

## The effect of entrepreneurial education on university student's entrepreneurial self-efficacy and entrepreneurial intention

Dwi Atmono<sup>1</sup>, Muhammad Rahmattullah<sup>1</sup>, Ananda Setiawan<sup>1</sup>, Rochman Hadi Mustofa<sup>2</sup>,  
Dias Aziz Pramudita<sup>2</sup>, Titik Ulfatun<sup>2</sup>, Reza Reza<sup>3</sup>, Achmad Mustofa<sup>4</sup>

<sup>1</sup>Economic Education Department, Faculty of Teacher Training and Education, Universitas Lambung Mangkurat, Banjarmasin, Indonesia

<sup>2</sup>Accounting Education Department, Faculty of Teacher Training and Education, Universitas Muhammadiyah Surakarta, Surakarta, Indonesia

<sup>3</sup>Economic Education Department, Faculty of Teacher Training and Education, Universitas Mulawarman, Samarinda, Indonesia

<sup>4</sup>Faculty of Teacher Training and Education, Universitas Syiah Kuala, Aceh, Indonesia

### Article Info

#### Article history:

Received Nov 14, 2021

Revised Nov 4, 2022

Accepted Nov 24, 2022

#### Keywords:

Curriculum attendance

Entrepreneurial intention

Entrepreneurial self-efficacy

Extracurricular activity

### ABSTRACT

The purpose of this study is to find out the impact of curriculum attendance (CA) and extracurricular activities (EA) on entrepreneurial self-efficacy (ESE) and entrepreneurial intentions (EI) in Indonesian students. This research is elaborated using the quantitative method with SEM-PLS to find out the studied phenomena. Decision questionnaires from questionnaires that have been used in previous studies. The questionnaire was responded to by 733 students who had studied entrepreneurship education during COVID-19 pandemic. The results showed that the presence of the curriculum attendance and extracurricular activities had a positive impact on entrepreneurial self-efficacy and entrepreneurial intentions. Extracurricular activities and entrepreneurial self-efficacy have a positive impact on entrepreneurial intentions. However, the presence of the curriculum has no impact on entrepreneurial intentions. This is the first step for universities and students to realize that the presence of the curriculum needs to be reconstructed in order to have an impact on entrepreneurial intentions.

*This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.*



### Corresponding Author:

Ananda Setiawan

Faculty of Teacher Training and Education, Universitas Lambung Mangkurat

North Banjarmasin, Banjarmasin City, South Kalimantan, Indonesia

Email: ananda.setiawan@ulm.ac.id

## 1. INTRODUCTION

Unemployment is something that must be the main focus for developed and developing countries. Unemployment rates worldwide, especially in times of global crisis [1]. Each country has specific policies and strategies to reduce unemployment in their respective countries. Among the alternative solutions that have been chosen the most to reduce unemployment is to extend the number of entrepreneurs [2]. This is because entrepreneurship is the main driver in fostering innovation, and creating jobs and can significantly grow the economy of a country [3]. However, to be able to develop entrepreneurship and change the entrepreneurial mindset of the community itself is a challenge for almost all countries [4].

Unemployment is also caused by COVID-19 which requires physical restrictions and limits gatherings with many people in the same place. One of those affected by COVID-19 is learning in universities [5], [6]. The restrictions on physical meetings and social distancing that are regulated by the government have resulted in restrictions on learning in the classroom, which has brought about learning strategies getting to be a web framework due to the COVID-19 pandemic [7].

The aim of this study is to find out the impact of curriculum attendance (CA) and extracurricular activities (EA) on entrepreneurial self-efficacy (ESE) and entrepreneurial intentions (EI) in Indonesian students during the COVID-19 pandemic. This is important to know because the ESE and EI of students in Indonesia are the main factors in determining careers as entrepreneurs in the future. Entrepreneurial behavior is able to form due to high entrepreneurial intentions, so it is important for universities to prepare students who have strong entrepreneurial intentions.

In addition to education as a government instrument in obtaining superior and productive human resources, there needs to be self-efficacy as an individual effort to be able to contribute to educational attainment. ESE is generally described as a person's conviction in their ability to be able to conduct a particular task [8]. In particular, entrepreneurship education (EE) can increase ESE. ESE is a special concept of self-efficacy as the construction of one's belief to be able to perform the skills needed to pursue new business opportunities.

Graduates of higher education show that the number of unemployed is still high. In line with this fact, EE is able to support the construction of entrepreneurial values in students while in college [9]. Business research defines entrepreneurship as the creative process, evaluation, and exploitation of profits to produce goods and services [10], [11]. Entrepreneurial self-efficacy has a significant and positive influence on entrepreneurial intentions [12]–[14]. Entrepreneurship education has a significant and positive effect on entrepreneurial intentions [15]–[18], however, there is disagreement if there is an influence of EE on the stated entrepreneurial intentions [19], [20]. The possibility of this disagreement is associated with the duration of the entrepreneurship education taken [21]. Other related researches showed that there is no significant and positive effect between entrepreneurship education and entrepreneurial intention [22].

The theory used to assess the variables of entrepreneurship education is theory of planned behavior (TPB) by Ajzen [23]. The source used to examine entrepreneurial self-efficacy variables is the social cognitive theory (SCT) [24]. The connection between entrepreneurial self-efficacy is not only seen from entrepreneurial self-efficacy affecting entrepreneurial education, but entrepreneurial education is also a predictor of entrepreneurial self-efficacy. Mozahem and Adlouni [25] found that entrepreneurial self-efficacy is affected by entrepreneurial education variables.

