



## ENTREPRENEURIAL INTENTION DEVELOPMENT MODEL ON STUDENTS

**Indra Kurniawan**

STIE PGRI Dewantara Jombang

Correspondence: [indra.k@stiedewantara.ac.id](mailto:indra.k@stiedewantara.ac.id)

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### **Abstract**

*This research aims to determine the effectiveness of entrepreneurship education on students' entrepreneurial intention by placing motivation as a mediating variable. The research used a survey to obtain 308 Indonesian students who had taken entrepreneurship courses. Data analysis uses structural equation model partial least squares (SEM-PLS). The research results state that the effectiveness of entrepreneurship education has a direct effect on motivation. Motivation has an immediate effect on entrepreneurial intentions, while the effectiveness of entrepreneurship education has no direct impact on entrepreneurial intentions, and motivation is a mediating variable.*

*Based on the research results, it implies that a stimulus is needed in the role of lecturers to increase motivation, which can encourage students to be interested in opening a business such as best practice.*

**Keywords:** *Entrepreneurship Education effectiveness, Motivation, Entrepreneurship Intention, students*

### **A. INTRODUCTION**

Over the past two decades, entrepreneurship has been introduced into education in Indonesia on a massive scale, and some higher education institutions' curriculum development has included entrepreneurship as a subject. The goal to be achieved from entrepreneurship learning is as an alternative route for students to become entrepreneurs. Considering that, at that time, competition in looking for work was tough, the availability of job opportunities was also minimal, and the skills possessed by job seekers were still not yet high. This causes many people, both those with high education and those with low education, to be unemployed.

Referring to the results of the National Labor Force Survey 2023, there will be 147.71 million, an increase of 3.99 million people compared to the previous year. Meanwhile, the open unemployment rate was 5.32 percent or decreased by 0.54 percent compared to last year (BPS, 2023). In addition, data that can be used to strengthen why entrepreneurship education is essential to apply at all levels of education is data about the amount of workers' wages. According to data (BPS, 2023), the national labor wage is 3.18 million, or an increase of 3.50 percent from the previous year, namely 3.07 million. Meanwhile, data shows that workers with a university education salaries are 4.78 million, while the wages of workers with primary school education are 2.03 million rupiah.

The data above can be used to construct an educational curriculum that includes entrepreneurship as a subject or course. Entrepreneurship provides provisions for students so that before graduating, they already have a business or at least a side business (passive income) while continuing to pursue their primary job.

Two understandings need to be known in implementing entrepreneurship in the course structure: entrepreneurship and intrapreneurship. Many people in the public do not yet know the true meaning of entrepreneurship, and many students do not even understand similar questions. The public and students at that time interpreted that entrepreneurship was the same as self-employment, although this answer was not wrong but also not entirely correct. This article does not theoretically examine the differences between entrepreneurship and intrapreneurship. Instead, it emphasizes the issue of students' willingness or interest in entrepreneurship after they have gained knowledge about entrepreneurship.

Building interest requires maximum effort because interest arises due to a shaping stimulus. Many factors influence students' interest in starting a business, depending on how these factors match what the student hopes for. Even though many efforts have been made in entrepreneurship education, students have not yet maximally realized new businesses.

## **B. LITERATURE REVIEW**

### **1. Entrepreneurship Education**

There is quite a lot of literature discussing entrepreneurship education, some of which focuses on entrepreneurial effectiveness (He et al., 2024; Adeel et al., 2023) and some of which focuses on entrepreneurship programs (bagis, 2022; Vesper & Gartner, 1997). paying close attention to pedagogical aspects (San-martín et al., 2022) (Gabrielsson et al., 2020), all depending on the research objectives to be solved.

