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Identifying factors affecting entrepreneurship education and entrepreneurial intention among Indonesian university students

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ABSTRACT

Objective: The shift from conventional to online learning activities may impact students' performance and entrepreneurial involvement. This research investigates the role of e-learning in determining entrepreneurship education and entrepreneurial self-efficacy, and students' intention on entrepreneurship.

Research Design & Methods: A quantitative method with structural equation modelling using the partial least squared was implemented to understand the phenomenon. The study involved students who enrolled in online entrepreneurship education in several universities in Malang of Indonesia.

Findings: The findings indicate that students' entrepreneurship education and self-efficacy can be performed using e-learning, and it is closely linked with lecturer competence, performance expectancy, and facilitating condition. The results also show a linkage between entrepreneurship education and entrepreneurial intention. This research confirms a crucial role of self-efficacy and entrepreneurship education in mediating teachers' competence and intention for entrepreneurship. This is the first step for further investigation regarding the effect of online learning on college students' entrepreneurial intentions.

Implications & Recommendations: This study implies that lecturers need to improve their competency on how to teach entrepreneurship more meaningful and involve all of students' psychological aspects. Furthermore, in cooperation with the government, the campus can provide adequate facilities and infrastructure to support online learning. Additionally, the government can consider improving the quality of the internet network so that geographical conditions do not constrain it.

Contribution & Value Added: This research provides an appropriate strategy to promote entrepreneurship education with e-learning that can be adopted during the global Covid-19 pandemic. Moreover, in a regular situation, the strategy may still enhance entrepreneurship promotion as it fosters familiarity with the use of educational technology.

Article type:	research article
Keywords:	e-learning; lecturer competence; self-efficacy; students' entrepreneurial intention; entrepreneurship education
JEL codes:	M21, O12

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INTRODUCTION

The coronavirus disease (Covid-19) caused a global pandemic, and the education system has acknowledged this concern by implementing online learning using technological platforms such as e-learning (Almaiah *et al*., 2020; Widyanti & Rajiani, 2021). Since the massive shift from conventional learning activities to online-based learning, it has been challenging to boost the number of entrepreneurs as

the motor of economic welfare. The new business creation has been acknowledged as the driver of promoting new job opportunities, diminishing the unemployment rates, and alleviating poverty (Nakara *et al*., 2021; Neumann, 2021). However, many small and large businesses decided to shut down their activities during the pandemic (Bongaerts *et al*., 2021; Gavrila & Ancillo, 2021).

Considering that issue, there is a need to understand how to teach or link e-learning with entrepreneurship education and entrepreneurial intentions. Some prior studies uphold the belief that the students' intention to follow business career can be enhanced by entrepreneurship education in the schools or colleges (Mei *et* al., 2020; Looi & Maritz, 2021). Through its theoretical and practical activities, entrepreneurship education can stimulate students' mindset and self-efficacy, which in turn can lead to entrepreneurship intentions (Karyaningsih *et al*., 2020; Ratten & Usmanij, 2021). Educators' competence is a significant component in accomplishing learning purposes in entrepreneurship education (Rapanta *et al*., 2020). There are four components to educators' competence: pedagogical, professional, social, and personal. A prior study by Bell (2021) remarks that pedagogical competence is the most significant component in terms of entrepreneurship education success primarily in e-learning.

In addition to lecturers' competence, other variables such as effort expectancy are essential for supporting entrepreneurship education (Surachim *et al*., 2018). Effort expectancy happens when the students can conveniently access e-learning so that interest in online learning increases due to the ease of use (Tarhini *et al*., 2018; Samat *et al*., 2020). With regard to the effort expectancy, facilitating conditions and performance expectancy have been linked with entrepreneurship education success (Kaliisa *et al*., 2019; Ameen *et al*., 2018). Facilitating conditions refer to the degree to which an individual believes that the existing infrastructure, technicalities, and organizations can encourage the use of technology (Bervell & Arkoful, 2020), while performance expectations are illustrated as the stage at which personal believes that incorporating the system will improve their performance (McGill *et al*., 2020). These matters not only affect entrepreneurship education but also drive individual self-efficacy.

This study makes some contributions to the studied matter. First, it presents an insight into the literature on the linkage between e-learning and entrepreneurial intention that is largely lacking in the antecedent studies. The majority of studies attempt to identify psychological factors to then understand an individual's entrepreneurship intention (Karyaningsih *et al*., 2020; Bhatti *et al*., 2021). Additionally, the studies on e-learning are more focused on the correlation between educational achievements and the Covid-19 pandemic (Siron *et al*., 2020; Rafique *et al*., 2021), and their authors overlook the specific studies in the entrepreneurship field that require both theoretical and practical settings. Second, the focus in Indonesia is unique as it experiences an unsettled in the technological adoption for education purposes, including teaching and learning activities (Wardoyo *et al*., 2021). Third, through the empirical estimation, this study provides an appropriate strategy to promote entrepreneurship education with e-learning which can be adopted during the Covid-19 pandemic and to enhance entrepreneurship promotion in a regular situation as it fosters familiarity with the use of educational technology.

