

The Effectiveness of Entrepreneurship Education on Students' Self-Efficacy and Entrepreneurial Intention: A Comparative Study of Major Cities in Indonesia

Lydiawati Soelaiman^{1*}, Keni Keni¹, Tay Lee Chin²

¹Universitas Tarumanagara, Jakarta, Indonesia

²Tunku Abdul Rahman University of Management and Technology, Kuala Lumpur, Malaysia



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ABSTRACT

Objective: Entrepreneurship has become a strategic solution to address unemployment in Indonesia, where the entrepreneurial ratio remains relatively low at only 3.47%. This study investigates the role of entrepreneurship education in enhancing students' entrepreneurial self-efficacy and entrepreneurial intention within the context of higher education in Indonesian. **Method:** Using quantitative approach, this study utilizes PLS-SEM to examine relationship among constructs, while PLS-MGA was used to assess regional differences across. Samples consist of 537 undergraduate students who had participated in entrepreneurship education programs at excellent-status higher education institutions in Jakarta, Bandung, and Surabaya, selected through purposive sampling. **Results:** The result reveals that entrepreneurial education has a significant effect on both entrepreneurial intention and entrepreneurial self-efficacy. Furthermore, entrepreneurial self-efficacy partially mediates the relationship between entrepreneurship education and entrepreneurial intention. The MGA results show no significant differences across the three cities, except for the effect of entrepreneurship education on self-efficacy between Jakarta and Surabaya. **Novelty:** Overall, the findings suggest relatively consistent effects of entrepreneurship education across major urban areas in Java. This study provides practical implication for developing experience-based entrepreneurship programs in HEIs.

INTRODUCTION

Entrepreneurship has become a strategic solution in overcoming the unemployment problems in Indonesia, that has reached the second highest number in South-East Asia. Increasing the entrepreneurial ratio is one of the most effective strategies in decreasing the unemployment number. Currently, the entrepreneurial ratio in Indonesia remains low, which is only 3.47% of total population, thus needs more effort to enhance the community's involvement in entrepreneurial activities (Mu Minah & Soelaiman, 2024). This condition raises a critical academic and policy-related question regarding the effectiveness of entrepreneurship education as a long-term intervention for fostering entrepreneurial intention, particularly within higher education contexts.

Entrepreneurial education in Higher Educational Institutions (HEIs) is believed to be one among the main strategies to develop the students' entrepreneurial framework of thinking with required business skills (Valliere, 2017). The optimization of entrepreneurial education is needed, because it can prepare students with important practical knowledge and skills to achieve success in business (Balan, 2021); (Hayter et al., 2017). In response to the necessity of entrepreneurial enhancement, the Indonesian government initiated a curriculum in order to fill the gap between the competence of graduates and the necessity of business world. These curriculum reforms, including

initiatives such as *Merdeka Belajar Kampus Merdeka*, emphasize real-world exposure, project-based learning, and industry engagement as core pedagogical approaches (Kemendikbudristek, 2024). This program provides the opportunity to students to gain practical experience outside their campus, thus they can enhance their skills and acquire experience directly supporting their readiness to build effective entrepreneurial education should be able to equip students with essential skills to face business uncertainty in more adaptive ways (Bischoff et al., 2018).

The study conducted by (Elnadi & Gheith, 2021) confirms that variation in entrepreneurial self-efficacy can be affected by the factors of social-demography, individuals' character, and access to the implementation of entrepreneurial education. However, the extent to which this curriculum produces consistent outcomes across different regional contexts remains empirically underexplored. Prior studies have predominantly examined entrepreneurship education in a generalized manner, often overlooking contextual and regional variations that may influence its effectiveness. This limitation is particularly relevant in large and diverse countries such as Indonesia, where institutional quality, economic ecosystems, and socio-cultural characteristics vary significantly across regions.

Research on entrepreneurial intention has become essential nowadays because individuals with entrepreneurial intentions have a higher tendency to start their businesses (Soelaiman et al., 2024). Nevertheless, empirical findings remain inconclusive, as several studies report that entrepreneurship education does not always translate into stronger entrepreneurial intention, especially in emerging countries such as Indonesia (Apriliana et al., 2025; Chai & Soelaiman, 2024; Kusumojanto et al., 2021; Mu Minah & Soelaiman, 2024).

Among the psychological mechanisms underlying entrepreneurial behavior, entrepreneurial self-efficacy has been consistently identified as a crucial factor, referring to the belief of a person toward his/her capability to run and expand business (Pushkarskaya et al., 2021); (Brändle et al., 2018); (Hsu et al., 2017). Prior studies indicate that entrepreneurship education alone does not automatically translate into entrepreneurial intention unless it is internalized as entrepreneurial self-efficacy (Anwar et al., 2022; Geovani & Soelaiman, 2025; Hoang et al., 2021; Purwati et al., 2020). Within the Theory of Planned Behavior (TPB), entrepreneurial self-efficacy reflects perceived behavioral control, which plays a central role in shaping entrepreneurial intention. In this regard, HEIs play a strategic role in building the intellectual capacity and self-efficacy of students, thus enabling them to be better prepared to engage in entrepreneurship (Passaro et al., 2018).

Addressing these gaps, this study examines the influence of entrepreneurship curriculum on entrepreneurial self-efficacy and entrepreneurial intention, while also investigating whether these effects differ across three major Indonesian cities- Jakarta, Bandung, Surabaya- using Partial Least Squares Multi-Group Analysis (PLS-MGA). Thus, this study does not only confirm the relationship among variables, but also evaluate whether there are regional differences in the effectiveness of entrepreneurship curriculum implementation in entrepreneurial education.

The findings of this study are expected to inform policymakers and HEIs in refining entrepreneurship curriculum design, especially in tailoring interventions that are relevant to varying regional contexts. Moreover, this study also contributes in identifying specific challenges in each area, thus the applied policy can be more adaptive toward the economic and social condition in such area. The increase of entrepreneurial education quality is expected to generate highly competitive entrepreneurs who can contribute in national economic growth.

Theoretical Framework

Theory of Planned Behavior (TPB) serves as the main fundamental theory in this study. TPB is explained by as an individual's intention to conduct certain behavior, that can be predicted by core components which are attitude toward behavior, subjective norm, as well as perceived behavioral control (Ajzen, 2020). Among these components, perceived behavioral control plays a particularly critical role in behavioral contexts characterized by uncertainty, risk, and individual agency that inherently define entrepreneurial activity.

Within the context of entrepreneurship education, this study deliberately focuses on perceived behavioral control as the most proximal psychological mechanism linking educational experiences to entrepreneurial intention. Prior studies indicate that perceived behavioral control often exhibits stronger and more consistent explanatory power in predicting entrepreneurial intention compared to attitude and subjective norm, particularly among students who are still in the intention-formation stage (Jena, 2020); (Şahin et al., 2019). This evidence provides a theoretical basis for simplifying the TPB framework by prioritizing the component most directly influenced by educational interventions.