Previous researchers provide conceptual differences between entrepreneurship education and the effectiveness of entrepreneurship education. Entrepreneurship education is explained by the scope of the study in a series of courses in the entrepreneurship program (Liu et al., 2020) for students to improve their competence. One form of education that aims to transform the public is entrepreneurship education, which must have an impact on students, and this positive impact of entrepreneurship is called the effectiveness of entrepreneurship education (Liu et al., 2020). There are many perspectives in measuring the effectiveness of entrepreneurship education, including entrepreneurial competence, entrepreneurial barriers, and entrepreneurial intention (Liu et al., 2020) (Kriz & Auchter, 2016; Fayolle et al., 2014; Giacomini et al., 2011).

Entrepreneurship education is defined as behavior, development of attitudes, and valuable abilities in an entrepreneurial career (Paola et al., 2023). During this decade, entrepreneurship has become an essential subject in the economic and social fields and the focus of research worldwide (Farrokhnia et al., 2022) (Ratten & Jones, 2021). As seen from the results, several schools with various entrepreneurship programs have been able to encourage intention to entrepreneurship (Wibowo et al., 2023; Ratten & Jones, 2021).

The current orientation of entrepreneurship education has developed towards practice through curriculum construction by integrating approach patterns, namely didactic and experiential approaches (Gabrielsson et al., 2020). Even though the practical approach is to hone students' practical skills in entrepreneurship, instilling an entrepreneurial spirit in students is no less critical. This is important as a provision for students to acquire life skills to face future business challenges. The main goal achieved in entrepreneurship education is the student's ability and willingness to open a new business as a way of life.

There is an approach that is relevant to current conditions to increase variation in entrepreneurship education, namely through a digital technology approach (Malik et al., 2023; Wibowo et al., 2023), which is none other than providing interest in doing business for the millennial generation. To have precise measurements for achieving entrepreneurship education goals, educational institutions (schools or universities) determine indicators following the policy direction of the entrepreneurship program. So it is clear that the measure of whether the program is appropriate or not, if not, evaluations of the entrepreneurship program need to be carried out. In this way, the entrepreneurship education that is carried out can foster students' interest in entrepreneurship. So, in this research, the following hypothesis can be developed,

*H1: The effectiveness of entrepreneurship education significantly affects entrepreneurship intention.*

## **2. Motivation**

Every individual has needs and desires to be better and develop in the future. Naturally, this is a drive within a person (intrinsic) as a human being to achieve his life's goal. Depending on how strong this motivation can be realized through the efforts and struggles made, the stronger the goal must be completed, the stronger the motivation will be recognized.

Motivation can be formed due to external factors within a person, which can be called extrinsic, where motivation arises from outside encouragement. External encouragement includes situations beyond one's control that can encourage someone to do something, for example, the work environment, social environment, and a person, which can trigger motivation.

Psychologically, motivation is the reason a person starts a business. The lower a person's motivation for entrepreneurship, the lower the interest in starting a business, and vice versa. If a person's motivation for entrepreneurship is high, the stronger the person's interest in starting a business (Martínez-Cañas et al., 2023; Fayolle & Liñán, 2014). A unique view of entrepreneurial motivation from various existing literature is that there is "pull" motivation and "push" motivation (Martínez-Cañas et al., 2023). Pull motivation can be interpreted as independence (autonomy) in income, wealth, challenge, status, and recognition (Barba-Sánchez et al., 2022). Meanwhile, push motivation is defined as a need, a concept intended to explain the "push" motive as poverty, lack of choice in work, and survival (Dawson & Henley, 2012).

Push factors are individual or external factors, including being ignored in promotions (within the organization), unemployment, and dissatisfaction with one's current professional situation, and this condition is often interpreted as an unfavorable (negative) connotation (Kirkwood, 2008). This negative encouragement can also be understood as a lack of career opportunities within the organization, thus encouraging a person to reduce tension by starting an independent business (Carsrud & Brannback, 2011).