The article unfolds in the following manner. Section one will provide literature review on the determinant factors affecting entrepreneurial education, self-efficacy, and entrepreneurial intention. Section two will describe the results, followed by a discussion in Section three. Section four will conclude.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Lecturer's Competence, Self-efficacy, and Entrepreneurship Education

The aim of the university is to continually promote students from job seekers to creator graduates (Kusmintarti *et al*., 2017; Gupta & Sharma, 2018). The widespread assumption is that the new business creations can involve a great opportunity to reduce employment rates and alleviate poverty levels (Sutter *et al*., 2019). Several scholars agree that entrepreneurial education takes a critical role in determining students' mindset and entrepreneurship intention (Wardana *et al*., 2020; Karyaningsih *et al*., 2020). Entrepreneurship education is a structured and formal transmission of competencies that refers to the provision of skills, concepts, and awareness of individuals towards entrepreneurship (Henry & Lewis, 2018). Entrepreneurship education can be performed by pedagogical competencies, including theory-based learning in the classroom and practice-based learning (Wardana *et al*., 2020).

In detail, providing entrepreneurship theories enables students to develop and understand the entrepreneurship theories. Meanwhile, practical-based pedagogy allows students to enhance self-efficacy and entrepreneurship skills (Karyaningsih *et al*., 2020). For this matter, we believe that the lecturers' competence will have a linkage with entrepreneurship educational success. In this matter, self-efficacy will play an important part in students' entrepreneurial intentions (Elnadi & Gheith, 2021). Self-efficacy is linked with the individuals' belief and ability to perform the expected actions (Fuller *et al*., 2018). Either entrepreneurship education model or students' self-efficacy depends on the lecturer's competencies in the entire learning process, including preparation, action, and evaluation (Fejes *et al*., 2019). For this matter, the study presents the following hypothesis:

H1: Lecturer's competence positively influences entrepreneurship education.

H2: Lecturer's competence positively influences self-efficacy.

H3: Entrepreneurship education positively promotes students' entrepreneurial intentions.

H4: Self-efficacy positively promotes students' entrepreneurial intention.

H5: Entrepreneurship education positively drives students' self-efficacy.

Effort Expectancy, Performance Expectancy, and Facilitating Condition

The underpinning theories for e-learning in education can be performed by the unified theory of acceptance and use of technology (UTAUT) that further developed technology acceptance model (TAM), theory of reasoned action (TRA), diffusion of innovations (DOI), and theory of planned behaviour (TPB).

According to UTAUT, users' acceptance of technology greatly influences their intentions and behaviour. The UTAUT is incorporated with four main dimensions of intention and usage of new technology, including performance expectancy, effort expectancy, social influence, and facilitating conditions (Decman, 2015). Furthermore, each dimension has a link of behavioural intention. In acquaintance with entrepreneurship education, effort expectancy takes an essential part in helping students to understand new model online learning of entrepreneurship education (Surachim *et al*., 2018). Effort expectancy happens when the students obtain convenience in accessing e-learning, including entrepreneurship subjects (Tarhini *et al*., 2018; Samat *et al*., 2020). Indeed, some scholars remarked that facilitating conditions and performance expectancy have been linked with entrepreneurship education success adopting e-learning (Kaliisa *et al*., 2019; Ameen *et al*., 2018). Referring to Decman (2015), the nexus between effort expectancy on self-efficacy and entrepreneurial education, in particular, can be explained through behavioural theory, especially TPB Ajzen (1991). Likewise, the effect of performance expectancy on self-efficacy and entrepreneurial education can be explained through the behavioural theory of TPB Ajzen (1991). Decman (2015) reinforced some previous studies by Chen (2011), Lin *et al*. (2013), which linked behavioural theory (TPB) with TAM and UTAUT theories. Therefore, the effect of facilitating conditions on self-efficacy and entrepreneurial education can be explained through the link between TPB and TAM.

H6: Effort expectancy positively affects entrepreneurial education.

H7: Effort expectancy positively affects self-efficacy.

H8: Performance expectancy positively affects entrepreneurial education.

H9: Performance expectancy positively affects self-efficacy.

H10: Facilitating conditions positively affects entrepreneurial education.

H11: Facilitating conditions positively affects self-efficacy.