Perceived behavioral control in TPB, is often associated with self-efficacy, as both variables can affect the belief of an individual toward his/her capability to act in challenging situations. Drawing on Self-Efficacy Theory (Bandura, 1997), this study positions entrepreneurial self-efficacy as a mediating mechanism rather than a parallel predictor. This modeling choice reflects the assumption that entrepreneurship education does not directly generate entrepreneurial intention, but instead operates by strengthening students' confidence in their entrepreneurial capabilities, which subsequently translates into intention. This mediating specification is consistent with prior empirical findings that identify self-efficacy as a key transmission mechanism between entrepreneurship education and entrepreneurial intention (Anwar et al., 2022; Geovani & Soelaiman, 2025; Hoang et al., 2021; Purwati et al., 2020).

Entrepreneurial Education on Intention

The entrepreneurial education's role has been recognized in many literatures, and as the result, it becomes the most dominant factor in enhancing entrepreneurial intention (Appiah-Nimo et al., 2018); (Soria-Barreto et al., 2017). Entrepreneurial education has a beneficial function in enhancing entrepreneurial intention, because it can provide the students with sufficient understanding and capability in performing entrepreneurship (T. M. A. T. Mahmood et al., 2020); (Adu et al., 2020); (Li et al., 2021). Not only does

entrepreneurial education increase students' business skills, but it also affects their perception on entrepreneurship as potential career choice (Dimov, 2017); (Passaro et al., 2018). This subjective behavior can be affected by qualitative element that exists during the process of entrepreneurial learning in HEIs. Entrepreneurial education and training can strengthen the entrepreneurial intention of individuals. In addition, the study expresses that entrepreneurial education with experiential learning is needed besides the conventional learning method (Liu et al., 2019).

H₁: Entrepreneurial education affects entrepreneurial intention.

Entrepreneurial Education on Self-Efficacy

Many previous research show that learning environment through education significantly support the formation of an individual's self-efficacy, especially in entrepreneurial context (Malebana & Swanepoel, 2014); (Kim-Soon et al., 2022). Entrepreneurial education is affected by the teachers' competence related to student's perception toward attitude, skills, and knowledge on entrepreneurship. Teachers as a role model can enhance students' self-confidence, which then impacts the enhancement of their self-efficacy (Setiawan et al., 2022); (Newman et al., 2019). Entrepreneurial education has three elements, which are learning, inspiration, and incubation (Ahmed et al., 2020). Learning involves the increase of students' self-confidence in form of business management, inspiration refers to the stimulation of students to perform entrepreneurship through role-model interaction, while incubation provides opportunity to students develop their business through business competition, internship program, and mentor support (Saptono et al., 2021). In general, students who have received entrepreneurial education, have high self-efficacy level to develop entrepreneurial competence, which focuses on value creation (Yeh et al., 2021); (Kayed et al., 2022). Thus, the curriculum of entrepreneurial education should include a chapter focusing on the development of individuals' perception and interaction with the environment, which finally can increase their self-efficacy (Oluwafunmilayo et al., 2018).

H₂: Entrepreneurial education affects entrepreneurial self-efficacy.

Entrepreneurial Self-Efficacy on Intention

Self-Efficacy becomes the key-predictor in entrepreneurial formation (Liu et al., 2019); (Bazkiaei et al., 2021). Confidence on self-capability is closely connected to entrepreneurial intention, because entrepreneurship constitutes a planned and intended behavior (Şahin et al., 2019); (Soomro & Shah, 2020). A study stressed that the higher a person's self-efficacy is, then the higher the probability that he/she will be committed in entrepreneurial activities (Newman et al., 2019). Students who have undergone entrepreneurial education may be able to better enhance their self-efficacy (Ebewo et al., 2017). Students' will can develop stronger self-efficacy on their capability to face entrepreneurial challenges (Nwosu et al., 2022). This is also supported by the study conducted by (Dinc & Budic, 2016), in which their finding shows a positive relationship between self-efficacy and intention.

H₃: Entrepreneurial self-efficacy affects entrepreneurial intention.

Self-Efficacy as A Mediator in The Effect of Entrepreneurial Education on Intention

Several recent studies have proven that self-efficacy acts as a mediator in the connection between entrepreneurial education and intention (Vamvaka et al., 2020); (Liao et al., 2022); (Alhiassah et al., 2024). Entrepreneurial self-efficacy can connect a gap between the effect of knowledge and skills received from entrepreneurial education on an individual's decision to run a business as part of their goals and career choices (Anwar et al., 2021). HEIs plays an important role in encouraging students' internal motivation in order to be more ready to enter the entrepreneurial world (Setiawan & Lestari, 2021). Furthermore, self-efficacy affects students' intention who have received entrepreneurial education (Otache, 2019). Therefore, self-efficacy has capability to mediate the connection between entrepreneurial education and the students' will to perform entrepreneurship as their career paths (Adu et al., 2020).

H₄: Entrepreneurial self-efficacy mediates the relationship between entrepreneurial education and entrepreneurial intention.

Despite the growing literature on entrepreneurial education, few studies have examined its effectiveness within the context of national curriculum reforms in developing countries, particularly using a comparative regional lens. Given regional differences in socio-economic conditions and entrepreneurial ecosystems, this study further examines whether the structural relationships in the proposed model differ across regions in Indonesia. Multi-Group Analysis (MGA) is conducted to compare whether these relationships differ across three regions: Jakarta, Bandung, and Surabaya.

H_{comp}: There are no significant differences in the structural relationships among entrepreneurship education, entrepreneurial self-efficacy, and entrepreneurial intention across regions in Indonesia.

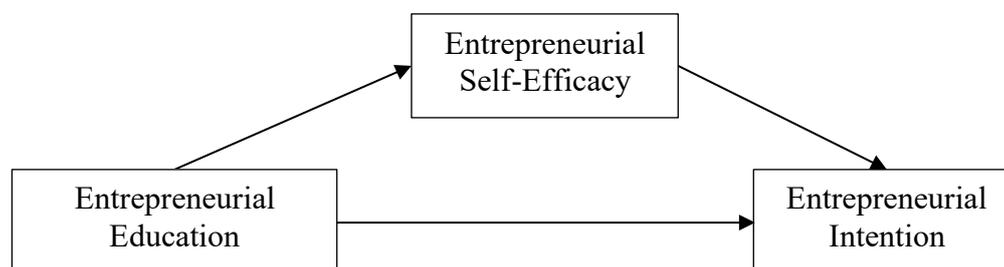


Figure 1. Research Model

RESEARCH METHOD

Study Design

In this study, PLS-SEM was used to perform the prediction between construct, and PLS-MGA was used to reveal the effect differences among variables contained in the model. This study previously tested the model validity and reliability to determine that the applied model can be compared in a valid way. Validity test was conducted by using PLS-SEM with the criteria of AVE ≥ 0.5 and outer loadings > 0.7 (Hair et al., 2019). Next, reliability test was performed by using the composite reliability rho_a and rho_c with the

reference value > 0.7 (Hair et al., 2014) to ensure internal consistency from the constructs measured.