The important thing that needs to be paid attention to in the measurement aspect of motivation is to understand the type of motivation that is captured, where there is the motivation that is driven because it focuses on efforts to achieve the expected results (Touré-Tillery & Fishbach, 2014). One focuses on how the elements achieve these results (Touré-Tillery & Fishbach, 2014). Several previous researchers explained that motivation measurement is divided into three perspectives, including cognitive, affective, and behavioral (Touré-Tillery & Fishbach, 2014). More deeply from the

results of the research conducted, it is essential to highlight the importance of including several measures to capture the manifestation of various dimensions of motivation, for example, distinguishing result-oriented motivation to complete a task and means-oriented motivation to comply with standards when completing a task, by measuring how quickly task completion response (speed) and how well you meet the task (accuracy, performance) (Touré-Tillery & Fishbach, 2014). So, in this research, the following hypothesis can be developed:

*H2: The effectiveness of entrepreneurship education has a significant effect on motivation.*

*H3: Motivation has a significant effect on entrepreneurship intention*

### **3. Entrepreneurship Intention**

Many factors influence students to become entrepreneurs, including friends, education, social media (Wibowo et al., 2023; Ratten & Jones, 2021), and many others. Entrepreneurship education may also form entrepreneurial intentions if the student meets what is expected (for example, the lecturer delivering the material is very easy to accept, real examples, and there are best practices) so that students are not only treated to success stories.

The development of digital technology, which is currently widely adopted in business (digital business), may also influence students to start new businesses. The current millennial generation may be very compatible with sophisticated technology. Many research results have shown that digital business can affect interest in entrepreneurship (Wibowo et al., 2023; Abdullah et al., 2023) (Ben et al., 2020).

The environment in which a person interacts can also influence starting a business (Barba-Sánchez et al., 2022). This can be due to the frequency of interactions that often discuss business matters, giving rise to a strong desire to start a business. Interest in entrepreneurship is not necessarily directly influenced by the environment, education, media, or whatever, but it is necessary to look at other roles that can influence it indirectly. So that the following research hypothesis can be developed:

*H4: Motivation mediates the effect of the effectiveness of entrepreneurship education on entrepreneurship intention.*

### **C. RESEARCH METHOD**

The research design uses a cross-sectional survey approach to examine the influence between variables: the effectiveness of entrepreneurship education, motivation, and entrepreneurship intention among students who have taken entrepreneurship courses in Indonesia. Therefore, feedback is needed from students on how effective, how strong their motivation is, and how much interest they have in opening a new business. This research also attempts to place the role of motivation as a mediating variable in influencing entrepreneurship intention.

This research uses a convenience sampling procedure via an online form distributed to students who have taken the entrepreneurship courses in which they study.

The variable for the effectiveness of entrepreneurship education is adapted from the concept carried out by Liu et al., (2020), using three measurements: 1) competence, 2) barrier, and 3) intention. Meanwhile, to measure motivation in this research, the writer use the concept of Touré-tillery Fishbach, (2014): 1) cognitive, 2) affective, and 3) behavioral motivation.

The entrepreneurial intention variable is measured through: 1) structural, educational, and 2) relational support, which this concept is adapted from Ben et al., (2020).

Structural equation modeling (SEM-PLS) is used for analysis in this research, considering that this research aims to explore and explain students' interest in entrepreneurship. SEM-PLS is suitable for this research because it can predict all relationships simultaneously and is widely used in business and entrepreneurship (Nowiński et al., 2020). Three hundred eight (308) respondents filled out the 315 questionnaires wholly distributed, with criteria determined at the beginning to screen respondent data, as shown in Table 1.

**Table 1.** Profilling

Descriptive	% (n = 308)	
<b>Gender</b>		
Male	126	40,9
Female	182	59,1
<b>Age</b>		
19 - 20	35	11,4
21 - 22	211	68,5
23 - 24	62	20,1

Source: Primary data (2023)

## D. RESULTS AND DISCUSSION

### 1. Measurement

Measurement assigns numbers to a variable based on rules Joseph F. Hair et al., (2014). This research extracts measurements from several well-established studies by adapting concepts developed by previous researchers. Respondents gave their answers on a scale of 1-5. The measurement of entrepreneurship education was adapted from research Liu et al., (2020), taking the central concept with three items. Likewise, with measuring motivation, this research uses three items from the main concept carried out by Touré-Tillery & Fishbach, (2014). Meanwhile, to measure interest in entrepreneurship, this research adapts research from Ben et al., (2020) through three measurement items of interest in entrepreneurship.