The Mediating Role of Entrepreneurship Education and Self-efficacy

Entrepreneurship education and self-efficacy have become a crucial matter in the entrepreneurial field as it promotes entrepreneurship intention. Entrepreneurship education has proven to be an effective mediator for the development of an individual's self-efficacy and business intention (Wardana *et al*., 2020; Mukhtar *et al*., 2021). A number of articles document that entrepreneurship education can increase students' self-efficacy and entrepreneurial intentions (Tung *et al*., 2020). Preliminary studies by

Linan (2004), Piperopoulos and Dimov (2015) found that there was a difference between entrepreneurship education solely focusing on theoretical instead of practical activities in the classroom. Therefore, Piperopoulos and Dimov (2015) suggest that combining theory and practice for conducting entrepreneurship education will prepare students to face the real world. Additionally, entrepreneurship education that incorporates observations on a successful entrepreneur will intercede in individuals' cognitive dimensions (mindset, attitude, and self-efficacy) and promote them in determining the intentions and behaviour (Cardon *et al*., 2009). The meta-analysis study revealed that dominant factors influence the link between entrepreneurship education and entrepreneurial intention. The results of Li and Wu's study (2019) found several gaps from several previous studies, especially in providing an understanding of why and how entrepreneurship education increases entrepreneurial intentions. In detail, Li and Wu (2019) integrated social cognitive theory and self-regulation theory to dissect the dominant factors in entrepreneurial education influencing intention for entrepreneurship. Following the literature exposure, we propose the following hypothesis:

H12: Entrepreneurial education mediates the influence of lecturer's competence intention entrepreneurship intention.

H13: Self-efficacy mediates the influence of lecturer's competence and entrepreneurship intention.

RESEARCH METHODOLOGY

Research Design

The current research engaged a quantitative approach utilizing a cross-sectional survey. We examined four exogenous variables: two intervening variables and one endogenous variable. The exogenous variables in this study included lecturer competence (LC), effort expectancy (EE), performance expectancy (PE), and facilitating conditions (FC). The intervening variables covered entrepreneurial education (EU) and self-efficacy (SE), while the endogenous variable was intended towards entrepreneurship (ETE). The framework research of this study is depicted in Figure 1.

Sampling and Data Collection

The population consisted of university students involved in an online entrepreneurship course. The sampling frame of this study gathered students who enrolled in entrepreneurship education from some universities in Malang of Indonesia. The determination of this geographical location considering Malang is the educational city in Indonesia. We delivered 150 questionnaires and collected 130 valid questionnaires (86.66%) for further analysis. The detail of the demographic respondent was provided in Table 1.

Common Variance Method

To ensure the quality of the data collection in this research, common method variance (CMV) was performed using the Harman one-factor test. The statistical calculation shows that CMV is not a concern in this research due to the total variances extracted by a single factor for the Indonesian samples were 36.30%, in which this value is less than 50% of the variance. Furthermore, to determine CMV that is not a problem, SmartPLS software is performed to estimate the full collinearity test. To assess the existence of bias, this research adopted indicators from Kock and Lynn (2012) and Kock and Gaskins (2014) to accomplish the common method variance by involving the variance inflation factors (VIF). The VIF value higher than 3.3 indicates that the model might be contaminated by CMV and vice versa. The VIF value in this study ranges from 1.554 to 3.017, indicating to achieve the CMV criteria.

Measurement

We used a survey to collect data from the respondents. The instruments were taken from literature review and preliminary articles and enhanced with minor modifications in the context language and Indonesian context. The modification was intended to obtain a greater understanding of the questionnaires. The lecturer's competence was calculated on the base of eight items from Fauth *et al*. (2019). The effort expectancy construct was evaluated by four questionnaires from Venkatesh *et al*. (2012),

Decman (2015). Performance expectancy was performed by four items from Venkatesh *et al*. (2012). Furthermore, facilitating conditions were estimated by four items adapted from Decman (2015). To evaluate entrepreneurship education, we performed six items from Linan (2004), while entrepreneurship intention was evaluated using six items from Zhao *et al*. (2005), Ibrahim and Lucky (2014). The instruments were provided on seven-point Likert scales from one for strongly disagree and seven for strongly agree. The collected data was further analysed employing Structural Equation Modelling Partial Least Squares (SEM-PLS) with SmartPLS version 3.0.

