

# Role of Attitude as a Mediator in the Relationship between Entrepreneurial Education and Intention to Become an Online Entrepreneur among Online Distance Learning Students in Malaysia

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## ABSTRACT

*This study focuses on evaluating the indirect relationship among entrepreneurial education, attitude and intention to become an online entrepreneur among students in Online Distance Learning higher institutions in Malaysia. To assess the indirect effect of attitude on the relationship between entrepreneurial education and intention, the Structural Equation Model technique was employed. The model was designed and later analysed using the Partial Least Square procedure on data collected from a survey that yielded 317 usable questionnaires. The results demonstrated that attitude has a mediating effect on the relationship between entrepreneurial education and intention to become an online entrepreneur among students in Malaysian Online Distance Learning higher institutions. The findings suggest that Online Distance Learning institutions should give a greater emphasis on strengthening entrepreneurial education and attitude to ensure their Online Distance Learning students have strong intention to become online entrepreneurs.*

**Keywords:** *entrepreneurial education, attitude, intention, online distance learning, online entrepreneur*

## Introduction

The role of entrepreneurship has become very vital in ensuring the advancement of economy and job creation, as well as in minimising the unemployment rate among the university graduates and the resulting social problems (Ambad & Damit, 2016). Long-term

economic growth also relies on entrepreneurship as the country's growth engine (Romer, 1994). Among the contributions of entrepreneurship are creation of jobs and innovation. Hence, source job creation is a result from venture creation in developed countries such as United States (Harris, 2013) and developing countries like Malaysia (Sandhu, Fahmi, & Riaz, 2011; Urbano & Aparicio., 2015). Therefore, entrepreneurship plays a crucial role in the dynamic global socioeconomic setting (Ali, Topping, & Tariq, 2010). In view of that, Malaysian students are encouraged to participate in entrepreneurship activities and to choose entrepreneurship as their main career. However, there are small numbers of students who are brave enough to venture into their own business after completing their studies, especially among those from open distance learning institutions. Further, the government of Malaysia has taken steps to make entrepreneurship subject compulsory for all students in Malaysian Higher education institutions including Online Distance Learning institutions. In view of that, it is crucial to figure out the determinants of students' intention to participate in entrepreneurship activities as a career choice. The aim of this study is to examine the mediating effect of attitude on the relationship between entrepreneurial education and intention to become an entrepreneur among students in online distance learning institutions in Malaysia.

## Literature Review

There has been a considerable focus on entrepreneurship in the last two decades (Davidsson, 2008). Entrepreneurs have made significant contributions such as creating new jobs, innovating new products and processes and many more. Many academicians equate entrepreneurs to the economic growth engine (Baron & Shane, 2008; Zvavahera, Chigora, & Tandji, 2018; Allam, Muneer, & Adel, 2020). Ajzen (1991, p. 181) defined intention as a sign of the willingness of an individual to attempt a particular behaviour and the amount of effort he or she intends to make in order to enact the behaviour. It is very challenging to examine intention due to the difficulty in measuring actual behaviour in a research study (Wu, 2010). Ajzen (1991) has suggested that behaviour is directly predicted by intention. In addition, Krueger, Reilly, and Carsrud (2000) describe entrepreneurial behaviour as planned and intended behaviour. Therefore, entrepreneurial intention is very important to be studied due to the relevancy of the entrepreneurship in business. (Krueger & Carsrud, 1993).

The idea of attitude is essential to comprehend how an individual's attitude predisposition is greatly affected by experience (Petty, Wegener, & Fabrigar, 1997). Attitude is depicted as a positive or negative outcome from the evaluation of continuous arrangement of something that we intend to do (Krueger et al., 2000). According to Hoyer and MacInnis (2004), attitude signifies how an individual evaluates and compares certain objects with other options based on his thoughts, beliefs and emotions with regard to the object. According to Maes, Leroy, and Sels (2014), individual attitudes and perceived behaviour do not directly related with social norms in determining the individual intentions to be involved in entrepreneurship. Sudipa and Damodharan (2012) proposed that attitude and entrepreneurial intention permit the new ventures creation and at the same time add value to the current ventures in different ways. Mohd. Salleh et al. (2005) and Sudipa and Damodharan (2012) suggest that attitude is one of the crucial elements in ensuring the individuals' success in entrepreneurship. This is consistent with what has been suggested by some researchers, who state that an individual's decision process about whether to become an entrepreneur or not is related to his or her attitude towards entrepreneurship (Jones et al. 2011; Nandram & Samson, 2006).