To avoid bias in the comparison between groups, this study also performed the MICOM test (Cheah et al., 2023). Measurement invariance was examined using the MICOM procedure (Klesel et al., 2022). The assessment includes three steps: Configural invariance, Compositional invariance, and Equality of composite means and variances. To avoid bias in the comparison between groups, this study also performed the MICOM test (Cheah et al., 2023).

Population and Sample

Population in this study are students in HEIs located in Java Island. Samples were collected from Excellent-Status HEIs located in three provincial capital cities, which are Jakarta, Bandung, and Surabaya. The selection of these cities is theoretically grounded in entrepreneurial ecosystem theory, which emphasizes the role of regional economic development, institutional quality, and innovation infrastructure in shaping entrepreneurial outcome (Stam, 2015). These cities host a large number of well-established HEIs and function as major educational hubs that attract students from diverse regions across Indonesia, allowing the sample to capture variation in student backgrounds within advanced urban contexts. Furthermore, the inclusion of Excellent-Status HEIs strengthens the study's external validity, as these institutions are nationally accredited based on standardized criteria related to curriculum quality, learning outcomes, and institutional capacity.

Samples were collected by using the purposive-sampling technique with some pre-determined criteria. In this study, the criteria for samples are active students in undergraduate level who have undergone the entrepreneurial education in their own HEI. The purposive sampling method was applied to ensure that respondents have experience that is relevant to this study, thus can provide more accurate response related to the effect of entrepreneurial education and self-efficacy on intention. While purposive sampling is appropriate for theory-driven research focusing on specific institutional and curricular contexts, it also entails potential self-selection bias, as participation was limited to students who possess interest to entrepreneurship.

Instrument

Data was gathered through questionnaire consisting of questions adapted from previous studies and their validity have been confirmed through empirical studies. The variable of entrepreneurial education adopted from (Duval-Couetil et al., 2012) and (Ordu, 2019) contains the indicators consisting of: the curriculum supporting business knowledge and skills; the knowledge to develop business ideas; the opportunity to envision business ideas; the opportunity to participate in entrepreneurial competition; the support in form of entrepreneurial seminar; and business incubator. The variable of entrepreneurial self-efficacy has indicators adopted from (Puni et al., 2018) consisting of: the confidence to contribute to community through entrepreneurship; the ability to identify business opportunity; the ability to perform entrepreneurial activity; being able to think creatively; the confidence to build a business. Last, the variable of entrepreneurial intention was taken from the study conducted by (Liñán & Fayolle, 2015) consisting of the indicators as follows: the readiness to start a business, the effort to run own-business; the plan to start

a business; the commitment to start a business; and entrepreneurship as the main professional goal. Each item in the questionnaire uses Likert-scale, having the range from Strongly Disagree (1) to Strongly Agree (5).

Data Analysis

This study adopted a quantitative approach using Partial Least Squares–Structural Equation Modeling (PLS-SEM), complemented by Multi-Group Analysis (MGA) to examine differences in structural relationships across respondent groups (Cheah et al., 2023). In multivariate analysis using PLS-SEM, an adequate sample size is essential to ensure sufficient statistical power and reliable parameter estimation. According to (Hair Jr et al., 2021), a minimum sample size of ten times the number of latent variables or structural paths in the model is generally recommended. As this study includes three latent constructs—entrepreneurship education, entrepreneurial self-efficacy, and entrepreneurial intention—the minimum required sample size per group was 30 respondents.

RESULTS AND DISCUSSION

Results

For data collection purpose, 537 respondents were involved, which originated from three provinces in Java Island, which are Jakarta (210 students), Bandung (157 students), and Surabaya (170 students). The respondents' characteristics were classified based on age, gender, educational background, and family background. Among those respondents, majority are males (272 students) and the remaining are females (265 students). Based on educational background, most respondents originated from non-business-management major (307 students), while the remaining (230 students) originated from business-management major. Based on age, majority respondents were 20 – 21 y.o. (193 students), and followed by the age group of 21 – 24 y.o. (147 students). In addition, most respondents had entrepreneurial family background (343 students), thus may affect their decision to become entrepreneurs.

Before performing the main data analysis, this study initially tested the outer-model by using PLS-SEM to measure the validity and reliability test of acquired data. The results indicated that indicators ESE2 and ESE3 did not meet the convergent validity criterion, as their outer loading values were below the recommended threshold of 0.708, therefore, these indicators were removed from the model. Indicators with outer loadings below this threshold contribute insufficiently to the construct and may weaken construct reliability and validity (Hair et al., 2019). After the elimination of these indicators, the remaining indicators demonstrated satisfactory convergent validity presented in Table 1.

Next, convergent validity test result shows that all variables used in this study have met the criteria due to having the AVE larger than 0.50 (Hair Jr et al., 2021). In reliability analysis, the internal consistency was tested using composite reliability, and the result shows that each variable passed the test, due to having the composite reliability larger than 0.7 (Hair et al., 2019). Based on the validity and reliability test result in Table 1, all instruments have met the measurement criteria, thus the next-stage analysis can be performed.

Table 1. The loading factor of indicators

Variable	Indicator	Outer Loadings	AVE	Composite Reliability (rho_a)	Composite Reliability (rho_c)
Entrepreneurial Education	EE-1	0.837	0.640	0.870	0.899
	EE-2	0.845			
	EE-3	0.776			
	EE-4	0.789			
	EE-5	0.749			
Entrepreneurial Self-Efficacy	ESE-1	0.764	0.619	0.703	0.829
	ESE-4	0.749			
	ESE-5	0.843			
Entrepreneurial Intention	EI-1	0.760	0.611	0.843	0.887
	EI-2	0.781			
	EI-3	0.742			
	EI-4	0.781			
	EI-5	0.842			

Source: Data Processed through SmartPLS Version 4 (2025)