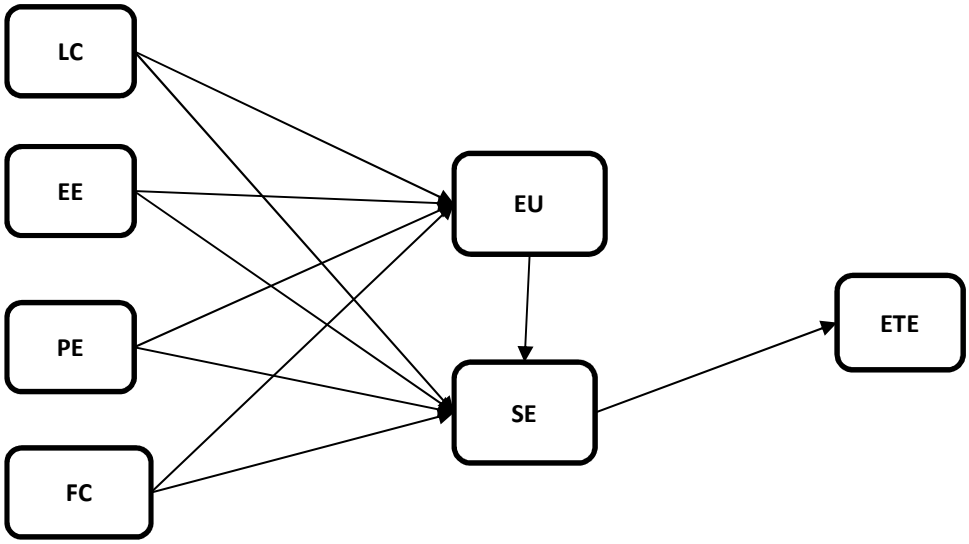

Figure 1. Theoretical Framework

Note: LC= lecturer competence; EE= effort expectancy; PE= performance expectancy; FC = facilitating conditions; EU = entrepreneurial education; SE = self-efficacy; ETE = intention towards entrepreneurship

Source: own elaboration based on Fauth *et al*. (2019), Venkatesh *et al*. (2012), Decman (2015), Linan (2004).

RESULTS AND DISCUSSION

Demographic Respondents

Table 1 provides information about the demographic of respondents from Indonesia. Overall, the participants in this survey were dominated by female students with a percentage of slightly higher than three quarters. In terms of the study year, most respondents were in their third year. Additionally, the majority of students involved in the online course for entrepreneurship were more than twelve (57.70%). Table 1 also informs that the respondent engaged in the online course using the government internet data program.

Table 1. The demographic of respondents

S/No.	Information	Frequency	%
1. Gender	Female	98	75.38
	Male	32	24.62
2. Semester	IV	35	26.92
	VI	95	73.08
3. Involvement for entrepreneurship online course	4 times	20	15.38
	6 times	35	26.92
	> 12 times	75	57.70
4. The Internet Data packages	From the government	130	100.00
	Private	0	00.00

Source: own study.

The outer model evaluation

We incorporated a multivariate data analysis method to analyse the data collected. Several procedures from Hair *et al.* (2020) were adopted to evaluate the validity and reliability of the construct. To estimate the construct reliability in the model, we used criteria of loading factors higher than 0.70. As illustrated in Table 2, the λ of LC ranged between 0.776 to 0.910 to achieve the construct reliability. Additionally, variable of EE, PE, PC had the loading factors (λ) between 0.751 to 0.885, and the variable of EU, SE, and ETE had loading factors (λ) ranging from 0.719 to 0.879, implicating that the criteria would be reached. At the same time, the construct achieved the discriminant validity when the cross-loading value was more than 0.70. As depicted in Table 3, the cross-loading value ranged from 0.800 to 0.950 to meet the discriminant validity criteria. Thus, the model to meet the composite reliability when the CR score is greater than 0.70 and the Cronbach's Alpha (α) was greater than 0.70. As illustrated in Table 7, the value of EE, ETE, EU, FC, LC, PE, and SE achieved the composite reliability.

Table 2. Outer model estimation

VA	Code	Items	λ
LC	Lc1	My lecturer actively participates in learning activities	0.910
	Lc2	My lecturer develops student potential	0.903
	Lc3	My lecturer motivates students' to learn	0.906
	Lc4	My lecturer ensures the adequate level of understanding and adjustment of learning activities	0.896
	Lc5	My lecturer improved his/her teaching method	0.799
	Lc6	My lecturer pays attention to the learning objectives	0.909
	Lc7	My lecturer provides opportunities to ask and gives opinion	0.777
	Lc8	My lecturer analyses the results of the assessment of students	0.862
EE	Ee1	It is easy to follow on how to implement e-learning	0.776
	Ee2	The use of e-learning is comprehensive and understandable	0.811
	Ee3	E-learning is easy to be followed	0.864
	Ee4	It is easy to become skilled in the adoption of e-learning	0.833
PE	Pe1	E-learning will be useful in learning activities	0.800
	Pe2	With e-learning, I will accomplish my learning purposes more easily	0.881
	Pe3	By using e-learning, I will increase learning efficiency	0.875
	Pe4	With e-learning, I can reach a better competency	0.885
FC	Fc1	I have the supporting resources to adopt e-learning	0.751
	Fc2	I have the knowledge and information to adopt e-learning	0.793
	Fc3	E-learning is similar to other platforms I use.	0.865
	Fc4	Other people can help me incorporate e-learning	0.789
EU	Eu1	Entrepreneurship need to be provided in high school/universities	0.790
	Eu2	If there is an opportunity, I will enlarge the theme of entrepreneurship	0.804
	Eu3	Entrepreneurship need to be presented as compulsory course to enhance entrepreneurship in the school/college	0.863
	Eu4	University needs to have various entrepreneurship activities that will help students to promote business.	0.850
	Eu5	University courses are well prepared for entrepreneurship course	0.745
SE	Se1	Through e-learning, I am able to identify new business/business opportunities	0.816
	Se2	I can create a new product	0.849
	Se3	I can think creatively	0.819
	Se4	I can commercialize new ideas or developments	0.879
ETE	Ete1	I have willingness and do many efforts to be an entrepreneur	0.788
	Ete2	I have willingness to initiate and run my business	0.872
	Ete4	I have decided to set up a company in the near future	0.794
	Ete5	My career purpose is to be an entrepreneur	0.719

Source: own study.