When conducting a study on 327 college students in China, Liu, Lin, Zhao, and Zhao (2019) found that entrepreneurial education has a positive and significant influence on entrepreneurial intention. Otuya, Kibas, Gichira, and Wafula (2012) did a survey on the influence of entrepreneurship education on entrepreneurial intention by using university

students as samples in Kenya, and found that entrepreneurship education positively and significantly influences entrepreneurial intentions. Gibcus, de Kok, Snijders, Smit, and Linden (2012) studied the effect of entrepreneurship education on attitude and entrepreneurial intention of European students, revealing that entrepreneurship education positively and significantly influences attitudes and subsequently influencing entrepreneurial intention. In addition, Souitaris and Laham (2007) mentioned that entrepreneurial education is the crucial determinant for entrepreneurial attitude and intention to become an entrepreneur. According to Sredojevic (2005), entrepreneurship education is deemed to be an economic growth starter. Also, Shane (2003) describes entrepreneurial education as a process comprising individual attitude, environment, entrepreneurial opportunities, discovery, opportunity exploitation, and execution. Postigo and Tamborini (2007) suggested that there is a strong tendency lately to study the entrepreneurship interest among the students.

Based on the above conceptual development, the following hypotheses are proposed:

- H<sub>1</sub>: There is a positive and significant influence of entrepreneurial education on attitude to become an online entrepreneur among Online Distance Learning (ODL) students in Malaysia.
- H<sub>2</sub>: There is a positive and significant influence of attitude on intention to become an online entrepreneur among ODL students in Malaysia.
- H<sub>3</sub>: There is a positive and significant influence of entrepreneurship education on intention to become an online entrepreneur among ODL students in Malaysia.
- H<sub>4</sub>: There is a positive and significant mediating effect of attitude on entrepreneurship education and intention to become an online entrepreneur among ODL students in Malaysia.

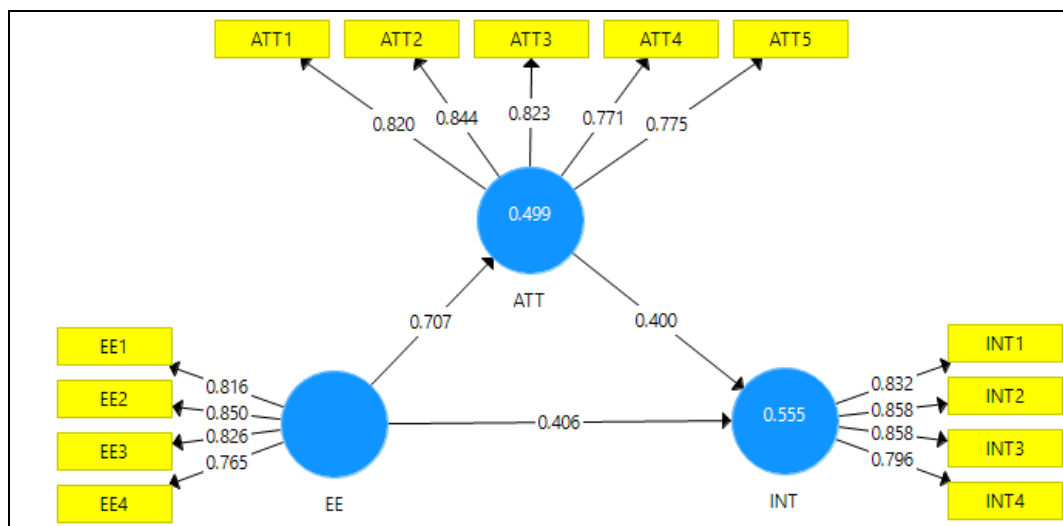


Figure 1. Research Model

### Research Methodology

This research design of this study comprised 13 observed variables, which constitute the measurement of exogenous variables of entrepreneurial education. The mediating variables of attitude comprise five items, and the endogenous variable of intention, 4 items. The scaling utilised in this study is a five-point Likert scale, as follows: 1-strongly disagree, 2-

disagree, 3-neutral, 4-agree and 5-strongly agree. The questionnaire instrument was adapted from previous studies to collect data (Otuya et al. 2012; Liu et al. 2019) and convenience sampling was utilised. Online distance learning students who are studying in diploma, bachelor and postgraduate programmes were the main respondents in the study. Of the 384 questionnaires that were distributed, 331 were returned. This constitutes a response rate of 86.2%, which is sufficient to perform Structural Equation Model (SEM) data analysis. Out of the 331 returned questionnaires, 326 were completed and after removing the outliers, 317 questionnaires were ready for analysis. Smartpls was employed to conduct multivariate data analysis, to run the evaluation of the model and to examine the proposed hypotheses. The Partial Least Square (PLS)-SEM technique was used in the study due to its overall model measurement evaluation capability and the relationship between the latent variables and their measures examination (Hair, Black, Babin, & Anderson, 2010). The study used the PLS-SEM approach via PLS-SEM algorithm to assess the measurement model and subsequently, structural model evaluation was performed via Bootstrapping.

