individual behavior. Moreover, some scholars who focus on TRA and TPB agree that intention can look at the motivational matters which influences behavior. In summary, the intention implies on the willingness of an individual to do any effort in performing a behavior (Rossmann, 2011; Sutton, 2014).

Corsini (2002) concluded that the intention is the right decision to conduct entrepreneurial behavior in both a conscious and planned context, or not. Furthermore, Ajzen (1991) suggests that intentions can be used to predict an individual's various behavioral tendencies accurately. The intention is a specific desire for someone to do something or some action; it is the result of a conscious mind that directs a person's behavior (Kautonen et al., 2015). On the other hand, Linan (2009) pointed out that entrepreneurial intention is affected by assorted circumstances, such as needs, values, habits, and beliefs. The external factors affect an individual's entrepreneurial attitudes (Khuong & An, 2016). These primary variables, for instances, time constraints, task difficulties, social pressure can be examples of these situational point (Wallace et al., 2005).

The majority of scholars agree that entrepreneurial intentions cannot be separated from the TPB theory, although there are some differences in their studies (Urbano et al., 2019; Fritsch & Wyrwich, 2017). This difference is mutually reinforcing because it is related to measurement aspects (Chandler & Lyon, 2001). Measuring variables related to entrepreneurial intentions that target more cognitive domains is not an easy matter (Baron, 1998), which causes some differences in empirical tests. Furthermore, Kolvereid (1996) used a measure of attitude based on belief. However, Kolvereid and Isaksen (2006) improved the attitude measure by using an aggregate measurement to predict an attitude and using a single indicator to calculate an intention. Some researchers who used unconditional measures of intention (Kibler et al., 2014), while others force participants to express their preferences and estimate the likelihood of tracing an entrepreneurial career as differing from organizational work (Kirkwood, 2009).

Despite the heightening studies whether or how entrepreneurial intention is determined, the focus on teacher perspectives is under looked by researchers. Inevitable studies in Indonesia have concerned on the factors gender, culture, learning circumstances (Ana, 2016; Henry & Lewis, 2018), family circumstances, emotional factor (Firmansyah & Hermawan, 2016), and self-efficacy (Murugesan & Jayavelu, 2017). This study raises two significant contributions. First, it promotes an insight into the current reports on entrepreneurship education and entrepreneurial intention by engaging teacher creativity, which is over examined in preliminary research. Second, this study provides novel insights into the ongoing discussion on the crucial factors that affect entrepreneurial intention in Indonesia, contributing to the academic discourse in this field and its implication on the policymakers in the educational sides.

METHODS

Research Design and Hypothesis

This study employs a quantitative approach to explore the correlation between variables. Specifically, the research examines the impact of teachers' creativity as the independent variable on students' entrepreneurial intention as the dependent variable, while also considering the intervening variable of entrepreneurship education. Figure 1 explains the theoretical model of this research that has been developed from relevant literature and preliminary studies.



Figure 1. Theoretical Framework

- H1: Teachers' creativity affects entrepreneurial education.
- H2: Teachers' creativity influences entrepreneurial intention.
- H3: Entrepreneurial education promotes entrepreneurial intention.
- H4: Entrepreneurial education mediates teacher's creativity and entrepreneurial intention

Sample and Data Collection

The population in this research were students of state vocational education school (SMK) in East Jakarta of Indonesia who had enrolled in the entrepreneurship courses and were engaged in entrepreneurial engagements. The determination of samples in this study used convenience sampling technique that are commonly adopted in entrepreneurial theme. The sample in this study was students of SMK in East Jakarta in grade 11 and 12 as many as 400 students. However, we found 390 completed questionnaires for analysis (97.5% response rates). The data were collected using a survey in which the distribution of questionnaires through links directed to the students. The respondents in this paper were provided their anonymity and the ethical clearance were performed by Universitas Negeri Jakarta.

Measurement and Analyzing of Data

The type of question used in the questionnaire is closed with five choices of Likert scale. To measure the teacher creativity variable, we modified the seven items from Ayob and Hussain (2013); Dobbins (2009). Furthermore, to predict the students' entrepreneurial education, we elaborated six constructs from Denanyoh et al. (2015); Opoku-Antwi et al. (2012). As for measuring entrepreneurial intention, we have adapted seven indicators with the Indonesian context from Linan and Chen (2009). The Partial Least Squares Structural Equation Modelling (PLS-SEM) method was applied through SmartPLS software (3.0 version) to determine the model and estimate the relationship between variables.