Table 3. Discriminant validity

Variable	EE	ETE	EU	FC	LC	PE	SE
EE	0.822						
ETE	0.292	0.95					
EU	0.312	0.495	0.812				
FC	0.529	0.411	0.456	0.800			
LC	0.368	0.286	0.400	0.402	0.872		
PE	0.529	0.120	0.186	0.371	0.708	0.861	
SE	0.307	0.369	0.201	0.393	0.655	0.632	0.841

Source: own study.

The discriminant validity criteria in this study also pursued the criteria from Henseler *et al*. (2015) to estimate the heterotrait-monotrait (HTMT) of each variable in the model. Table 4 informs that the HTMT ratio of each variable was under 0.90 to reach the discriminant validity criteria.

Table 4. Heterotrait-monotrait ratio

Variable	EE	ETE	EU	FC	LC	PE	SE
EE							
ETE	0.347						
EU	0.358	0.562					
FC	0.638	0.471	0.530				
LC	0.406	0.330	0.432	0.438			
PE	0.612	0.155	0.221	0.435	0.770		
SE	0.353	0.443	0.234	0.452	0.717	0.715	

Source: own elaboration. Inner model evaluation.

We adopted indicators from Hair *et al*. (2020) to evaluate the structural model, which covers collinearity test, R-squared (R^2), F-square (f^2), and (4) Q-squared predictive (Q^2). The model meets the collinearity criteria when the coefficient of Variance Inflation Factor (VIF) is lower than 5.00. Table 5 and Table 6 illustrate that the variables involved in this study (EE, ETE, EU, FC, LC, PE, and SE) are under 5.00, meaning that the collinearity did not occur in this construct (Hair *et al*., 2013). Therefore, the indicator construct can be used for further analysis.

In addition to collinearity estimation, we followed the R^2 criteria from Chin (1998). Moreover, the previous estimation noted that the EU has 0.311, meaning that 31.1 per cent of variable EU could be performed by LC, EE, PE, and FC, the moderate category. Furthermore, the variant of SE could be explained by LC, EE, PE, FC, and EU with a moderate prediction level. Indeed, ETE had a value R^2 of 0.331, implying that ETE could be provided by LC, EE, PE, FC, EU, and SE with moderate criteria. Furthermore, f^2 evaluation was conducted using criteria from Hair *et al*. (2020) with categories of 0.02 (small), 0.15 (moderate), 0.35 (large). From the statistical calculation, it is be known that LC, EE, PE, and FC influence the EU at a moderate level (f2=0.322). Similarly, LC, EE, PE, FC, and EU impact SE with medium level (f^2= 0.30). Lastly, LC, EE, PE, FC, EU, and SE influence ETE with a moderate level (f^2= 0.383). Moreover, the model to achieve Q^2 criteria when the value of Q^2 is higher than 0, remarking that the construct has predictive relevance. From the preliminary testing, it can be concluded that the Q^2 score of LC, EE, PE, FC, EU, SE, and ETE were upper than 0, implicating that the model has a predictive relevance value.

Table 5. Variance inflation factor (VIF) outer

Indicator	Ee1	Ee2	Ee3	Ee4	Ete1	Ete2	Ete4	Ete5	Eu1	Eu2	Eu3
VIF	1.940	1.960	2.106	1.739	1.585	2.065	1.787	1.554	2.184	2.138	2.586
Indicator	Eu4	Eu5	Fc1	Fc2	Fc3	Fc4	Lc1	Lc2	Lc3	Lc4	Lc5
VIF	3.107	2.289	1.497	1.725	1.908	1.758	2.702	2.586	2.546	2.336	2.603
Indicator	Lc6	Lc7	Lc8	Pe1	Pe2	Pe3	Pe4	Se1	Se2	Se3	Se4
VIF	2.711	2.162	2.694	1.797	2.878	2.717	2.469	1.833	2.216	1.988	2.431

Source: own study.

Table 6. Variance inflation factor (VIF) inner

Variable	**EE**	**ETE**	**EU**	**FC**	**LC**	**PE**	**SE**
EE			1.713				1.747
ETE							
EU		1.042					1.451
FC			1.498				1.644
LC			2.131				2.426
PE			2.420				2.581
SE		1.042					

Source: own study.

Goodness of Fit Assessment

The last procedure in this study was the goodness of fit (GoF) evaluation model by following criteria from Hair *et al*. (2013; 2020). The model reaches the GoF criteria when the value of Cronbach's Alpha (α) is higher than 0.70, composite reliability (CR) is more than 0.70, and Average Variance Extracted (AVE) is greater than 0.50. Table 7 informs the value of α, CR, and AVE of the variables to achieve the GoF criteria. Therefore, it indicates that the structural model in this study was in a good category.