Entrepreneurial self-efficacy is built on and affected by entrepreneurial outcomes. Entrepreneurial self-efficacy is developed through the concept of self-efficacy through SCT [10], which contains the social context, observation, and social learning behavior. Self-efficacy is the main construct that develops ESE and has its roots in the agency perspective theory on individuals who interact socially. Then, self-efficacy represents individuals who are able to manage emotions, mental and behavior [8]. Individuals who have the ability to be able to manage emotions, manage entrepreneurial behavior, and believe that they can become successful entrepreneurs are ESE theories that were developed from self-efficacy.

Structural model on entrepreneurial self-efficacy variables is exogenous variables [12]. In the model, ESE is associated with entrepreneurial creativity and attitude toward entrepreneurship, and entrepreneurial intentions. While entrepreneurship education is used as a moderating variable. The entrepreneurial intention variable is examined using intention theory [26]. Nowiński *et al.* [27] explain that the exogenous variable of EE has an influence on EI. The study also examined entrepreneurial self-efficacy variables related to searching, planning, marshaling, implementation people, and implementation finance. The correlation value shown by entrepreneurship education is not too large, namely .04, but it becomes the basis for thinking that there is a relationship between entrepreneurship education and the variable of entrepreneurial intention.

Entrepreneurship education is a place for formal learning and has the aim of forming a complete or holistic human being as a person who has an entrepreneurial character. EE has a very important role in growing students' entrepreneurial intentions at universities. Many students have the intention to have their own business after getting an entrepreneurship course program in college. EE can be internalized in several ways, including: i) Integrating all subjects with entrepreneurial values and familiarizing entrepreneurial behavior every day for students; ii) Integrating entrepreneurship education programs with extracurricular activities or outside subjects; iii) Entrepreneurship education through counseling; iv) Changing learning patterns that usually only use theory into direct practice; v) Integrating entrepreneurship education through school or college culture; and vi) Integrating entrepreneurship education with local content learning provided according to the area the students are located.

Entrepreneurship education with indicators (know what, know who, know-how, know why) that have a significant influence on a person's intention to be able to become an entrepreneur, especially for students [28]. Furthermore, there is a positive impact between EE and EI [29]. Other studies also explain that there is an effect of EE on EI [30]–[32].

The entrepreneurial self-efficacy variable has a close relationship with entrepreneurial intentions, this is evidenced by research conducted by Nowiński and Haddoud [22]. The research discovered that entrepreneurial self-efficacy became an exogenous variable and was able to strengthen the endogenous

variable, namely entrepreneurial intentions, which could be strengthened by entrepreneurial self-efficacy variables related to searching, planning, marshaling, implementing people, and implementation finance. Then, Nowiński and Haddoud [22] found that entrepreneurial intention became an endogenous variable with the exogenous variable being entrepreneurial self-efficacy as the exogenous variable.

In another research study, entrepreneurial intention can be an endogenous variable [33]. Entrepreneurial self-efficacy shows that there is a close connection between ESE variable and entrepreneurial intentions. The findings also explain that entrepreneurial self-efficacy is measured by a popular instrument developed by Zhao, Hills, and Seibert [34], while entrepreneurial intention uses a six scale [35]. Entrepreneurial self-efficacy has a close relationship with the mediation of the entrepreneurial ecosystem [33]. Then partially the connection of ESE and EI significantly affects .586 (male and female), then the conclusion of the analysis finds that ESE on EI for male respondents is .704 or bigger than the effect of entrepreneurial self-efficacy and female respondents are equal to .535.

According to several research findings, it can be analyzed that there is a connection between entrepreneurial self-efficacy variables and entrepreneurial intentions. There were five relationships suggested in this study regarding CA and ESE; EA and ESE; CA and EI; EA and ESE; ESE and EI as shown in Figure 1. Therefore, the following hypotheses are suggested in this study: i) CA will significantly influence students' ESE (H1); ii) Students' EA will significantly influence students' ESE (H2); iii) CA will significantly influence students' EI (H3); iv) Students' EA will significantly influence on students' EI (H4); v) Students' ESE will significantly influence students' EI (H5).