### 2. Outer Model Evaluation

Following the procedure required in PLS-SEM, the indicator loading (loading factor) is above 0.708, indicating that the construct explains more than 50 percent of the indicator variance (Hair et al., 2019). This research shows that all indicators have a loading  $> 0.70$ , as shown in Table 2. The next step is to test the reliability of the construct by looking at Cronbach's Alpha value to measure internal consistency, where values between 0.60 and 0.70 are acceptable in exploratory research. At the same time, results between 0.70 and 0.95 can be said to have a high reliability value (Hair et al., 2019).

The next test is construct validity by looking at the average variance extracted (AVE) value with an acceptable value of 0.50 and above. Meanwhile, the discriminant validity value is to see the measurement of reflective indicators with the latent variable

scores. As shown in Table 2, the variable block value is greater than the other variable values. The formative construct testing also checked the variance inflation factor (VIF) value. The higher the VIF value, the greater the collinearity. In this study, the VIF value was low, as shown in Table 3.

**Table 2. Measurement Model**

Item	$\lambda$	Cronbach's Alpha	Rho_A	CR	AVE
EED		0.749	0.757	0.856	0.664
eed1	0.810				
eed2	0.835				
eed3	0.800				
MTV		0.695	0.731	0.827	0.616
mtv1	0.777				
mtv2	0.849				
mtv3	0.722				
IE		0.866	0.869	0.918	0.790
ie1	0.850				
ie2	0.920				
ie3	0.895				

Note: EED = Effectiveness of Entrepreneurship Education, MTV = Motivation, IE = Entrepreneurship Intention

Source: Primary data (2023)

**Table 3. Discriminant Validity**

	EED	IE	MTV
EED	0,815		
IE	0,170	0,889	
MTV	0,439	0,529	0,785

Note: EED = Effectiveness of Entrepreneurship Education, MTV = Motivation, IE = Entrepreneurship Intention

Source: Primary data (2023)

**Table 4. Variance Inflation Factor**

	VIF
M1	1,337
M2	1,372
M3	1,347
X1.1	1,595
X1.2	1,475
X1.3	1,456
Y.1	1,923
Y.2	2,911
Y.3	2,494

Note: X = independent variable (effectiveness of entrepreneurship education = mediating variable (Motivation), Y = dependent variable (entrepreneurship intention)

Source: Primary data (2023)