## Findings and Discussion

### Findings

#### 1. Common Method Bias

Common method bias is one of the main concerns when conducting research in the management field. This occurs when variance is attributed to the measurement method rather than to the constructs that the measures are supposed to represent in the study. To examine the bias of the measurement items in this study, Harman's single factor test was employed. After performing factor analysis of principle components, the result of the principal factor was 29.35%, confirming the absence of common method bias since the principal factor did not hold the majority of variance explained. This is in line with Podsakoff and Organ (1986) who suggested that if the variance explained percentage of the principal component does not exceed 50%, there is no issue of common method bias.

#### 2. Measurement model

The measurement model used in this study is to assess the measurement of construct validity and reliability by using PLS-SEM Algorithm (Figure 1). For that purpose, Hair, Hult, Ringle, and Sarstedt (2013) suggest that reliability and validity are the two important elements employed in PLS-SEM analysis to estimate the goodness outer model. Table 1 depicts the composite reliability, which ranged from 0.887 to 0.903 for the first order constructs and therefore achieved the condition of 0.70 and above (Hair, Hult, Ringle, & Sarstedt, 2014). In addition, the average variance extracted (AVE) ranged from 0.652 to 0.699, which are greater than 0.50, therefore confirming the convergent validity is met for all the latent constructs (Hair et al., 2013). In Table 2, the AVE square root results are showed on the diagonal side and construct correlations are off the diagonal side of the table. The results depict that all the AVE square roots are greater than the correlations of each construct and confirmed the discriminant validity is achieved. Discriminant validity in this study was further confirmed by evaluating the Hetrotrait-Monotrait (HTMT) ratio of correlation developed by Henseler, Ringle and Sasstdt (2015). The result of HTMT ratio analysis shown in Table 3 demonstrates that all values achieved the criterion of HTMT, which was less that 0.85 (Kline, 2011) and therefore showed the establishment of discriminant validity. In view of that, this study proved the reliability and validity of the latent variables (Hair et al., 2014).

Table 1  
*Indicators Loading, Average Variance Extracted (AVE) and Internal Consistency*

Indicator	Loading	rho_A	CR	AVE
ATT1	0.820	0.868	0.903	0.652
ATT2	0.844			
ATT3	0.823			
ATT4	0.771			
ATT5	0.775			
EE1	0.816	0.831	0.887	0.664
EE2	0.850			
EE3	0.826			
EE4	0.765			
INT1	0.832	0.858	0.903	0.699
INT2	0.858			
INT3	0.858			
INT4	0.796			

ATT=Attitude EE=Entrepreneurial Education INT=Intention

Table 2  
*AVE Square Root against Correlations*

	ATT	EE	INT
ATT	0.807		
EE	0.707	0.815	
INT	0.687	0.689	0.836

Table 3  
*Hetrotrait-Monotrait (HTMT) Ratio*

	ATT	EE	INT
ATT			
EE	0.834		
INT	0.794	0.815	

### 3. Structural Model

This study assessed the structural model by using path coefficient and the  $R^2$  value (Hair, Sarstedt, Ringle, & Mena, 2012). PLS bootstrapping utilised 500 sub-samples to ascertain the significance of the path coefficients. Table 4 shows the hypotheses test results, path coefficients and t-values. As shown in Table 4, hypothesis 1 predicts a positive relationship between entrepreneurial education and attitude and the result shows that there is a positive and significant influence of entrepreneurial education on attitude ( $\beta = 0.707$ ,  $t = 19.179$ ); as a result, *H1* is supported. The result of hypothesis 2 also reveals a significant and positive relationship between attitude and intention ( $\beta = 0.400$ ,  $t = 6.101$ ), thus supporting *H2*. The results for hypothesis 3 also show that entrepreneurship education has a positive and significant influence on intention ( $\beta = 0.406$ ,  $t = 6.134$ ), therefore, *H3* is supported. In addition, the results for hypothesis 4 show that there is a positive and significant mediating effect of attitude on the relationship between entrepreneurship education and intention (indirect effect= 0.283,  $t = 5.670$ ); therefore *H4* is supported.