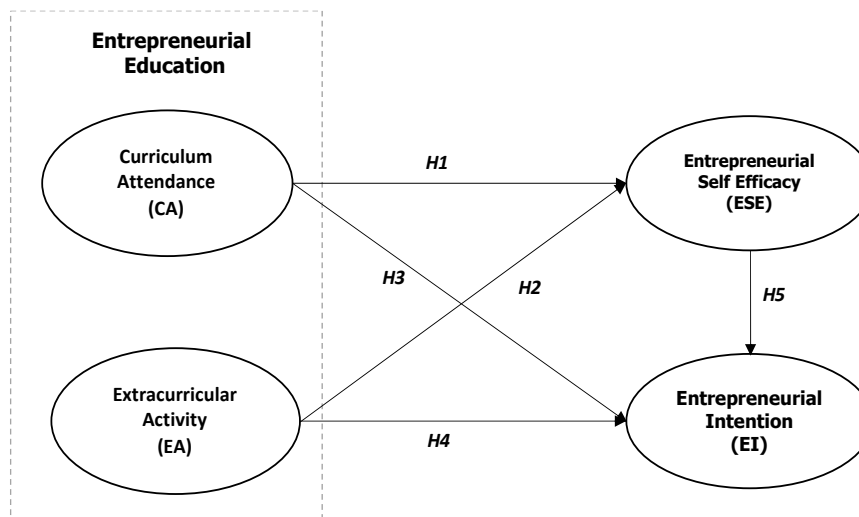


Figure 1. The research framework

## 2. RESEARCH METHOD

### 2.1. Design and data

This study uses a confirmatory quantitative approach by analyzing causal comparative between variables involving four variables, namely entrepreneurship education which is separated into CA, EA, ESE, and EI. The research was conducted at Lambung Mangkurat University, Banjarmasin City, South Kalimantan, Indonesia. The research data was obtained through a Google Form-assisted survey during March and June 2021. A total of 1,022 respondents filled out the questionnaire, but only 733 respondents (71.7%) returned the questionnaire. The research sample was taken from all faculties at Lambung Mangkurat University using stratified random sampling.

### 2.2. Variable measurement

This research questionnaire was constructed based on a literature review and modified from the preliminary research. Thus, to measure CA, we included six questionnaires from Cui, Sun, and Bell [36]. EA measured by modifying the instrument from Cui, Sun, and Bell [36]. As for measuring ESE, we included 12 questionnaires from Shahab *et al.* [12]. EI was estimated by nine items modified from Liñán and Chen [35]. The instrument was translated from English to Indonesian and adapted to the language context and research subject. The researchers entered a 7-point Likert scale from “strongly disagree” (1) to “strongly agree” (7).

### 2.3. The structural model estimation

This study uses multivariate data analysis as an effort to test the research hypotheses developed based on the theory. This study calculates the outer model and inner model as the main requirement to know the structural model tested in this study. The outer model estimation test includes testing convergent validity, discriminant validity, and composite reliability validity to meet the test criteria. Criteria for determining convergent validity when the loading factor is more than .70 and the mean extract variance (AVE) is more than .50 [37]. In this regard, to achieve discriminant validity (DV) when the cross-loading value is more than .70 [37]. To achieve reliability in the model, the value of Cronbach's alpha must be more than .70. The inner model assessment includes collinearity problems, path coefficients, R-square level (R<sup>2</sup>), effect size (f<sup>2</sup>), and predictive relevance (Q<sup>2</sup>). The researchers involved structural equation modeling with PLS to answer the hypothesis with a sig level of .05.

## 3. RESULTS AND DISCUSSION

### 3.1. Results

#### 3.1.1. The outer model prediction

Table 1 informs the profile of respondents who provide information in the form of quantitative data. What is exciting in Table 1 are respondents from various ethnic groups (dominated by Banjar tribes), gender is dominated by female respondents, and most respondents are 6th and 8th-semester students (final semester students). It is also known that the respondents are elaborating on the construct of EE while studying in higher education at ESE and EI.

Table 1. Final respondent background

Demographics		Frequency	Percentage
Gender	Male	202	27.6
	Female	531	72.4
Semester	2	90	22.90
	4	37	9.41
	6	120	30.53
	8	129	32.82
	10	16	4.07
Age (years)	14	1	.25
	< 20	172	23.5
	20-23	554	75.6
	23-26	6	.8
Business ownership	> 26	1	.1
	Yes	405	55.3
	No	328	44.7

Table 2 shows the reckoning of the outer model in this study. Entirety, the loading factor value ranges from .722 to .829 (more than 70), so it implies that this study is authenticated to fulfill convergent validity. Some items that do not meet the criteria (<70) are items EA04, EA05, EA06, ESE09, and EI09. Items that do not meet these criteria are eliminated to obtain the appropriate structural model. Furthermore, to reach discriminant validity when the AVE value is above .50. Table 2 explains the AVE value of the constructs CA (.690), CA (.613), ESE (.654), and EI (.693). The AVE value is known to be higher than 50 or ranging from 613 to 693, which has implications for the confirmed DV criteria. Meanwhile, the composite reliability (CR) value given by CR should be above .70 [37]. Table 2 also shows CR values ranging from 9.30 to .954. This value indicates that the CR has met the criteria for composite reliability. To quantify discriminant validity, this study also estimates using heterotraits. Discriminant validity is attained when the ratio is below .90. The heterotrait-monotrait values ranged from .574 to .766 indicating that the discriminant validity has been confirmed as shown in Table 3.

Table 2. Result of measurement model (outer model)

Construct	Item	Loading	Cronbach alpha	CR	AVE
Curriculum attendance	CA01	.815	.910	.930	.690
	CA02	.796			
	CA03	.828			
	CA04	.867			
	CA05	.882			
	CA06	.791			
Extracurricular activities	EA01	.765	.947	.954	.613
	EA02	.784			
	EA03	.742			
	EA07	.722			
	EA08	.785			
	EA09	.823			
	EA10	.797			
	EA11	.776			
	EA12	.782			
	EA13	.769			
	EA14	.776			
	EA15	.804			
Entrepreneurial self-efficacy	ESE01	.800	.947	.954	.654
	ESE02	.807			
	ESE03	.859			
	ESE04	.824			
	ESE05	.833			
	ESE06	.797			
	ESE07	.782			
	ESE08	.846			
	ESE10	.747			
	ESE11	.824			
	ESE12	.768			
	Entrepreneurial intentions	EI01			
EI02		.848			
EI03		.847			
EI04		.893			
EI05		.841			
EI06		.841			
EI07		.835			
EI08		.747			