Table 7. The Goodness of Fit for Outer Model

Variable	**Cronbach's Alpha (α)**	**rho_A**	**CR**	**AVE**
EE	0.843	0.867	0.893	0.675
ETE	0.807	0.829	0.872	0.632
EU	0.870	0.876	0.906	0.659
FC	0.814	0.841	0.877	0.641
LC	0.954	0.960	0.962	0.760
PE	0.883	0.888	0.920	0.741
SE	0.862	0.865	0.906	0.708

Source: own study.

Hypothesis Testing

In this study, we used SEM-PLS to propose hypothesis testing using a resampling bootstrap. The hypothesis to determine to be accepted when the t-value is higher than 1.645, and the p-value is less than 0.05. From Table 8 and Figure 2, it informs that eleven hypotheses were approved with t-value ranging from 2.258 to 5.091 (> 1.645), and p-values range from 0.000 to 0.033 (< 0.050). However, two other hypotheses were declined due to the t-values were less than 1.645, and p-values were more than 0.05.

Table 9 illustrates the bootstrapping estimation of the two indirect effects: β = 0.198 and β = 0.114, which are significant with t-values of 3.737and 2.382. The indirect effects use 95% Boot Confidence Internal Bias Corrected: [LL = 0.100, UL = 0.298], and [LL = 0.034, UL = 0.217], do not straddle a 0 in between, implicating that there is mediation effect. Thus, this can indicate that the mediation effect follows a significant level. H12 and H13 were confirmed that EU and SE can mediate the linkage between LC and ETE (Preacher & Hayes, 2008).

Table 8. The summary of hypothesis testing

Hypothesis	Linkage	β	SE	T-value	CI		Supported
					LL	UL	
H_1	LC → EU	0.451	0.091	4.974	0.261	0.618	Yes
H_2	LC → SE	0.404	0.105	3.896	0.212	0.612	Yes
H_3	EE → EU	0.155	0.090	1.697	0.031	0.333	Yes
H_4	EE → SE	-0.099	0.093	1.116	-0.292	0.069	No
H_5	PE → EU	0.333	0.122	2.764	0.088	0.581	Yes
H_6	PE → SE	0.404	0.102	3.409	0.124	0.540	Yes
H_7	FC → EU	0.316	0.106	3.074	0.112	0.529	Yes
H_8	FC → SE	0.193	0.086	2.161	0.016	0.355	Yes
H_9	EU → SE	-0.081	0.073	1.100	-0.292	0.069	No
H_{10}	EU → ETE	0.439	0.086	4.909	0.264	0.594	Yes
H_{11}	SE → ETE	0.281	0.091	3.097	0.101	0.465	Yes

Source: own study.

Table 9. Structural model evaluation (mediating effect)

Hypothesis	Linkage	β	SE	T-value	CI		Decision
					LL	UL	
H_{12}	LC → EU → ETE	0.198	0.053	3.737	0.100	0.298	Supported
H_{13}	LC → SE → ETE	0.114	0.048	2.382	0.034	0.217	Supported

Note: t-value >1.645; $p < 0.05$; CI, confidence internal; BC, bias corrected; UL, upper level; LL, lower level; SE, standard error; β, path coefficient.
Source: own study.