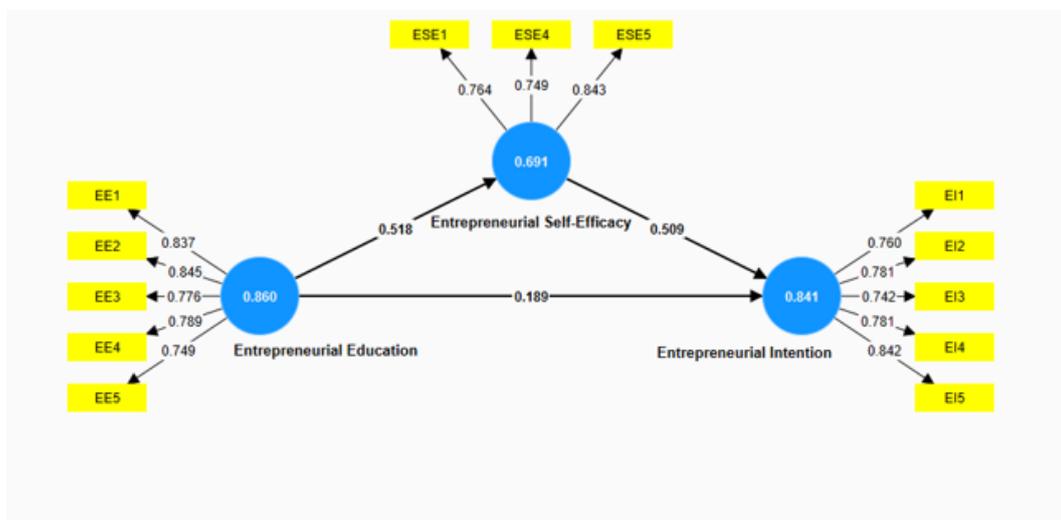


Figure 2. Outer Loadings, Path Coefficients, dan Cronbach's Alpha

Table 2. The evaluation of inner model

Data	Relationship	β	t-value	p-value	Conclusion
Complete n = 537	ED → EI	0.189	4.613	0.000	Accepted
	ED → ESE	0.518	13.520	0.000	Accepted
	ESE → EI	0.509	12.147	0.000	Accepted
	ED → ESE → EI	0.264	8.903	0.000	Accepted
Jakarta n = 210	ED → EI	0.278	4.115	0.000	Accepted
	ED → ESE	0.628	12.876	0.000	Accepted
	ESE → EI	0.452	6.609	0.000	Accepted
	ED → ESE → EI	0.284	6.212	0.000	Accepted
Bandung	ED → EI	0.197	3.274	0.001	Accepted

Data	Relationship	β	t-value	p-value	Conclusion
n = 157	ED \rightarrow ESE	0.495	6.299	0.000	Accepted
	ESE \rightarrow EI	0.485	4.509	0.000	Accepted
	ED \rightarrow ESE \rightarrow EI	0.240	3.445	0.001	Accepted
	ED \rightarrow EI	0.196	2.578	0.010	Accepted
Surabaya n = 170	ED \rightarrow ESE	0.367	5.870	0.000	Accepted
	ESE \rightarrow EI	0.586	8.363	0.000	Accepted
	ED \rightarrow ESE \rightarrow EI	0.215	4.530	0.000	Accepted

Source: Data Processed through SmartPLS Version 4 (2025)

The results as shown in Table 2 explain that, in general (among the students in Jakarta, Bandung, and Surabaya), the entrepreneurial education effect is significant toward intention ($\beta = 0.189$; t-value = 4.613; p-value = 0.000). The same phenomenon also happens in the entrepreneurial education effect on self-efficacy ($\beta = 0.518$; t-value = 13.520 dan p-value = 0.000). Moreover, entrepreneurial self-efficacy effect is also significant toward intention ($\beta = 0.509$; t-value = 12.147 dan p-value = 0.000). The finding also indicates that entrepreneurial self-efficacy significantly mediates the connection between entrepreneurial education and intention partially ($\beta = 0.264$, t-value = 8.903 dan p-value = 0.000).

In addition, the research result in each province also shows the same pattern, in which there is a positive and significant effect of the independent variable toward the dependent one. Specifically, the students in Jakarta shows the strongest effect of entrepreneurial education on intention ($\beta = 0.278$) as well as on self-efficacy ($\beta = 0.628$). Meanwhile, in Surabaya, although the effect is significant, the correlation coefficient is less compared to those in the other two provinces, which are $\beta = 0.196$ for entrepreneurial intention and $\beta = 0.367$ for entrepreneurial self-efficacy. This study proves that entrepreneurial self-efficacy can perform as a mediator in increasing entrepreneurial intention among the students, although there is a variation in the level of effect among the observed provinces.

Next, the difference test was performed to find out the difference of effect in the observed variables in each province. Prior to performing the difference test, the MICOM test was performed initially to determine whether the MGA approach can be applied. The first-phase was performed by using Configural Invariance test to ensure that the structure of variables and indicators used in each group of samples is the same, and data has passed the validity and reliability test (Cheah et al., 2023). In this phase, the Configural Invariance test has been passed. In the second phase, the Compositional Invariance test was performed by using permutation method, and the result shows that most variables have met the criteria with permutation p-value bigger than 0.05. And in the last phase, the Scalar Invariance test was used to measure the average difference and variance among groups. If the average difference and variance have permutation value larger than 0.05, it can be concluded that there is no difference among the groups (Cheah et al., 2023).

Table 3. The result of MICOM test

Constructs	Compositional Invariance	Equal Mean Value	Equal Variances
Jakarta VS Bandung			
Entrepreneurial Education	0.323	0.119	0.634
Entrepreneurial Self-Efficacy	0.042	0.395	0.224
Entrepreneurial Intention	0.938	0.452	0.535
Jakarta VS Surabaya			
Entrepreneurial Education	0.183	0.000	0.000
Entrepreneurial Self-Efficacy	0.043	0.129	0.019
Entrepreneurial Intention	0.437	0.571	0.260
Bandung VS Surabaya			
Entrepreneurial Education	0.130	0.000	0.000
Entrepreneurial Self-Efficacy	0.036	0.480	0.179
Entrepreneurial Intention	0.158	0.912	0.100

Source: Data Processed through SmartPLS Version 4 (2025)

The results show that configural invariance and compositional invariance were achieved for all constructs, while full invariance was not reached for ESE. However, partial measurement invariance is sufficient to proceed with MGA allowing valid comparison of path coefficients across groups (Klesel et al., 2022). Therefore, MGA was conducted to examine the difference in effects among the three provinces. Next, the difference test by using PLS-MGA procedure with the result in form of hypothesis test is explained in Table 4. The significant difference among provinces exists, if the value is lower than 0.05 (Cheah et al., 2023).

Table 4. The result of difference test by using PLS-MGA

Relationship	Group	diff	p-value	Conclusion
ED → EI	Jakarta vs Bandung	0.082	0.451	Not Accepted
	Jakarta vs Surabaya	0.082	0.385	Not Accepted
	Bandung vs Surabaya	0.001	0.996	Not Accepted
ED → ESE	Jakarta vs Bandung	0.134	0.074	Not Accepted
	Jakarta vs Surabaya	0.261	0.002	Accepted
	Bandung vs Surabaya	0.127	0.260	Not Accepted
ESE → EI	Jakarta vs Bandung	-0.033	0.746	Not Accepted
	Jakarta vs Surabaya	-0.133	0.187	Not Accepted
	Bandung vs Surabaya	-0.101	0.366	Not Accepted
ED → ESE → EI	Jakarta vs Bandung	0.044	0.538	Not Accepted
	Jakarta vs Surabaya	0.069	0.366	Not Accepted
	Bandung vs Surabaya	0.025	0.757	Not Accepted

Source: Data Processed through SmartPLS Version 4 (2025)

Note: ED (Entrepreneurial Education), ESE (Entrepreneurial Self-Efficacy), EI (Entrepreneurial Intention)

Based on the result in Table 4, there is no difference in the entrepreneurial education's effect on intention among the students in Jakarta, Bandung, and Surabaya.