Table 3. Heterotrait-monotrait ratio (HTMT)

	Construct	CA	EI	ESE	EA
1	CA				
2	EI	574			
3	ESE	620	731		
4	EA	722	714	766	

### 3.1.2. The structural inner model estimation

Initial calculations assumed the model has met the validity and reliability tests. For further analysis, this study uses PLS estimation to build a structure by approximating the inner model. It aims to determine the relationship among constructs. All data use a subsample of 500 bootstraps through 733 cases, basic bootstrapping, and bias-corrected and accelerated (BCa) bootstrap, as well as two-tailed. Apart from this, it can be seen from the calculation that in general, the outer VIF value ranges from 1.927 to 4.253, the implication of the findings shows no collinearity problem in the research model. According to Table 4, all hypotheses were accepted with a t-value greater than 1.96 and a p-value for each relationship was at .000 (<.05). Except for Hypothesis 3 with a t-value of 1.679 (<1.96; p-value=0.094).

Table 4. Path coefficients and results of hypotheses testing (CA, EA, ESE, and EI)

Hypothesis	Relationship	T-value	p-value	Decision
H1	CA → ESE	4.320	.000	Accepted
H2	EA → ESE	19.547	.000	Accepted
H3	CA → EI	1.676	.094	Rejected
H4	EA → EI	6.506	.000	Accepted
H5	ESE → EI	8.867	.000	Accepted

**3.1.3. Model fit**

R-square (R2) intends to find predictions accurately in the research model. This study adopted the advice of Hair *et al.* [37] categories: high (.75), moderate (.50), and weak (.25). Based on preliminary findings, it shows that the R2 value for ESE is .548, which implies that CA and EA can pass about 54.8%. ESE with medium category. Furthermore, R2 for EI is .548, which implies that CA, EA, and ESE are at moderate levels. In addition, the study also included f2 to estimate the size of the variable construct. This study followed Hair *et al.* [38], with f2 criteria: .02 (small), .15 (medium), and .35 (large). The results indicate that the f2 value of CA to ESE and EA to ESE is .032 (medium) and .468 (high). The f2 value between CA to EI is .006 (small), EA to EI is .091 (medium), and ESE to EI is .170 (medium).

**3.1.4. Model fit**

Table 4 and Figure 2 deliver information on the estimation of the hypothesis in this study using a significance level of 5%. This study confirms the five hypotheses proposed with the results that four hypotheses are accepted and one hypothesis is rejected. The accepted hypotheses in this model include the effect of CA and EA, on ESE, EA, and ESE on EI (H0=rejected; Ha=accepted). However, there were no significant effect between CA and EI (H0=accepted; Ha=rejected). While H1, H2, H4, and H5 were approved, H3 was rejected.

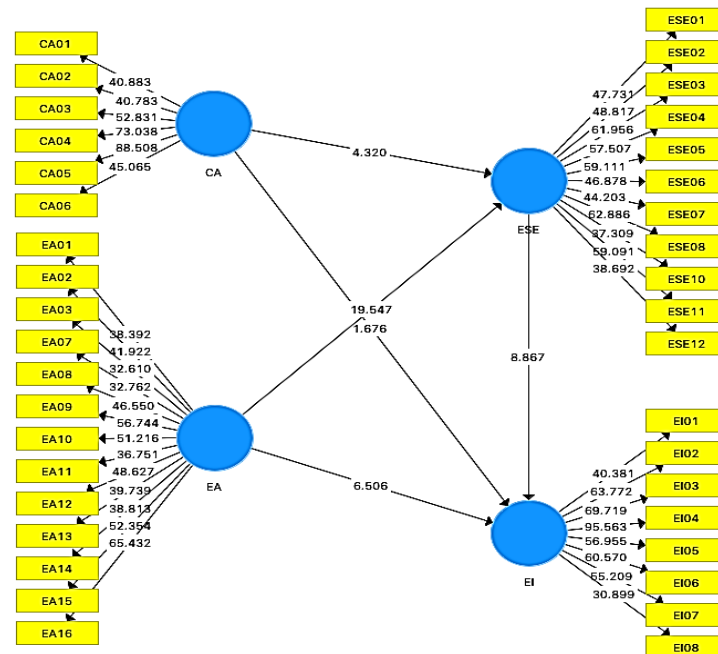


Figure 2. Measurement and structural model estimation (CA, EA, ESE, and EI)

**3.2. Discussion**

The first hypotheses aim to find out the effect of CA and ESE on students. This study finds that there is a significant and positive effect between CA and ESE. CA which is designed to be case-based and project-based learning during the COVID-19 pandemic can trigger student participation to increase students' self-confidence to become entrepreneurs independently. This study also confirms the findings [27], [39], [40] that EE on campus (curriculum attendance) affects the ESE of undergraduate students. In line with the findings [27] which found that there was a positive and significant effect of EE on ESE in Poland.

However, other findings stated that EE did not have a positive influence on his research in the Czech Republic, Hungary, and Slovakia. This finding is possible because the elements of EE in each country are different, thus enabling different findings. Student CA is not only providing theoretical knowledge in class, but it is very important for students to have the ability to identify products that the market wants, develop unique ideas, design effective advertisements, design products, be able to collaborate with others, and be able to inspire others, and have the confidence to be able to build a business until it succeeds or succeeds. The second hypothesis finds that there is an influence between EA and ESE. This finding is in line with hypothesis 1 which finds that there is a positive and significant effect between CA on ESE.