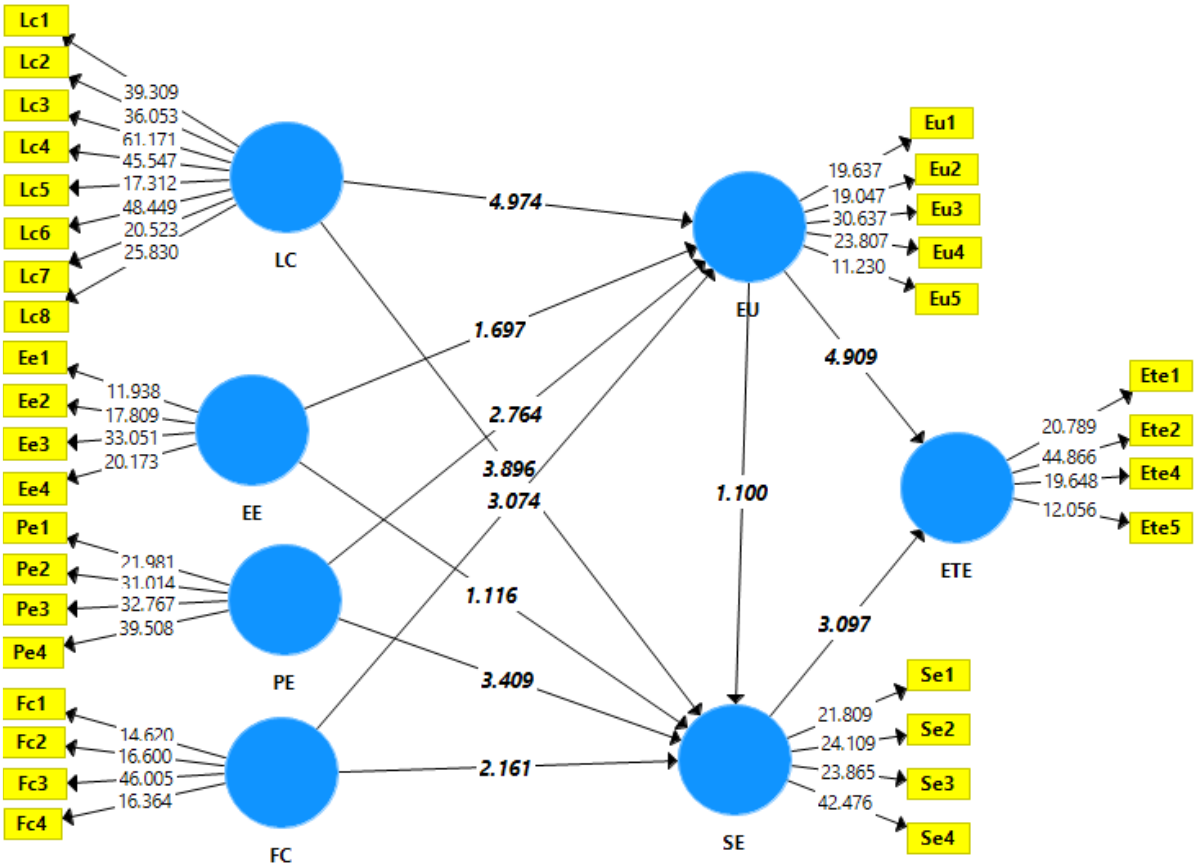

Figure 2. Model development test results
Source: own elaboration based on investment results.

The research aimed to examine the influence of e-learning on students' entrepreneurial intentions in the era of the Covid-19 pandemic. This study adopted the TAM and UTAUT models, which were proven effective in predicting student acceptance of online learning in association with students' self-efficacy and entrepreneurial intentions. The general assumption is that when online entrepreneurship education is implemented effectively, it will increase students' self-efficacy and intention to become entrepreneurs. The assumption is also inseparable from the belief that entrepreneurship learning needs to adapt to the conditions of the Covid-19 pandemic, which will last for an unpredicted time in the whole world, including Indonesia.

The results of the study indicate that the lecturer's competence has a direct effect on entrepreneurship education and students' self-efficacy. The results corroborate many studies conducted by previous scholars, such as Surachim *et al.* (2018), Samat *et al*. (2020), Tarhini *et al.* (2018), Rapanta *et al*. (2020), Qashou (2021), Bell (2021). The findings of this study are logical considering that lecturer's competence is a pivotal aspect in entrepreneurship education not only under normal conditions but also during the Covid-19 pandemic. Lecturers who do not have competence will not teach entrepreneurship properly and effectively. Because they cannot teach well, it is reasonable that their self-efficacy and intention to enter the world of entrepreneurship is also insufficient. The findings of this research confirm that entrepreneurship education will increase students' self-efficacy and entrepreneurial intentions if the lecturer has competence both in teaching and competence in the field of entrepreneurship. This should be a concern for campuses to place competent lecturers in entrepreneurship theory and practice courses. These competent lecturers will increase students' self-efficacy and intention to enter the world of entrepreneurship. The lecturers' competence can be improved by proposing either individually or in teams to attend workshops, training/courses, and education in the theme of entrepreneurship.

Furthermore, the results found that students' effort expectancy did not affect their entrepreneurship education and self-efficacy. However, the results of this work oppose most earlier studies by Tarhini *et al*. (2018), Samat *et al*. (2020), or Bervell and Arkoful (2020). The underlying reason to explain this result is that in the context of online learning in Indonesia, facilities and infrastructure moderately support these activities. Even though the Indonesian government provides free data quotas/packages to students and lecturers during online learning during the Covid-19 pandemic, this policy is not accompanied by the provision of supporting facilities and infrastructure. Moreover, geographical conditions have not been resolved with the provision of an adequate internet network. As a result, the respondents of this study felt many obstacles during online learning, such as online applications that were not optimal, internet signal problems, and other supporting facilities. Considering these obstacles, the learning process is not optimal and ineffective. Consequently, students' expectations of entrepreneurship learning become smaller and their self-efficacy for entrepreneurship is insufficient. This research provides valuable insight, especially for the government that wants to carry out online entrepreneurship learning and needs to provide adequate supporting facilities and infrastructure. Without good facilities and infrastructure, entrepreneurship education will not positively impact self-efficacy and students' intentions to engage in the world of entrepreneurship.