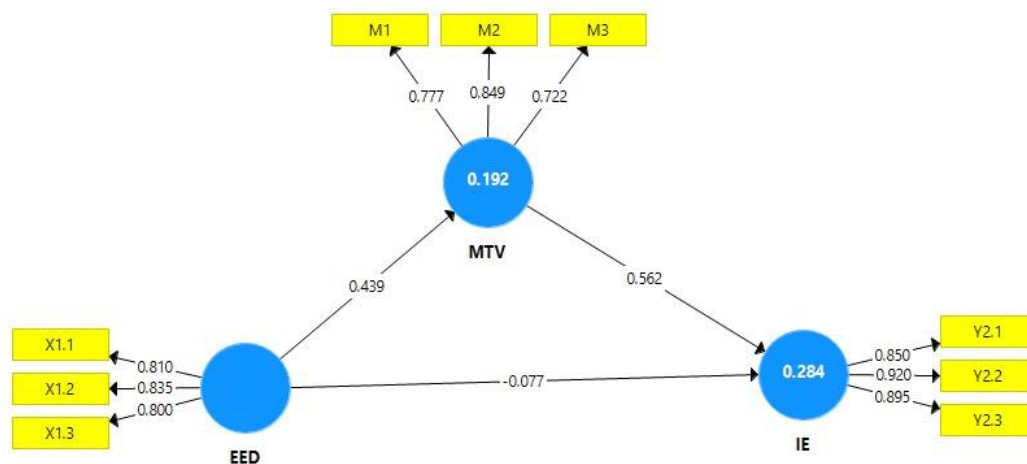


Figure 1. Outer Model Results

### 3. Inner Model Evaluation (Structural Model)

After testing the outer model, the next step is to carry out structural testing according to the guidelines in SEM-PLS analysis, including the collinearity test value, coefficient of determination ( $R^2$ ), effect size ( $f^2$ ), predictive relevance ( $Q^2$ ), and path coefficient value (Hair et al., 2019).

The results show that the predictor construct for collinearity in the structural model is seen at a low VIF value so that this research can be safe for the first step of testing. The next step is testing the coefficient of determination ( $R^2$ ), where the  $R^2$  value ranges from 0 to 1, with 0 indicating no relationship and 1 indicating a perfect relationship. The higher the  $R^2$  value, the greater the explanatory power of the PLS structural model and, therefore, the better the prediction of the endogenous construct. As a guideline,  $R^2$  values of 0.75, 0.50, and 0.25 can be considered substantial, moderate, and weak, respectively (Hair et al., 2019). This research shows that the coefficient of determination value is soft, so the independent variable's ability to explain variations in the dependent variable is minimal.

Next is the effect size test to determine the magnitude of the influence of the variable after being given treatment. Cohen (1980) provides limits for the effect size value, namely 0.02 (small), 0.15 (medium), and 0.35 (large), while values less than 0.02 have no effect (Hair et al. al., 2019). As shown in Table 5, the results show that the effect size value of EED to IE has no effect. Meanwhile, the value of EED to MTV tends to be significant, and the value of MTV to IE is considerable. The next test is predictive relevance testing ( $Q^2$ ), or to find out the predicted value in the model. In evaluations using cross-validated redundancy methods for blindfolding as a general guideline,  $Q^2$  values greater than zero for certain endogenous constructs indicate that the accuracy of pathway model predictions is acceptable (Hair et al., 2019). As shown in Table 6, the model is accurate in predicting and fine.

The final test is the path coefficient value (path coefficient) to see the influence of exogenous variables on endogenous variables by looking at the specified significance level. The research results, as shown in Table 7, can be explained that EED is not proven to affect IE, and EED has an effect on MTV. Likewise, MTV affects IE. So, it can be said that entrepreneurship education does not directly impact entrepreneurship intention. Meanwhile, entrepreneurship education has a direct effect on motivation, and motivation has a direct impact on entrepreneurship intention.

**Table 5. Effect Size Values**

	<b>EED</b>	<b>IE</b>	<b>MTV</b>
EED		0,007	0,238
IE			
MTV		0,357	

Note: EED = Effectiveness of Entrepreneurship Education, MTV = Motivation, IE = Entrepreneurship Intention

Source: Primary data (2023)

**Table 6. Predictive Relevance Values**

	<b>SSO</b>	<b>SSE</b>	<b>Q<sup>2</sup> (=1-SSE/SSO)</b>
<b>EED</b>	924,000	924,000	
<b>IE</b>	924,000	720,039	0,221
MTV	924,000	822,639	0,110

Note: EED = Effectiveness of Entrepreneurship Education, MTV = Motivation, IE = Entrepreneurship Intention

Source: Primary data (2023)

**Table 7. Path Coefficient**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Decision
EED -> IE	-0,077	-0,072	0,066	1,171	0,242	Not Accepted
EED -> MTV	0,439	0,442	0,054	8,160	0,000	Accepted
MTV -> IE	0,562	0,562	0,054	10,332	0,000	Accepted

Note: EED = Effectiveness of Entrepreneurship Education, MTV = Motivation, IE = Entrepreneurship Intention

Source: Primary data (2023)