Hypotheses 1 and 2 are supported by previous research [41] which explain that the learning method adopted by entrepreneurship lecturers has an influence on ESE in undergraduate students. EA that is actively participated by students outside of learning classes such as attending entrepreneurship seminars, entrepreneurship dialogues, and participating in student creativity programs that are not designed in the curriculum attendance during the COVID-19 period, are able to increase students' confidence to become successful entrepreneurs, it is also able to increase students' confidence in becoming successful entrepreneurs. EI of students while studying at the University. In addition to learning in class (curriculum attendance), the presence of entrepreneurs at seminars and scientific meetings outside the classroom (extracurricular activity) also has an influence on students' entrepreneurial self-efficacy.

Hypothesis 3 finds that there is no effect between CA and EI. CA that is designed contextually and involves the active role of students in the learning process during the COVID-19 pandemic cannot increase students' EI. This is an impact that occurs because the learning process is not optimal during the COVID-19 pandemic. These findings were not found in Ajzen theory, so these findings are important for further study. Previous studies [42], [43] discovered that there was no positive and significant effect between EE on students' EI. The entrepreneurial intention has decreased along with the increase in the length of education taken, but these findings contradict the opinion [17], [29], [31], [32], [44]–[47] which discovered that there is a positive influence of EE in the classroom (curriculum attendance) and EI.

Hypotheses 4 and 5 found that there is a positive and significant effect between EE and EI and ESE with entrepreneurial intention. It is irrelevant to these findings (Hypothesis 4), there was no positive and significant relationship between EA and EI [42]. This result is also relevant to previous research which showed that students do not think that education at university has a direct impact on business creation [48].

Fayolle and Gailly [49] found that students felt it was impossible to create their own businesses, but they felt inclined to work as organizational workers. ESE possessed by students is able to increase students' EI, this is because students have the ability to take curriculum attendance and extracurricular activities. Then the findings of hypothesis 5 are in line with the findings of Nowiński and Haddoud [22] that ESE has a close relationship with EI. Another study discovered that ESE became an exogenous variable and was able to strengthen the endogenous variable, namely EI, which could be strengthened by ESE variables related to searching, planning, marshaling, implementation people, and implementation finance. Entrepreneurial intention will be increased by growing ESE [22].

#### 4. CONCLUSION

The main purpose of this study is to determine the main factors that can affect entrepreneurial self-efficacy and entrepreneurial intention in students in Indonesia during the pandemic. We propose five hypotheses, four of which are accepted, namely H1, H2, H4, and H5, while H3 is rejected. The research findings show that curriculum attendance has a positive effect on entrepreneurial self-efficacy but has no significant effect on entrepreneurial intention. Then extracurricular activity has a positive and significant effect on entrepreneurial self-efficacy and entrepreneurial intention in students, and entrepreneurial self-efficacy has a significant effect on entrepreneurial intention.

The findings confirm that curriculum attendance cannot affect entrepreneurial intention but can increase student entrepreneurial self-efficacy. Extracurricular activity can affect entrepreneurial self-efficacy and entrepreneurial intention. This shows that extracurricular activities have a more positive impact on increasing entrepreneurial self-efficacy than only studying in class (curriculum attendance). These findings indicate that entrepreneurship curriculum is still not able to facilitate the increase of entrepreneurial intention, even though the entrepreneurial intention is one of the most important factors in shaping entrepreneurial behavior. This finding is an important input for stakeholders, especially university leaders to be able to reconstruct the entrepreneurship curriculum for students so that the entrepreneurship curriculum can have a positive impact on increasing entrepreneurial self-efficacy and entrepreneurial intention during the pandemic.

The limitation of this research is that the respondents only came from one university and only conducted a survey. Furthermore, future research needs to examine qualitative methods, so that the findings can be discovered in more detail. Further research suggested including other variables outside of the variables in this research model to determine the most influential factors to the entrepreneurial intention of students.

#### ACKNOWLEDGEMENTS

The authors express their gratitude for the assistance of various parties, especially to *Lembaga Penelitian dan Pengabdian kepada Masyarakat* (LPPM) Universitas Lambung Mangkurat, as stipulated in Contract No. 010. 41/UN8.2/PL/2021 which has provided financial support for this research.