The findings of the study report that performance expectancy has a direct effect on students' entrepreneurship education and entrepreneurial self-efficacy. The results confirm some studies conducted by preliminary scholars such as Tarhini *et al*. (2018), Samat *et al*. (2020), and Bervell and Arkoful (2020). The results of our research came as a surprise in the context of learning entrepreneurship in Indonesia during the Covid-19 pandemic. This implies that despite the limited conditions in terms of facilities and infrastructure, students showed high-performance expectations towards the results of entrepreneurship education. The respondents still expect that even in an emergency, entrepreneurship education will still be effective in increasing students' self-efficacy and intentions to enter the entrepreneurial world after they graduate. Entrepreneurship learning continues to be carried out despite the restricted conditions. This surprising phenomenon should be responded to positively by the university to provide the best educational services to students. Entrepreneurship learning must be designed as attractively as possible, interactively, and involve all of students' psy-

chological aspects. This is both an opportunity and a challenge for campuses in Indonesia. The challenge is that lecturers must carry out entrepreneurship learning effectively and on target so that students' high hopes are not counter-productive.

In addition to previous findings, the results also indicate that facilitating conditions affect entrepreneurship education and entrepreneurial self-efficacy. Even though this is relevant to the basic theory of TAM and UTAUT as studied by a number of scholars (Tarhini *et al*., 2018; Samat *et al*., 2020; Bervell & Arkoful, 2020), the results of our study are surprising. This is because constraints in the form of limited facilities and infrastructure do not prevent students from increasing students' self-efficacy and entrepreneurial intentions. In other words, facilitating conditions positively affect entrepreneurship education, self-efficacy, and students' intentions to become entrepreneurs. The respondents perceive that online facilities and infrastructure limitations are not an obstacle to participating in entrepreneurship education. It seems that respondents have adapted to online entrepreneurship education carried out in normal conditions. The surprising results must be responded to positively by the university by providing effective learning services. The creativity of lecturers and the campus must be enhanced considering that the implementation of the online learning model is not easy but complex. This finding becomes an entry point for further researchers to explore why research respondents in Indonesia do not make limited facilities and infrastructure an obstacle in participating in online entrepreneurship learning.

Finally, the results show that entrepreneurship education has a linkage with students' entrepreneurial intentions. This study confirms some of the previous studies by Linan (2004), Piperopoulos and Dimov (2015), Li and Wu (2019), Saptono *et al*. (2020), Karyaningsih *et al.* (2020), Wardana *et al*. (2020), and Saparuddin *et al*. (2020). Despite the fact that the learning has been conducted using the online platform, students still perceive it normal conditions. In general, students believe that online entrepreneurship education still has a linear impact on their entrepreneurial intentions, just as under regular conditions. However, entrepreneurship education in this study failed to increase students' self-efficacy. Although in contrast to the majority of previous researchers such as Wardana *et al*. (2020), Ratten and Jones (2020), Saptono *et al*. (2020), we may conclude from the result of this research that in the conditions of the Covid-19 pandemic entrepreneurship education has not been able to increase student self-efficacy as in normal conditions. The results provide a valuable input for lecturers and campus parties to improve online entrepreneurship education learning services effectively and efficiently. This is an opportunity and a challenge for the lecturers and the campus. A strategic step to respond positively to these findings is for lecturers to improve their online entrepreneurship education competencies while the campus provides adequate facilities and infrastructure for students. The research also provides inspiration for further researchers regarding how to package online entrepreneurship education so that it can increase student entrepreneurial self-efficacy.

CONCLUSIONS

We adopted the TAM and UTAUT models to determine how online entrepreneurship education influences student self-efficacy and entrepreneurial intentions during the Covid-19 pandemic. Surprisingly, the online learning model affects students' intentions to become entrepreneurs. On the other hand, the results found that online learning has not increased student's entrepreneurship and self-efficacy. The findings answer our overall assumption that if online entrepreneurship education is carried out effectively, it will increase students' intention to enter the world of entrepreneurship. The results of this research imply that lecturers need to improve their competence, especially concerning the e-learning incorporation. The lecturers need to change the conventional learning model as in normal conditions into an online learning model that is interactive, interesting and involves all of students' psychological aspects. This is an opportunity and a challenge for lecturers. Furthermore, in cooperation with the government, the campus needs to provide adequate facilities and infrastructure to support online learning. In addition to continuously provide quota package assistance to students and lecturers, the government must also improve the quality of the internet network so that geographical conditions are not a constraint. As for the limitations of this study, it did not involve the TAM and UTAUT models completely, thus some variables were not included in the construct.

Further researchers can elaborate on the TAM and UTAUT models to predict the dominant variables that affect students' entrepreneurial intentions. Moreover, this study used only a cross-sectional sample with a limited number of samples. Future researchers would benefit from considering data longitudinally so that the results can represent the actual conditions of the research field. Furthermore, we solely involved partial indicators of measuring lecturer's competence, thus it is suggested to involve complete indicators. Future research also needs to incorporate with more respondents and use personal and contextual variables so that students who are involved in research really become entrepreneurs or choose a profession as entrepreneurs when they graduate.

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