The same result also occurs in the effect of entrepreneurial self-efficacy on intention. Nevertheless, there is a significant difference between the effect of entrepreneurial education on self-efficacy among the students in Jakarta and those in Surabaya (p -value = 0.002, which is less than 0.05). On contrast, there is no significant difference in such effect between the students in Jakarta and those in Bandung, as well as between the students in Bandung and those in Surabaya.

This study's result also reveals that the entrepreneurial self-efficacy's role as mediator between entrepreneurial education and intention, does not show significant difference among the group of students in Jakarta, Bandung, and Surabaya. Hence, in overall, the entrepreneurial education effect on intention through self-efficacy is relatively consistent in those three provinces, without any significant difference.

Discussion

This study extends prior empirical findings (Bae et al., 2014; Bazkiaei et al., 2021; Mahmood et al., 2020) which provides evidence that entrepreneurial education has a positive and significant effect on entrepreneurial intention. The educational process can help the development of entrepreneurial competence which finally encourages the will to conduct entrepreneurship (Liu et al., 2019); (Wang et al., 2023). Importantly, the relatively similar pattern of influence observed across metropolitan regions suggests that a standardized entrepreneurship curriculum may function as an equalizing mechanism, generating comparable motivational outcomes in regions with similar institutional capacity. From a theoretical standpoint, this finding implies that curriculum coherence and pedagogical design may exert a stronger influence on entrepreneurial intention than regional location alone, particularly in developing-country contexts where national curricula play a central role in shaping educational delivery.

From a practical perspective, the magnitude of the observed effects indicates that entrepreneurship education meaningfully enhances students' readiness to consider entrepreneurship as a viable career option. By integrating theoretical understanding with practical experience, can substantially strengthen students' entrepreneurial intentions by equipping them with relevant business knowledge, fostering problem-solving and critical-thinking abilities, and providing opportunities to apply learned concepts in real-world contexts. These mechanisms collectively reduce psychological entry barriers and increase students' preparedness for entrepreneurial engagement.

This study also provides theoretical support for entrepreneurial self-efficacy as a central psychological mechanism through which entrepreneurship education operates. The findings indicate that the higher the students' self-efficacy toward entrepreneurial capability is, the higher the tendency that they will involve in entrepreneurial activities (Newman et al., 2019). This finding aligns with prior studies (Wu et al., 2022), (Yousaf et al., 2020) and (Wang et al., 2023) showing that entrepreneurial education strengthens an individual's confidence in overcoming entrepreneurial challenges. Beyond confirming existing evidence, this finding highlights that entrepreneurship education primarily influences entrepreneurial outcomes by strengthening students perceived capability to act entrepreneurially, rather than merely increasing their exposure to business knowledge. This finding in line with self-efficacy theory (Bandura, 1997), educational experiences that provide mastery learning, experiential tasks, and real-world problem-

solving opportunities contribute to stronger behavioral persistence and goal commitment.

The observed increase in entrepreneurial self-efficacy carries meaningful implications for students' entrepreneurial readiness. Higher self-efficacy reduces fear of failure, increases tolerance for ambiguity, and enhances students' willingness to initiate entrepreneurial action. Consequently, even moderate improvements in self-efficacy may substantially lower psychological barriers to entrepreneurship among university students, reinforcing the importance of confidence-building mechanisms within entrepreneurship curricula.

Although entrepreneurial education directly affects entrepreneurial intention, the findings demonstrate that this effect becomes stronger when mediated by entrepreneurial self-efficacy. This finding is the same as prior studies that confirming that self-efficacy mediates the connection between entrepreneurial education to entrepreneurial intention (Nowiński et al., 2019); (Zhang et al., 2016). From a theoretical perspective, this supports the argument that educational interventions do not automatically translate into intention unless students internalize the acquired knowledge and experiences as confidence in their own entrepreneurial capabilities. Rather than functioning merely as a parallel predictor, self-efficacy captures the psychological transformation process through which educational exposure is converted into intentional readiness to act entrepreneurially.

Within the Theory of Planned Behavior (TPB), entrepreneurial self-efficacy represents perceived behavioral control, which is expected to operate relatively consistently across contexts where institutional structures and educational delivery systems are comparable. The absence of significant differences across most structural paths suggests that entrepreneurship education strengthens perceived behavioral control in a stable manner across metropolitan regions with similar levels of educational infrastructure and ecosystem maturity. This finding supports the assumption that, under standardized curriculum conditions, perceived behavioral control functions as a robust psychological mechanism that is less sensitive to regional variation within advanced institutional contexts.

Furthermore, while the effect of students' entrepreneurial self-efficacy on intention does not show any significant difference between Jakarta - Bandung and Bandung - Surabaya. On contrary, this study identifies a significant difference in the effect of entrepreneurial education on entrepreneurial self-efficacy among the students in Jakarta and Surabaya. This finding indicates that while the overall TPB structure remains valid, the strength of perceived behavioral control formation may vary depending on regional ecosystem characteristics. Prior studies on entrepreneurial ecosystems suggest that regions with more diversified and innovation-oriented economic structures tend to provide stronger reinforcement for entrepreneurial self-efficacy through visible role models, networks, and institutional support (Stam, 2015). In contrast, Surabaya's entrepreneurial landscape has traditionally been more concentrated in trade- and SME-based activities, which may offer fewer opportunities for students to engage with innovation-driven entrepreneurial role models, thereby limiting the extent to which educational exposure translates into entrepreneurial self-efficacy.

Finally, the mediating role of entrepreneurial self-efficacy's in the relationship between entrepreneurial education and intention, does not show significant differences

across provinces. This phenomenon confirms that although there is a variation in the enhancement of self-efficacy affected by entrepreneurial education, the entrepreneurial intention formation process through education and self-efficacy in general remains consistent across the observed region.

Taken together, the MGA findings indicate a pattern of partial regional consistency rather than complete uniformity across regions. While most structural relationships remain stable across Jakarta, Bandung, and Surabaya, the presence of a significant difference in the entrepreneurship education–self-efficacy relationship suggests that regional ecosystem characteristics can condition the strength of perceived behavioral control formation. Accordingly, the observed “regional consistency” reflects similarities among metropolitan areas within Java rather than uniformity across Indonesia as a whole. In regions outside Java, where access to higher education resources, entrepreneurial networks, and role models may be more limited, the strength and mechanisms through which entrepreneurship education influences self-efficacy and entrepreneurial intention may differ. These contextual differences constitute important boundary conditions, indicating that the relationships identified in this study are most applicable to regions with comparable levels of infrastructure, institutional support, and entrepreneurial ecosystem maturity.