RESULTS AND DISCUSSION

The outer model evaluation is directed to calculate the model's validity and reliability. This study follows Hair et al. (2013) in estimating the outer model, which consists of convergent, discriminant validity, composite, and construct reliability are carried out. Convergent validity implies that the manifest variable of a construct should be a robust correlated. A construct meets convergent validity if the loading factor value is> 0.70 (Chin, 2010; Hair et al., 2013). Table 2 gives information that AVE value of the teachers' creativity variable is 0.671 > 0.50, thus completing the discriminant validity (Chin, 2010; Hair et al., 2013).

In addition, the CR and Cronbach Alpha (α) values for teachers' creativity variables are 0.942 and 0.930 > 0.70, respectively, to reach composite reliability. The results of the convergent validity test for the entrepreneurial education and entrepreneurial intention variables (Table 2) show that all indicators have a factor loading score above 0.70 or> 0.70. Thus, referring to Chin (2010); Hair et al. (2013), all indicators of the entrepreneurial education and entrepreneurial intention variables meet convergent validity. However, the EI3 indicator (0.64) must be dropped on the entrepreneurial intention variable because it has a factor loading value below 0.70 or < 0.70. We next performed discriminant validity tests, follows criteria of Hair et al. (2013) by observing the cross-loading value for the variables must be > 0.70. In a different manner, the discriminant validity test can be conducted by calculating the AVE and other construct value.

Construct	Loading	CR	α	AVE
Teachers' Creativity				
TC1	0.781			
TC2	0.860			
TC3	0.854			
TC4	0.835	0.942	0.930	0.671
TC5	0.787			
TC6	0.773			
TC7	0.825			
TC8	0.833			
Entrepreneurship Ed	ucation			
EE1	0.818			
EE2	0.873			
EE3	0.855	0.928	0.907	0.684
EE4	0.859			
EE5	0.745			
EE6	0.807			
Entrepreneurial Inte	ntion			
EI1	0.863			
EI2	0.862	0.936	0.915	0745
EI4	0.860			0.743
EI5	0.868			
EI7	0.863			

Table 2 The Outer Model Calculati

Referring Table 3, the cross-loading value of the variables, including teachers' creativity, entrepreneurial education, and entrepreneurial intention is more significant than 0.70. Thus, referring to Chin (2010); Hair et al. (2013), teachers' creativity, entrepreneurial education, and students' creativity fulfill convergent validity. The complete discriminant validity test results can be seen in Table 3.

Table	3.	Discriminant	V	'alidity
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	ТС	EE	EI
Teachers' Creativity (TC)	0.819		
Entrepreneurial Education (EE)	0.705	0.827	
Entrepreneurial Intention (EI)	0.746	0.847	0.863

The further stage is to calculate the inner model, also known as the structural model evaluation. The results of the collinearity test indicated that all variables had a VIF coefficient value ranging from 1.821 to 3.362, which is below the threshold of 5.00, thereby indicating the absence of collinearity. Moreover, the R² value of the entrepreneurial education variable was 0.497, indicating a moderate effect, while that of the entrepreneurial intention was 0.722, indicating a robust effect. The f² test revealed that the teachers' creativity in entrepreneurial education had a large effect size of 0.990. Furthermore, the value of f² for teachers' creativity and teachers' creativity in entrepreneurial education was 1.092, which suggested a large effect size. Notably, the Q² value of each variable was greater than 0, indicating the model's

predictive relevance value. Therefore, these findings suggest that the model is valid and reliable for evaluating the relationships between the studied variables.

To estimate structural models, path analysis was conducted, and the stability of the Partial Least Squares Structural Equation Modeling (PLS-SEM) calculation was assessed through bootstrapping. The results of the bootstrapping, which were based on 500 samples, demonstrate the robustness of the PLS-SEM calculation. Table 4 reports that the path coefficient (p-value) of the correlations among variables ranged from 0.000 to 0.007, which is less than the significance level of 0.05. The final structural model's outcome is presented in Figure 2.

