

The Impact of Mindset and Self-Efficacy on Entrepreneurial Intentions in Indonesia

Dian Indiyati^{1*} , Adhi Prasetyo² , Fetty Poerwita Sary³ , Nidya Dudija⁴ , Untung Rahardja⁵ 

^{1, 2, 3, 4}School of Economics and Business, Telkom University, Indonesia

⁵Eduaward Incorporation, United Kingdom

¹dianindiyati@telkomuniversity.ac.id, ²adhipras@telkomuniversity.ac.id, ³fettyps@telkomuniversity.ac.id,

⁴nidyadudija@telkomuniversity.ac.id, ⁵urahardja@eduaward.co.uk

*Corresponding Author

Article Info

Article history:

Submission June 4, 2025

Revised November 28, 2025

Accepted July 27, 2026

Published August 7, 2026

Keywords:

Human Capital Management

Entrepreneurial Mindset

Self-Efficacy

Entrepreneurial Intention

Small Medium Enterprise

ABSTRACT

Entrepreneurship contributes to the country's economy, but the low number of entrepreneurs in Indonesia indicates the need for research on the entrepreneurial intentions of business actors. The **purpose** of this study examines the interaction of entrepreneurial mindset and self-efficacy with entrepreneurial intention in the context of business actors in Indonesia. Data collection was conducted by distributing questionnaires to 129 respondents, which were then further processed. carry on using SEM-Second Order. Research **results** show that Entrepreneurial mindset plays a significant role in shaping the self-efficacy and entrepreneurial intention of MSMEs in Indonesia. Another interesting finding in this study is that self-efficacy does not play a significant role in influencing entrepreneurial intention. This expected can **contribute** to knowledge that explains that in the context of MSMEs in Indonesia, the entrepreneurial intentions of MSME actors can improved with change the entrepreneurial mindset.

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



DOI: <https://doi.org/10.34306/att.v8i3.752>

This is an open-access article under the CC-BY license (<https://creativecommons.org/licenses/by/4.0/>)

©Authors retain all copyrights

1. INTRODUCTION

Entrepreneurship contributes significantly to a country's economy by creating employment opportunities, fostering innovation and creativity, promoting social development, and driving economic growth. It has the potential to alleviate poverty and stimulate economic development at both micro and macro levels, offering substantial financial and social advantages [1]. The rapid development of the internet and the COVID-19 pandemic have accelerated entrepreneurial growth in Indonesia by enabling new combinations referred to as the digital economy [2]. Readiness and capability for digital transformation in this era are crucial for improving entrepreneurial performance and competitiveness. The digital economy plays a significant role in shaping entrepreneurial systems and development pathways, while creating opportunities to strengthen entrepreneurial competencies.

Nevertheless, despite Indonesia's digital penetration reaching 79.5% [3], the number of entrepreneurs in the country remains relatively low. This condition is reflected in the entrepreneurship-to-population ratio and the Global Entrepreneurship Index (GEI). Compared to other countries, Indonesia's entrepreneurship ra-

tio remains modest at only 3.47% of the total population. This figure lags behind Singapore at 8.76%, while Malaysia and Thailand have exceeded 4.5%. In developed countries, the entrepreneurship ratio typically ranges between 10% and 12%. Similarly, Indonesia ranks 75th out of 137 countries in the GEI, with a score of 26, indicating weaker entrepreneurial capacity compared to several neighboring ASEAN countries [4]. The relatively low number of entrepreneurs in Indonesia highlights the need for research focusing on EI. Entrepreneurship has become a dominant issue in both developed and developing countries due to its role in enhancing national economic welfare [5, 6] and promoting economic and social growth [7, 8].

However, the phenomenon of the low entrepreneurial ratio cannot be viewed solely from the aspect of intention, but also needs to be studied from the perspective of Human Capital Management. In the context of a developing economy, entrepreneurship represents one of the most valuable human capital assets because it reflects individuals' capacity to identify opportunities, innovate, and create economic value. Human Capital Theory emphasizes that economic success is determined not only by physical resources but also by the accumulation of intangible assets, including knowledge, entrepreneurial mindset, skills, and self-efficacy possessed by individuals. Therefore, understanding how these psychological and cognitive resources are developed, managed, and interacted among MSME actors is essential for formulating effective strategies to strengthen entrepreneurial capacity at the national level.

From a global development perspective, the focus on strengthening EI through entrepreneurial mindset development is closely aligned with the United Nations Sustainable Development Goal (SDG) 8 (Decent Work and Economic Growth), as entrepreneurship plays a critical role in promoting productive employment, fostering inclusive economic growth, and supporting the sustainability of micro, small, and medium enterprises.



Figure 1. SDG 8 (Decent Work and Economic Growth)

Intention is considered the strongest predictor of entrepreneurial behavior [9], and the Theory of Planned Behavior (TPB) has been widely applied in entrepreneurship research, including studies conducted in China [10]. Prior studies indicate that individuals with high EI significantly and positively influence entrepreneurial behavior [11]. Previous research has consistently found a positive relationship between ESE and EI [12]. In this study, ESE specifically refers to an individual's perceived capability to perform entrepreneurial tasks related to opportunity identification, business initiation, and venture management. In the long term, past experience and behavior can shape future entrepreneurial choices and actions by enhancing ESE [13, 14]. Such experience should be complemented by adequate entrepreneurial knowledge to achieve greater success.