CONCLUSION

Fundamental Finding: This study finds that entrepreneurship education significantly enhances students' entrepreneurial intention primarily through entrepreneurial self-efficacy. Entrepreneurial self-efficacy is empirically validated as a key mediating mechanism within the Theory of Planned Behavior, strengthening perceived behavioral control. The findings also reveal that the effects of entrepreneurship education are largely consistent across major metropolitan regions in Java, although limited regional variation exists in the relationship between entrepreneurship education and self-efficacy.

Implication: The results suggest that entrepreneurship education should prioritize the development of entrepreneurial self-efficacy rather than focusing solely on knowledge transmission. Policymakers and universities are encouraged to integrate experiential learning components—such as business projects, internships, and mentoring—into entrepreneurship curricula, while adopting differentiated policies to address regional disparities in entrepreneurial ecosystems. **Limitation:** This study is limited by its focus on three metropolitan areas in Java, which may restrict the generalizability of the findings to other regions with different institutional and economic. **Future Research:** Future studies should employ longitudinal and experimental designs to examine the long-term effects of entrepreneurship education. Incorporating mixed methods and contextual moderators—such as institutional support, local entrepreneurial culture, and regional policies—would further enrich understanding, particularly in less-developed regions outside Java.

REFERENCES

- Adu, I. N., Boakye, K. O., Suleman, A.-R., & Bingab, B. B. B. (2020). Exploring the factors that mediate the relationship between entrepreneurial education and entrepreneurial intentions among undergraduate students in Ghana. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(2), 215–228.
<https://journal.unesa.ac.id/index.php/jepk>

<https://doi.org/10.1108/apjie-07-2019-0052>

- Ahmed, T., Chandran, V. G. R., Klobas, J. E., Liñán, F., & Kokkalis, P. (2020). Entrepreneurship education programmes: How learning, inspiration and resources affect intentions for new venture creation in a developing economy. *International Journal of Management Education*, 18(1), 1-13. <https://doi.org/10.1016/j.ijme.2019.100327>
- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314-324. <https://doi.org/10.1002/hbe2.195>
- Alhiassah, M., Halim, M. A., Omar, K., & Hamid, R. B. A. (2024). Mediating role of entrepreneurial self-efficacy on the relationship of entrepreneurial education and personality traits on entrepreneurial intention of universities students. *Salud, Ciencia y Tecnologia - Serie de Conferencias*, 3, 1-12. <https://doi.org/10.56294/sctconf2024.1179>
- Anwar, I., Jamal, M. T., Saleem, I., & Thoudam, P. (2021). Traits and entrepreneurial intention: testing the mediating role of entrepreneurial attitude and self-efficacy. *J. International Business and Entrepreneurship Development*, 13(1), 40-60. <https://doi.org/10.1504/JIBED.2021.112276>
- Anwar, I., Thoudam, P., & Saleem, I. (2022). Role of entrepreneurial education in shaping entrepreneurial intention among university students: Testing the hypotheses using mediation and moderation approach. *Journal of Education for Business*, 97(1), 8-20. <https://doi.org/10.1080/08832323.2021.1883502>
- Appiah-Nimo, C., Ofori, D., Naa, K., & Arthur, A. (2018). Assessment of Entrepreneurship Education on Entrepreneurial Intentions: Evidence from University of Cape Coast. *Global Journal of Management and Business Research*, 18(9), 1-12. <https://journalofbusiness.org/index.php/GJMBR/article/view/2583>
- Apriliana, T., Suwarno, H. L., & Abednego, F. (2025). Entrepreneurship education and generation Z: Mediating effects of emotions and orientation on entrepreneurial intentions. *Jurnal Ekonomi Pendidikan Dan Kewirausahaan*, 13(2), 2025. <https://doi.org/10.26740/jepk.v13n2.p337-364>
- Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The Relationship Between Entrepreneurship Education and Entrepreneurial Intentions: A Meta-Analytic Review. *Entrepreneurship: Theory and Practice*, 38(2), 217-254. <https://doi.org/10.1111/etap.12095>
- Balan, I. M. (2021). The importance of entrepreneurial education for the business environment. *Romanian Journal of Economics*, 2(62), 68-77. <https://www.revecon.ro/articles/2021-2/2021-2-5.pdf>
<https://journal.unesa.ac.id/index.php/jepk>

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Bazkiaei, H. A., Khan, N. U., Irshad, A. ur R., & Ahmed, A. (2021). Pathways toward entrepreneurial intention among Malaysian universities' students. *Business Process Management Journal*, 27(4), 1009–1032. <https://doi.org/10.1108/BPMJ-01-2021-0021>
- Bischoff, K., Volkmann, C. K., & Audretsch, D. B. (2018). Stakeholder collaboration in entrepreneurship education: an analysis of the entrepreneurial ecosystems of European higher educational institutions. *Journal of Technology Transfer*, 43(1), 20–46. <https://doi.org/10.1007/s10961-017-9581-0>
- Brändle, L., Berger, E. S. C., Golla, S., & Kuckertz, A. (2018). I am what I am - How nascent entrepreneurs' social identity affects their entrepreneurial self-efficacy. *Journal of Business Venturing Insights*, 9, 17–23. <https://doi.org/10.1016/j.jbvi.2017.12.001>
- Cheah, J. H., Amaro, S., & Roldán, J. L. (2023). Multigroup analysis of more than two groups in PLS-SEM: A review, illustration, and recommendations. *Journal of Business Research*, 156, 1–19. <https://doi.org/10.1016/j.jbusres.2022.113539>
- Chai, M., & Soelaiman, L. (2024). Entrepreneurial intentions and readiness for startup among P2MW grant recipients. *Jurnal Ekonomi*, 29(2), 185–201. <https://doi.org/10.24912/je.v29i2.2107>
- Dimov, D. (2017). Towards a qualitative understanding of human capital in entrepreneurship research. *International Journal of Entrepreneurial Behaviour and Research*, 23(2), 210–227. <https://doi.org/10.1108/IJEER-01-2016-0016>
- Dinc, M. S., & Budic, S. (2016). The impact of personal attitude, subjective norm, and perceived behavioural control on entrepreneurial intentions of women. *Eurasian Journal of Business and Economics*, 9(17), 23–35. <https://doi.org/10.17015/ejbe.2016.017.02>
- Duval-Couetil, N., Rhoads, T. R., & Haghghi, S. (2012). Engineering students and entrepreneurship education: involvement, attitudes and outcomes. *International Journal of Engineering Education*, 28(2), 425–435. <https://www.researchgate.net/publication/286953529>
- Ebewo, P. E., Richard, S., & Robert, R. (2017). Entrepreneurial intentions of Tshwane University of technology, arts and design students. *African Journal of Business Management*, 11(9), 175–182. <https://doi.org/10.5897/ajbm2017.8253>
- Elnadi, M., & Gheith, M. H. (2021). Entrepreneurial ecosystem, entrepreneurial self-efficacy, and entrepreneurial intention in higher education: Evidence from Saudi Arabia. *International Journal of Management Education*, 19(1), 1–16. <https://doi.org/10.1016/j.ijme.2021.100458>
- <https://journal.unesa.ac.id/index.php/jepk>