## REFERENCES




- [1] K. A. S. Taha, S. N. Ramlan, and I. M. Noor, "The factors affecting entrepreneurial intentions of university students in Malaysia," *International Journal of Business and Technopreneurship*, vol. 7, no. 2, pp. 189–202, 2017.
- [2] M. A. Nazri, H. Aroosha, and N. A. Omar, "Examination of Factors Affecting Youths' Entrepreneurial Intention: A Cross-Sectional Study," *Information Management and Business Review*, vol. 8, no. 5, pp. 14–24, 2016.
- [3] A. Badulescu and D. Badulescu, "How entrepreneurial are doctoral students? some evidence from Romania," *Journal of Eastern Europe Research in Business and Economics*, pp. 1–10, Oct. 2013, doi: 10.5171/2013.186798.
- [4] I. A. Shah, S. Amjed, and S. Jaboo, "The moderating role of entrepreneurship education in shaping entrepreneurial intentions," *Journal of Economic Structures*, vol. 9, no. 1, p. 19, Dec. 2020, doi: 10.1186/s40008-020-00195-4.
- [5] S. Brammer and T. Clark, "COVID-19 and management education: reflections on challenges, opportunities, and potential futures," *British Journal of Management*, vol. 31, no. 3, pp. 453–456, Jul. 2020, doi: 10.1111/1467-8551.12425.
- [6] A. L. Marshall and A. Wolanskyj-Spinner, "COVID-19: challenges and opportunities for educators and generation z learners," *Mayo Clinic Proceedings*, vol. 95, no. 6, pp. 1135–1137, Jun. 2020, doi: 10.1016/j.mayocp.2020.04.015.
- [7] V. Ratten, "Coronavirus disease (COVID-19) and sport entrepreneurship," *International Journal of Entrepreneurial Behaviour and Research*, vol. 26, no. 6, pp. 1379–1388, Jul. 2020, doi: 10.1108/IJEBR-06-2020-0387.
- [8] A. Bandura, "Toward a psychology of human agency," *Perspectives on Psychological Science*, vol. 1, no. 2, pp. 164–180, Jun. 2006, doi: 10.1111/j.1745-6916.2006.00011.x.
- [9] S. Darmanto and G. Yuliari, "Mediating role of entrepreneurial self efficacy in developing entrepreneurial behavior of entrepreneur students," *Academy of Entrepreneurship Journal*, vol. 24, no. 1, pp. 1–14, 2018.
- [10] A. Newman, M. Obschonka, S. Schwarz, M. Cohen, and I. Nielsen, "Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research," *Journal of Vocational Behavior*, vol. 110, pp. 403–419, Feb. 2019, doi: 10.1016/j.jvb.2018.05.012.
- [11] S. Shane, "Delivering on the promise of entrepreneurship as a field of research," *Academy of Management Review*, vol. 37, no. 1, pp. 10–20, 2012.
- [12] Y. Shahab, Y. Chengang, A. D. Arbizu, and M. J. Haider, "Entrepreneurial self-efficacy and intention: do entrepreneurial creativity and education matter?" *International Journal of Entrepreneurial Behaviour and Research*, vol. 25, no. 2, pp. 259–280, Feb. 2019, doi: 10.1108/IJEBR-12-2017-0522.
- [13] J. Schmutzler, V. Andonova, and L. Diaz-Serrano, "How context shapes entrepreneurial self-efficacy as a driver of entrepreneurial intentions: a multilevel approach," *Entrepreneurship: Theory and Practice*, vol. 43, no. 5, pp. 880–920, Sep. 2019, doi: 10.1177/1042258717753142.
- [14] E. Kibler, "Formation of entrepreneurial intentions in a regional context," *Entrepreneurship and Regional Development*, vol. 25, no. 3–4, pp. 293–323, Apr. 2013, doi: 10.1080/08985626.2012.721008.
- [15] J. J. Chrisman and W. E. McMullan, "Some additional comments on the sources and measurement of the benefits of small business assistance programs," *Journal of Small Business Management*, vol. 40, no. 1, pp. 43–50, 2002, doi: 10.1111/1540-627X.00037.
- [16] G. Packham, P. Jones, C. Miller, D. Pickernell, and B. Thomas, "Attitudes towards entrepreneurship education: A comparative analysis," *Education + Training*, vol. 52, no. 8–9, pp. 568–586, Nov. 2010, doi: 10.1108/00400911011088926.
- [17] P. Westhead and M. Z. Solesvik, "Entrepreneurship education and entrepreneurial intention: Do female students benefit?" *International Small Business Journal: Researching Entrepreneurship*, vol. 34, no. 8, pp. 979–1003, Dec. 2016, doi: 10.1177/0266242615612534.
- [18] S. D. Barbosa, J. Kickul, and B. Smith, "The road less intended: integrating entrepreneurial cognition and risk in entrepreneurship education," *Journal of Enterprising Culture*, vol. 16, no. 04, pp. 411–439, 2008, doi: 10.1142/s0218495808000181.
- [19] H. Matlay, "Entrepreneurship education in UK business schools: conceptual, contextual and policy considerations," *Journal of Small Business and Enterprise Development*, vol. 12, no. 4, pp. 627–643, Dec. 2005, doi: 10.1108/14626000510628270.
- [20] H. Oosterbeek, M. van Praag, and A. Ijsselstein, "The impact of entrepreneurship education on entrepreneurship skills and motivation," *European Economic Review*, vol. 54, no. 3, pp. 442–454, Apr. 2010, doi: 10.1016/j.euroecorev.2009.08.002.
- [21] T. J. Bae, S. Qian, C. Miao, and J. O. Fiet, "The relationship between entrepreneurship education and entrepreneurial intentions: a meta-analytic review," *Entrepreneurship: Theory and Practice*, vol. 38, no. 2, pp. 217–254, Mar. 2014, doi: 10.1111/etap.12095.
- [22] W. Nowiński and M. Y. Haddoud, "The role of inspiring role models in enhancing entrepreneurial intention," *Journal of Business Research*, vol. 96, pp. 183–193, Mar. 2019, doi: 10.1016/j.jbusres.2018.11.005.
- [23] I. Ajzen, "The theory of planned behavior," *Organizational Behavior and Human Decision Processes*, vol. 50, no. 2, pp. 179–211, 1991, doi: 10.1016/0749-5978(91)90020-T.
- [24] A. Bandura, "Social cognitive theory: an agentic perspective," *Annual Review of Psychology*, vol. 52, no. 1, pp. 1–26, Feb. 2001, doi: 10.1146/annurev.psych.52.1.1.
- [25] N. A. Mozahem and R. O. Adlouni, "Using entrepreneurial self-efficacy as an indirect measure of entrepreneurial education," *International Journal of Management Education*, vol. 19, no. 1, p. 100385, Mar. 2021, doi: 10.1016/j.ijme.2020.100385.
- [26] A. Bandura, "The explanatory and predictive scope of self-efficacy theory," *Journal of Social and Clinical Psychology*, vol. 4, no. 3, pp. 359–373, Sep. 1986, doi: 10.1521/jscp.1986.4.3.359.
- [27] W. Nowiński, M. Y. Haddoud, D. Lančarič, D. Egerová, and C. Czeglédi, "The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries," *Studies in Higher Education*, vol. 44, no. 2, pp. 361–379, Feb. 2019, doi: 10.1080/03075079.2017.1365359.
- [28] D. T. Tung, N. T. Hung, N. T. C. Phuong, N. T. T. Loan, and S. C. Chong, "Enterprise development from students: The case of universities in Vietnam and the Philippines," *International Journal of Management Education*, vol. 18, no. 1, p. 100333, Mar. 2020, doi: 10.1016/j.ijme.2019.100333.
- [29] H. Sun, C. T. Lo, B. Liang, and Y. L. B. Wong, "Engineering students in Hong Kong," *The Impact of Entrepreneurial Education on Entrepreneurial Intention of Engineering Students in Hong Kong*, vol. 1, no. 1, pp. 123–156, 2017.
- [30] M. A. Uy, K. Y. Chan, Y. L. Sam, M. R. Ho, and O. S. Chernysenko, "Proactivity, adaptability and boundaryless career attitudes: The mediating role of entrepreneurial alertness," *Journal of Vocational Behavior*, vol. 86, pp. 115–123, Feb. 2015, doi: 10.1016/j.jvb.2014.11.005.
- [31] N. M. Cruz, A. I. Rodriguez Escudero, J. Hernangomez Barahona, and F. Saboia Leitao, "The effect of entrepreneurship education programmes on satisfaction with innovation behaviour and performance," *Journal of European Industrial Training*, vol. 33, no. 3, pp. 198–214, Apr. 2009, doi: 10.1108/03090590910950578.