Table 4  
*Path Coefficients and Hypotheses Testing*

Path	Beta	T values	P Values	
ATT -> INT	0.400	6.101	0.000	Supported
EE -> ATT	0.707	19.179	0.000	Supported
EE -> INT	0.406	6.134	0.000	Supported
Indirect				
EE ->ATT -> INT	0.283	5.670	0.000	Supported

ATT=Attitude EE=Entrepreneurial Education INT=Intention

## Discussion

### 1. Theoretical Implications

The findings of this study clearly demonstrate that attitude does influence the relationship between entrepreneurial education and intention to become an online entrepreneur among students in Malaysian online distance learning programmes at institutes of higher learning. Interestingly, many students are ready and have a strong inclination to become online entrepreneurs. This may result from their exposure to entrepreneurship during entrepreneurial education. The students' positive attitudes towards entrepreneurship can be concluded based on the large number of students who strongly agreed with the statement that entrepreneurial courses would help students to start businesses. The second most influential item in entrepreneurial education is that students believed they were encouraged to become online entrepreneurs during their study at the university. From the attitude construct, it was found that the majority of the students who strongly agreed with the statement that being an online entrepreneur would entail great satisfaction for the students.

### 2. Managerial Implications

As stated earlier, the analysis showed that attitude has a positive and significant influence on the relationship between entrepreneurial education and intention to become an online entrepreneur among students of open distance learning programmes in Malaysia. The implications of this finding are abundant. Firstly, it means the ODL higher institutions in Malaysia should strengthen their entrepreneurial education and further strengthen students' attitude by focusing more on the entrepreneurship curriculum in entrepreneurial education. This is an important factor that can have a great impact on the students' intention via their attitude. This implication is supported by the study conducted by Souitaris and Laham (2007).

However, strengthening entrepreneurial education alone is not sufficient. The attitudes of the students also must be improved and strengthened. By strengthening students' attitude, the influence of entrepreneurial education on students' intention can have a greater impact. The above analysis clearly shows that there is a positive and significant direct relationship between entrepreneurial education and intention, but after attitude was introduced as a mediator, the relationship was further strengthened. The total indirect effect of entrepreneurial education on attitude and of attitude on intention was  $0.707 \times 0.689 = 0.487$ . Therefore, ODL higher institutions in Malaysia must ensure they can develop a high-quality entrepreneurship curriculum in their entrepreneurial education. Online distance learning institutions must motivate and encourage students to become online entrepreneurs and come up with the strategies to initiate online entrepreneurial activities. This will attract their students' interest to learn more about online entrepreneurship and form the right attitude based on the entrepreneurial education they receive towards developing their intention to become online entrepreneurs. The ability to create an online business is one way for the

students to begin to generate an income in the current job market. By acquiring entrepreneurial activities and developing an entrepreneurial mind, graduates will be able to explore new business ideas and look beyond the domestic market for the opportunities in this borderless world.

### 3. Limitations and Future Direction

Among the limitations of this study is the use of convenience sampling in collecting data for analysis. Although there are some advantages in using this technique, such as ease of finding respondents, there are some shortcomings, such as the inability to generalise the findings. Another limitation of this study was the limitation of time to meet the academic requirements of completing this paper. This paper was completed as part of an academic research effort and there was a time limit. Therefore, the data collection was carried out over a minimal period of time to facilitate compilation of data and data analysis. It is suggested that a longitudinal study be done in the future to provide a longer period of time for data collection so that better conclusions and in-depth implications can be drawn out. Future studies should also consider other wider constructs that have an influence on intention to become an online entrepreneur such as self-efficacy and social influence.

## Conclusion

This study focuses on entrepreneurial education, attitude, and intention of students in online distance learning institutions in Malaysia. The results have shown that there is an indirect effect of attitude on entrepreneurial education and intention to become an online entrepreneur, which was statistically found to be positive and significant. Entrepreneurship educators and researchers need to apply approaches to boost entrepreneurial education and attitudes, which will eventually strengthen the intention of ODL students to become online entrepreneurs after completing their studies. This study can inform the government to come up with better policies in developing entrepreneurial strategies, particularly with regard to online entrepreneurship. This study also will allow ODL institutions and educators to formulate a better entrepreneurial education curriculum to make entrepreneurial education more effective.

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