- Geovani, K. G., & Soelaiman, L. (2025). The role of self-efficacy as a mediator in the effect of entrepreneurial education and mindset on entrepreneurial intentions. *Proceedings of the Thirteenth International Conference on Entrepreneurship and Business Management UNTAR 2024*, 243–252. https://doi.org/10.2991/978-94-6463-809-7_19
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106–121. <https://doi.org/10.1108/EBR-10-2013-0128>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). *Partial least squares structural equation modeling (PLS-SEM) Using R: A Workbook*. Springer. <https://doi.org/10.1007/978-3-030-80519-7>
- Hayter, C. S., Lubynsky, R., & Maroulis, S. (2017). Who is the academic entrepreneur? The role of graduate students in the development of university spinoffs. *Journal of Technology Transfer*, 42(6), 1237–1254. <https://doi.org/10.1007/s10961-016-9470-y>
- Hoang, G., Le, T. T. T., Tran, A. K. T., & Du, T. (2021). Entrepreneurship education and entrepreneurial intentions of university students in Vietnam: the mediating roles of self-efficacy and learning orientation. *Education and Training*, 63(1), 115–133. <https://doi.org/10.1108/ET-05-2020-0142>
- Hsu, D. K., Wiklund, J., & Cotton, R. D. (2017). Success, failure, and entrepreneurial reentry: An experimental assessment of the veracity of self-efficacy and prospect theory. *Entrepreneurship Theory and Practice*, 41(1), 19–47. <https://doi.org/10.1111/etap.12166>
- Jena, R. K. (2020). Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, 1–10. <https://doi.org/10.1016/j.chb.2020.106275>
- Kayed, H., Al-Madadha, A., & Abualbasal, A. (2022). The effect of entrepreneurial education and culture on entrepreneurial intention. *Organizacija*, 55(1), 18–34. <https://doi.org/10.2478/orga-2022-0002>
- Kemendikbudristek. (2024, February 26). *Apa itu Kampus Merdeka?* Pusatinformasi.Kampusmerdeka.Kemdikbud.Go.Id. <https://pusatinformasi.kampusmerdeka.kemdikbud.go.id/hc/id/articles/4417185050777-Apa-itu-Kampus-Merdeka>

- Kim-Soon, N., Al-Rawi, O. Y. M., Mostafa, S. A., Ling, C. Y., Al-Dayyeni, W. S., Ali, R. R., Mahmoud, M. A., & Al-Rawi, B. (2022). A model for predicting entrepreneurship intentions based on social cognitive theory and entrepreneurship characteristics. *Information Sciences Letters*, 11(2), 445–455. <https://doi.org/10.18576/isl/110215>
- Klesel, M., Schuberth, F., Niehaves, B., & Henseler, J. (2022). Multigroup analysis in information systems research using PLS-PM: A systematic investigation of approaches. *Data Base for Advances in Information Systems*, 53(3), 26–48. <https://doi.org/10.1145/3551783.3551787>
- Kusumojanto, D. D., Wibowo, A., Kustiandi, J., & Narmaditya, B. S. (2021). Do entrepreneurship education and environment promote students' entrepreneurial intention? the role of entrepreneurial attitude. *Cogent Education*, 8(1). <https://doi.org/10.1080/2331186X.2021.1948660>
- Li, J., Huang, S. Z., Chau, K. Y., & Yu, L. (2021). The influence of undergraduate entrepreneurship education on entrepreneurial intention: evidence from universities in China's Pearl River Delta. *Frontiers in Psychology*, 12, 1–12. <https://doi.org/10.3389/fpsyg.2021.732659>
- Liao, Y. K., Nguyen, V. H. A., & Caputo, A. (2022). Unveiling the role of entrepreneurial knowledge and cognition as antecedents of entrepreneurial intention: a meta-analytic study. *International Entrepreneurship and Management Journal*, 18(4), 1623–1652. <https://doi.org/10.1007/s11365-022-00803-8>
- Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11(4), 907–933. <https://doi.org/10.1007/s11365-015-0356-5>
- Liu, X., Lin, C., Zhao, G., & Zhao, D. (2019). Research on the effects of entrepreneurial education and entrepreneurial self-efficacy on college students' entrepreneurial intention. *Frontiers in Psychology*, 10(869), 1–9. <https://doi.org/10.3389/fpsyg.2019.00869>
- Mahmood, T. M. A. T., Mamun, A. Al, & Ibrahim, M. D. (2020). Attitude towards entrepreneurship: a study among Asnaf Millennials in Malaysia. *Asia Pacific Journal of Innovation and Entrepreneurship*, 14(1), 2–14. <https://doi.org/10.1108/apjie-06-2019-0044>
- Malebana, M. J., & Swanepoel, E. (2014). The relationship between exposure to entrepreneurship education and entrepreneurial self-efficacy. *Southern African Business Review*, 18(1), 1–26. <https://www.ajol.info/index.php/sabr/article/view/104672>
- Mu Minah, T., & Soelaiman, L. (2024). Peran pendidikan kewirausahaan dalam <https://journal.unesa.ac.id/index.php/jepk> 47784 - 91

- membangun jiwa wirausaha generasi Z melalui efikasi diri dan pola pikir entrepreneurial. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, 8(1), 63-74. <https://doi.org/10.24912/jmieb.v8i1.28703>
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). 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*, 110, 403-419. <https://doi.org/10.1016/j.jvb.2018.05.012>
- Nowiński, W., Haddoud, M. Y., Lančarič, D., Egerová, D., & Czeglédi, C. (2019). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. *Studies in Higher Education*, 44(2), 361-379. <https://doi.org/10.1080/03075079.2017.1365359>
- Nwosu, H. E., Obidike, P. C., Ugwu, J. N., Udeze, C. C., & Okolie, U. C. (2022). Applying social cognitive theory to placement learning in business firms and students' entrepreneurial intentions. *International Journal of Management Education*, 20(1), 1-13. <https://doi.org/10.1016/j.ijme.2022.100602>
- Oluwafunmilayo, A. M., Moses, C. L., Olokundun, M. A., & Grace, A. C. (2018). Assessing the Influence of Entrepreneurship Education on Self efficacy, Attitude and Entrepreneurial Intentions. *Covenant Journal of Entrepreneurship (CJoE)*, 1(1), 47-59. <https://core.ac.uk/download/pdf/219507378.pdf>
- Ordu, P. (2019). Influence of activity-based entrepreneurship education on students' entrepreneurial intention to startup business after graduation from federal college of education (Tech.), Omoku- Rivers State. *International Journal of Operational Research in Management, Social Sciences & Education*, 5(2), 91-103. <https://internationalpolicybrief.org/wp-content/uploads/2023/10/ARTICLE7-85.pdf>
- Otache, I. (2019). Entrepreneurship education and undergraduate students' self- and paid-employment intentions: A conceptual framework. *Education and Training*, 61(1), 46-64. <https://doi.org/10.1108/ET-10-2017-0148>
- Passaro, R., Quinto, I., & Thomas, A. (2018). The impact of higher education on entrepreneurial intention and human capital. *Journal of Intellectual Capital*, 19(1), 135-156. <https://doi.org/10.1108/JIC-04-2017-0056>
- Puni, A., Anlesinya, A., & Korsorku, P. D. A. (2018). Entrepreneurial education, self-efficacy and intentions in Sub-Saharan Africa. *African Journal of Economic and Management Studies*, 9(4), 492-511. <https://doi.org/10.1108/AJEMS-09-2017-0211>
- Purwati, A. A., Hamzah, M. L., & Suhermin, S. (2020). Entrepreneurship education and its impact on student's intention to entrepreneurship. *Revista Espacios*, 41(9), 4-16. <https://journal.unesa.ac.id/index.php/jepk>