- [32] R. Athayde, "Measuring Enterprise Potential in Young People," *Entrepreneurship Theory and Practice*, vol. 33, no. 2, pp. 481–500, 2009, doi: 10.1111/j.1540-6520.2009.00300.x.
- [33] M. Elnadi and M. H. Gheith, "Entrepreneurial ecosystem, entrepreneurial self-efficacy, and entrepreneurial intention in higher education: Evidence from Saudi Arabia," *International Journal of Management Education*, vol. 19, no. 1, p. 100458, Mar. 2021, doi: 10.1016/j.ijme.2021.100458.
- [34] H. Zhao, G. E. Hills, and S. E. Seibert, "The mediating role of self-efficacy in the development of entrepreneurial intentions," *Journal of Applied Psychology*, vol. 90, no. 6, pp. 1265–1272, 2005, doi: 10.1037/0021-9010.90.6.1265.
- [35] F. Liñán and Y.-W. Chen, "Erskine childers - a life dedicated to building a working world community," *Development Dialogue*, no. 56, pp. 593–617, 2009.
- [36] J. Cui, J. Sun, and R. Bell, "The impact of entrepreneurship education on the entrepreneurial mindset of college students in China: The mediating role of inspiration and the role of educational attributes," *International Journal of Management Education*, vol. 19, no. 1, p. 100296, Mar. 2021, doi: 10.1016/j.ijme.2019.04.001.
- [37] J. F. Hair, M. C. Howard, and C. Nitzl, "Assessing measurement model quality in PLS-SEM using confirmatory composite analysis," *Journal of Business Research*, vol. 109, pp. 101–110, Mar. 2020, doi: 10.1016/j.jbusres.2019.11.069.
- [38] J. F. Hair, G. T. M. Hult, C. M. Ringle, and M. Sarstedt, *A Primer o Partial Least Squares Structural Equation Modeling (PLS-SEM)*, Second ed. California: Sage, Thousand Oaks, 2017.
- [39] W. Byabashajja and I. Katono, "The impact of college entrepreneurial education on entrepreneurial attitudes and intention to start a business in Uganda," *Journal of Developmental Entrepreneurship*, vol. 16, no. 1, pp. 127–144, Mar. 2011, doi: 10.1142/S1084946711001768.
- [40] M. M. Gielnik, R. Bledow, and M. S. Stark, "A dynamic account of self-efficacy in entrepreneurship," *Journal of Applied Psychology*, vol. 105, no. 5, pp. 457–505, 2020, doi: 10.1037/apl0000451.
- [41] E. Abaho, D. R. Olomo, and C. Urasa, G, "Education + Training Article information: learning perspective," *Education + Training*, vol. 57, no. 5, pp. 492–511, 2015.
- [42] N. Arranz, F. Ubierna, M. F. Arroyabe, C. Perez, and J. C. Fdez. de Arroyabe, "The effect of curricular and extracurricular activities on university students' entrepreneurial intention and competences," *Studies in Higher Education*, vol. 42, no. 11, pp. 1979–2008, Nov. 2017, doi: 10.1080/03075079.2015.1130030.
- [43] D. D. Kusumojanto, A. Wibowo, J. Kustiandi, and B. S. Narmaditya, "Do entrepreneurship education and environment promote students' entrepreneurial intention? the role of entrepreneurial attitude," *Cogent Education*, vol. 8, no. 1, 2021, doi: 10.1080/2331186X.2021.1948660.
- [44] P. F. Izedonmi and C. Okafor, "The Effect of Entrepreneurship Education on Entrepreneurial Intention," *Global Journal of Management and Business Research*, vol. 10, no. 6, pp. 49–60, 2010, doi: 10.18032/kaaba.2020.33.3.443.
- [45] D. Maresch, R. Harms, N. Kailer, and B. Wimmer-Wurm, "The impact of entrepreneurship education on the entrepreneurial intention of students in science and engineering versus business studies university programs," *Technological Forecasting and Social Change*, vol. 104, pp. 172–179, Mar. 2016, doi: 10.1016/j.techfore.2015.11.006.
- [46] I. Otache, "Enhancing the effectiveness of entrepreneurship education: the role of entrepreneurial lecturers," *Education and Training*, vol. 61, no. 7–8, pp. 918–939, Aug. 2019, doi: 10.1108/ET-06-2018-0127.
- [47] R. S. Shinnar, D. K. Hsu, B. C. Powell, and H. Zhou, "Entrepreneurial intentions and start-ups: are women or men more likely to enact their intentions?" *International Small Business Journal: Researching Entrepreneurship*, vol. 36, no. 1, pp. 60–80, Feb. 2018, doi: 10.1177/0266242617704277.
- [48] Z. I. Ertuna and E. Gurel, "The moderating role of higher education on entrepreneurship," *Education and Training*, vol. 53, no. 5, pp. 387–402, Jun. 2011, doi: 10.1108/00400911111147703.
- [49] A. Fayolle and B. Gailly, "The impact of entrepreneurship education on entrepreneurial attitudes and intention: hysteresis and persistence," *Journal of Small Business Management*, vol. 53, no. 1, pp. 75–93, Jan. 2015, doi: 10.1111/jsbm.12065.