Table 4.1 ath coefficients and hypothesis resting						
Hypothesis	Path	T-value	P-value	Decision		
H_1	TC \rightarrow EE	31.814	0.000	Confirmed		
H_2	TC \rightarrow EI	2.323	0.021	Confirmed		
H_3	$EE \rightarrow EI$	17.826	0.000	Confirmed		
H_4	TC EE EI	15.551	0.000	Confirmed		

Table 4. Path Coefficients and Hypothesis Testing



Note. TC=teacher creativity, EE=entrepreneurship education, EI=entrepreneurial intention

Figure 2. Final Model Estimation

Discussion

The first hypothesis (H1) of this research aims to understand the effect of teachers' creativity and entrepreneurial education. The statistical finding showed that teachers' creativity has a significant influence of entrepreneurial education and this finding is relevant to several antecedent studies, for instance, those performed by Wibowo et al. (2018); Hamidi et al. (2008); Pishghadam et al. (2012) that confirms

this relationship. The rationale behind this result is that teacher is the central and take an important role in the classroom. Therefore, the performance of teacher will provide a greater entrepreneurship education. The involvement of various learning model and adoption of technology has led to a more interesting entrepreneurship education.

In addition, this work also confirm that teacher creativity has a robust influence on entrepreneurial intention among vocational school students. The main rationale is that teacher creativity enables students to more active in the classroom during teaching and learning. In this way, teacher's creativity in entrepreneurship course will assist students to have knowledge and ideas on entrepreneurship that further stimulates to initiate a business or raise their intention for business. The findings of this research reinforce the work of the study of Wibowo et al. (2018) which found that teacher creativity affects students' entrepreneurial intentions. The output of this work also supports the previous study conducted by Zampetakis (2008) that teacher creativity affects students' entrepreneurial intentions. Creative teachers apply learning methods, techniques, and materials that develop students' creativity which contributes to students' entrepreneurial intentions.

The next hypothesis (H3) of this research is that entrepreneurship education has a significant effect on entrepreneurial intention. The outcome is relevant to a number of antecedent research conducted by Kim and Park (2019); Alshebami et al. (2020) states that entrepreneurship education drives the entrepreneurial intentions of students. The findings of this research are reasonable as the objective of teaching entrepreneurship is to shape the mentality, disposition, and conduct of students to become entrepreneurs, so that later they will make entrepreneurship the main choice as a career after completing education. Moreover, entrepreneurship education with several practices will allow students to enhance both knowledge and entrepreneurial skills. Such entrepreneurial education models not only arouse students' attention in learning entrepreneurship but also promotes their entrepreneurial activity in the future.

Lastly, this statistical estimation showed that entrepreneurial education plays a significant mediating role in the relationship between teachers' creativity and students' entrepreneurial intention. These results are in line with previous research conducted by Wibowo et al. (2018), Zampetakis (2008), and Zampetakis et al. (2011), which suggest that entrepreneurship education has a direct or indirect impact on the development of entrepreneurial intentions. Creative teachers will implement an interactive method that promotes students' creative thinking skills. Addition, it provides students assignments which allow them to use various ways and resources to overcome the given problems. The application of the teacher's creativity will of course inspire, empower students, whose results will greatly influence their future entrepreneurial intentions. This output reinforces the work of Wu and Wu (2008) that entrepreneurial education has a direct and mediating effect on previous predictors of entrepreneurial intention. The outputs of this research also confirm that the better entrepreneurial intention. The outputs students with entrepreneurial skills, the more likely they are to become entrepreneurs.

CONCLUSION

This study aims to examine teachers' creativity and entrepreneurial intention among Indonesian vocational school students, as well as the role of entrepreneurship education. The output of this study confirmed four hypotheses proposed in which teachers' creativity can have a robust influence on entrepreneurship education and the entrepreneurial intention of vocational schools' students. In addition, this papers also remarked the role of entrepreneurial education in mediating the link between teachers' creativity and students' entrepreneurial intention in Indonesia.

Furthermore, based on data description, hypothesis testing, analysis, discussion, and conclusions, teachers need to increase their creativity in classroom learning, inspire, and promote students to have high entrepreneurial intentions. Entrepreneurship education should involve psychomotor aspects to reach a greater result. From this finding, the entrepreneurship education curriculum must be modified to meet the changes. Educational organization needs to make an adjustment with the real business world to allow students have practices experience. With this direct practice, students will obtain what they need after graduating. The limitation of this study is solely elaborated with state vocational education that make the results can be generalized. In addition, future studies can consider other determinant variables of entrepreneurial intentions, for instance, entrepreneurial readiness, ecosystem, and business orientation.

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