**Table 8. Specific Indirect Effect**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
<b>EED -&gt; MTV -&gt; IE</b>	0,247	0,249	0,039	6,381	0,000

Note: EED = Effectiveness of Entrepreneurship Education, MTV = Motivation, IE = Entrepreneurship Intention

Source: Primary data (2023)

Proof of whether motivation functions as a mediating variable in this research can be seen in Table 8 above. The p-values show  $<0.05$ , so it can be said that motivation acts as a mediator in the influence of the effectiveness of entrepreneurship education on entrepreneurship intention. There is a statement that to find out whether a variable functions as a mediator, first, the independent variable is proven to have a significant effect on the mediating variable (path a) in the first regression equation; secondly, the mediating variable is proven to have a substantial effect on the dependent variable (path b) in the second regression equation, and the third is that the independent variable has no significant effect on the dependent variable (path c) or has a value of zero (Baron & Kenny, 1986).



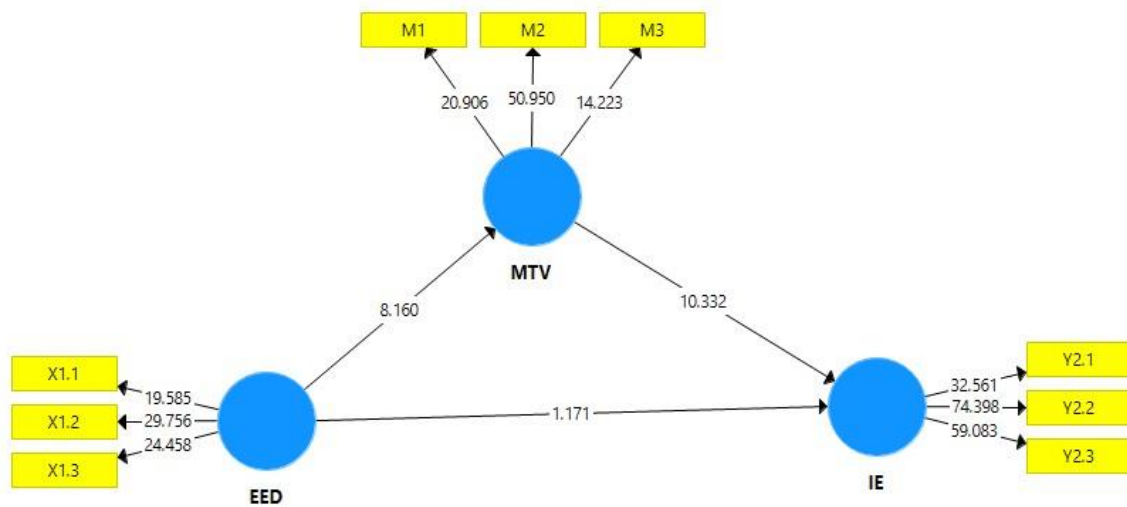


Figure 2. Bootstrapping results

## E. CONCLUSION

Overall, the results of hypothesis testing can be stated that, first, the effectiveness of entrepreneurship education has a significant effect on motivation. Second, motivation has a significant effect on entrepreneurial intentions. Third, the effectiveness of entrepreneurship education has no significant effect on entrepreneurial intentions, and fourth, and motivation functions as a mediating variable for the influence of effectiveness.

The results of this research can explain that it turns out that the effectiveness of entrepreneurship education does not necessarily have a direct effect on entrepreneurial intentions, meaning that it is not just the transfer of knowledge that students need but the existence of best practices from lecturers and entrepreneurship clinics from lecturers to convince students to be interested in entrepreneurship. The research also found that motivation functions as a mediating variable in the influence of the effectiveness of entrepreneurship education on entrepreneurial intentions, so the role of lecturers is needed in providing strong motivation to students through mentoring so that students have strong intentions in entrepreneurship. This includes reinforcing that students must try even though the risk of failure has become commonplace in business, but how can they evaluate and measure failure and existing risks so that it becomes a success in the future.

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