<https://www.revistaespacios.com/a20v41n09/20410904.html>

Pushkarskaya, H., Fortunato, M. W. P., Breazeale, N., & Just, D. R. (2021). Enhancing measures of ESE to incorporate aspects of place: Personal reputation and place-based social legitimacy. *Journal of Business Venturing*, 36(3). <https://doi.org/10.1016/j.jbusvent.2020.106004>

Şahin, F., Karadağ, H., & Tuncer, B. (2019). Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention: A configurational approach. *International Journal of Entrepreneurial Behaviour and Research*, 25(6), 1188–1211. <https://doi.org/10.1108/IJEER-07-2018-0466>

Saptono, A., Wibowo, A., Widyastuti, U., Narmaditya, B. S., & Yanto, H. (2021). Entrepreneurial self-efficacy among elementary students: the role of entrepreneurship education. *Heliyon*, 7(9), 1–7. <https://doi.org/10.1016/j.heliyon.2021.e07995>

Setiawan, G. T., & Lestari, E. (2021). The effect of entrepreneurship education to student's entrepreneurial intention with self-efficacy as mediating variable. *DeReMa (Development Research of Management): Jurnal Manajemen*, 16(2), 158–178. <https://doi.org/10.19166/derema.v16i2.3884>

Setiawan, J. L., Kasim, A., & Ardyan, E. (2022). Understanding the Consumers of Entrepreneurial Education: Self-Efficacy and Entrepreneurial Attitude Orientation among Youths. *Sustainability (Switzerland)*, 14(8), 1–18. <https://doi.org/10.3390/su14084790>

Soelaiman, L., Keni Keni, & Puspitowati, I. (2024). Empowering Entrepreneurial Intentions: Educational Support And Self-Efficacy In MBKM Context. *Jurnal Manajemen*, 28(1), 23–44. <https://doi.org/10.24912/jm.v28i1.1760>

Soomro, B. A., & Shah, N. (2020). Technopreneurship intention among nonbusiness students: a quantitative assessment. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(3), 502–514. <https://doi.org/10.1108/WJEMSD-10-2020-0129>

Soria-Barreto, K., Honores-Marin, G., Gutiérrez-Zepeda, P., & Gutiérrez-Rodríguez, J. (2017). Prior exposure and educational environment towards entrepreneurial intention. *J. Technol. Manag. Innov*, 12(2), 45–58. <https://doi.org/https://doi.org/https://doi.org/10.4067/S0718-27242017000200006>

Stam, E. (2015). Entrepreneurial ecosystems and regional policy: A sympathetic critique. *European Planning Studies*, 23(9), 1759–1769. <https://doi.org/10.1080/09654313.2015.1061484>

- Valliere, D. (2017). Multidimensional entrepreneurial intent: an internationally validated measurement approach. *International Journal of Entrepreneurial Behaviour and Research*, 23(1), 59–77. <https://doi.org/10.1108/IJEBR-08-2015-0182>
- Vamvaka, V., Stoforos, C., Palaskas, T., & Botsaris, C. (2020). Attitude toward entrepreneurship, perceived behavioral control, and entrepreneurial intention: dimensionality, structural relationships, and gender differences. *Journal of Innovation and Entrepreneurship*, 9(1), 1–26. <https://doi.org/10.1186/s13731-020-0112-0>
- Wang, X. H., You, X., Wang, H. P., Wang, B., Lai, W. Y., & Su, N. (2023). The effect of entrepreneurship education on entrepreneurial intention: mediation of entrepreneurial self-efficacy and moderating model of psychological capital. *Sustainability (Switzerland)*, 15(3), 1–20. <https://doi.org/10.3390/su15032562>
- Wu, L., Jiang, S., Wang, X., Yu, L., Wang, Y., & Pan, H. (2022). Entrepreneurship education and entrepreneurial Intentions of college students: The mediating role of entrepreneurial Self-efficacy and the moderating role of entrepreneurial competition experience. *Frontiers in Psychology*, 12, 1–9. <https://doi.org/10.3389/fpsyg.2021.727826>
- Yeh, C. H., Lin, H. H., Wang, Y. M., Wang, Y. S., & Lo, C. W. (2021). Investigating the relationships between entrepreneurial education and self-efficacy and performance in the context of internet entrepreneurship. *International Journal of Management Education*, 19(3), 1–11. <https://doi.org/10.1016/j.ijme.2021.100565>
- Yousaf, U., Ali, S. A., Ahmed, M., Usman, B., & Sameer, I. (2020). From entrepreneurial education to entrepreneurial intention: a sequential mediation of self-efficacy and entrepreneurial attitude. *International Journal of Innovation Science*, 13(3), 364–380. <https://doi.org/10.1108/IJIS-09-2020-0133>
- Zhang, F., Wei, L.-Q., Sun, H., & Chan, C. M. (2016). How entrepreneurship education impacts entrepreneurial orientation: A planned behavior approach. *Academy of Management Proceedings*, 13(1), 146–170. <https://doi.org/10.5465/ambpp.2016.12459abstract>

* **Lydiawati Soelaiman (Corresponding Author)**

Universitas Tarumanagara

Address: Letjen S. Parman St No.1, Grogol petamburan, West Jakarta City, Jakarta 11440, Indonesia

Email: lydiawatis@fe.untar.ac.id

Keni Keni

Universitas Tarumanagara

Address: Letjen S. Parman St No.1, Grogol petamburan, West Jakarta City, Jakarta 11440, Indonesia

Email: keni@fe.untar.ac.id

Tay Lee Chin

Tunku Abdul Rahman University of Management and Technology

Address: Ground Floor, Bangunan Tan Sri Khaw Kai Boh (Block A), Jalan Genting Kelang, Setapak, 53300 Kuala Lumpur, Malaysia

Email: lctay@tarc.edu.my

The Effectiveness of Entrepreneurship Education on Students' Self-Efficacy and Entrepreneurial Intention: A Comparative Study of Major Cities in Indonesia