## BIOGRAPHIES OF AUTHORS






**Dwi Atmono**    is currently a lecturer at the Economic Education Study Program, Faculty of Teacher Training and Education, Lambung Mangkurat University, Indonesia. He is also a professor in the field of economic education. He completed his undergraduate education at IKIP Bandung since 1987. He also completed his master's education at Brawijaya University since 2001. He also completed his doctoral education at the State University of Malang since 2008. He can be contacted at email: [dwi.atmono@ulm.ac.id](mailto:dwi.atmono@ulm.ac.id).






**Muhammad Rahmattullah**    is currently a lecturer at the Economic Education Study Program, Faculty of Teacher Training and Education, Lambung Mangkurat University, Indonesia. He has completed his doctoral education at the State University of Malang since 2020. He can be contacted at email: [mrahmattullah@ulm.ac.id](mailto:mrahmattullah@ulm.ac.id).






**Ananda Setiawan**    is currently a lecturer at Economics Education Study Program, Faculty of Teacher Training and Education, Universitas Lambung Mangkurat, Indonesia. His main research directions are pre-service teacher training; entrepreneurial education research. He has completed his doctoral at Department of Economics education, Universitas Negeri Malang in 2022. He can be contacted at: [ananda.setiawan@ulm.ac.id](mailto:ananda.setiawan@ulm.ac.id).






**Rochman Hadi Mustofa**    is currently a lecturer at the Accounting Education study program, Faculty of Teacher Training and Education, Universitas Muhammadiyah Surakarta. He obtained a master's degree in Economics Education from Universitas Sebelas Maret. Currently, his research focus is on marketing, consumer behavior, economics learning, and research methodologies. He can be contacted at email: [rhm342@ums.ac.id](mailto:rhm342@ums.ac.id).






**Dias Aziz Pramudita**    is currently a lecturer at the Informatics Engineering Education Study Program, Faculty of Teacher Training and Education, Universitas Muhammadiyah Surakarta. He obtained a master's degree in Computer Science from Universitas Gadjah Mada. Currently, his research is focused on Technology in Education, IT-Based Learning Strategy, and Artificial Intelligence in Education. He can be contacted at email: [dap207@ums.ac.id](mailto:dap207@ums.ac.id).






**Titik Ulfatun**    is a lecturer at the Faculty of Teacher Training and Education, Universitas Muhammadiyah Surakarta, Indonesia. In 2016, she earned a B.Ed. from Universitas Negeri Yogyakarta. She worked as a teacher in a private vocational high school from 2016 to 2017. She completed her studies and graduated with an M.Ed. from Hiroshima University in 2019. Her research interest is related to teaching and learning, teacher competencies, and accounting education. She can be contacted at email: [titik.ulfatun@ums.ac.id](mailto:titik.ulfatun@ums.ac.id).



**Reza**    is currently a lecturer at the Economic Education Study Program, Faculty of Teacher Training and Education, Mulawarman University, Indonesia. He completed his doctoral education at the State University of Malang since 2020. He can be contacted at email: [reza\\_pendeko79@yahoo.co.id](mailto:reza_pendeko79@yahoo.co.id).



**Achmad Mustofa**    was appointed as a lecturer in 2019 at Universitas Syiah Kuala and became a teaching staff in the economic education program at the Faculty of Teacher Training and Education. His research focuses on economic education and entrepreneurship education. He can be contacted at email: [achmadmustofa@unsyiah.ac.id](mailto:achmadmustofa@unsyiah.ac.id).