Accordingly, individuals with high self-efficacy tend to respond more positively to various conditions compared to those with low self-efficacy, who are more likely to hesitate when facing new environments

[15, 16]. High levels of optimism associated with self-efficacy further amplify entrepreneurial behavioral outcomes. Specifically, [17] emphasize its constructive role in opportunity recognition, project implementation, and entrepreneurial task execution. Entrepreneurs with strong confidence in their business-related capabilities are more likely to initiate and persist in entrepreneurial activities than those with lower self-efficacy [18]. Scholars also argue that understanding ESE is essential, particularly in relation to starting, managing, and expanding new ventures [19, 20]. Consequently, individuals with high self-efficacy tend to develop more effective cognitive mindsets. ESE represents a socio-cognitive process that explains individual cognitive patterns manifested through EI and behavior [7], thereby motivating individuals with higher self-efficacy to create new businesses. Entrepreneurship involves formulating new ventures and choosing alternative career paths beyond conventional employment [6].

Beyond self-efficacy, the entrepreneurial mindset has been recognized as a critical factor influencing both success and failure among entrepreneurs [21]. Entrepreneurial mindset is closely associated with deep cognitive phenomena reflecting commitment to entrepreneurial activities [22] and the development of EI [23]. Research on entrepreneurial mindset has been conducted primarily in developed-country contexts [24, 25]. Individuals with stronger entrepreneurial mindsets are more likely to initiate their own businesses [26].

However, studies examining entrepreneurial mindset in relation to EI remain limited [27]. Comparative studies from other emerging markets, such as India and Malaysia, indicate that entrepreneurial mindset plays a critical role in shaping EI under conditions of institutional uncertainty, resource constraints, and rapid digital transformation. These findings suggest that emerging economies share structural similarities that make cross-country comparison particularly relevant for understanding entrepreneurial behavior in Indonesia. Most prior research has focused on contexts outside Indonesia, including Europe, the United States, Africa, and Malaysia [28–30]. Although the relationship between mindset and self-efficacy has been explored [31–33], to the best of our knowledge, empirical evidence on the direct relationship between entrepreneurial mindset and self-efficacy within the context of EI in Indonesia remains scarce. Therefore, this study aims to address this research gap by identifying the effects of these factors on EI among Small and Medium Enterprise (SME) actors in Indonesia. Accordingly, the research model developed in this study addresses the following research questions:

- RQ1. What are the effects of entrepreneurial mindset and Entrepreneurial Self-Efficacy (ESE) on Entrepreneurial Intention (EI) among small and medium enterprise actors in Indonesia?
- RQ2. Does Entrepreneurial Self-Efficacy (ESE) mediate the relationship between entrepreneurial mindset and Entrepreneurial Intention (EI) among small and medium enterprise actors in Indonesia?

These research questions aim to fill a critical gap in the literature by exploring the dynamics of entrepreneurial mindset and self-efficacy within the Indonesian context [34]. Understanding how these factors interact to influence EI among Small and Medium Enterprise (SME) actors is essential for informing policies and programs aimed at enhancing entrepreneurship in Indonesia [35]. Moreover, the study's findings may provide valuable insights into the specific role of self-efficacy in bridging the gap between mindset and EI, which could help in designing targeted interventions to foster entrepreneurial behavior in SMEs.

1.1. Theory and Hypothesis Development

This research is built on the Human Capital Management perspective which views that businessman as asset intellectual key assets in organizations. Within this human asset management framework, psychological attributes such as emotional intelligence and psychological capital are conceptualized as intangible assets that must be activated. The activation and management of this capital strengthens the role of entrepreneurship as a key intellectual asset, driving innovation, and sustainably improving organizational performance [36, 37]. The research model in this study is grounded in Social Cognitive Theory, which emphasizes self-efficacy as a central construct [38].

This theory posits that individuals are more likely to pursue their goals when they perceive their skills and abilities as sufficient to achieve desired outcomes [39]. The integration of these two perspectives provides a solid foundation for understanding entrepreneurial dynamics, where Entrepreneurial Mindset acts as a cognitive capacity to identify opportunities, while Self-Efficacy functions as an internal validation mechanism that convinces individuals that they are capable of executing those opportunities. Therefore, entrepreneurial intention in this study is not only seen as a psychological desire, but as a strategic decision of individuals to invest their human capital in economic value creation activities.

EI is defined as an individual's self-acknowledged belief to initiate a new career or venture. Prior studies have demonstrated that entrepreneurial mindset is positively associated with EI [23]. Entrepreneurial mindset refers to an individual's commitment to entrepreneurial activities [40, 41]. For instance, studies in India and Malaysia have similarly highlighted the critical role of entrepreneurial mindset in shaping EI, with findings showing that a proactive approach to risk-taking and opportunity recognition significantly influences self-efficacy and intention. In contrast, research in South Korea suggests that while entrepreneurial mindset is crucial, the role of self-efficacy is somewhat more pronounced, particularly in high-technology sectors [42]. These comparative studies underscore the importance of understanding the interaction between mindset and self-efficacy in various cultural and economic contexts, thus enriching the theoretical framework of this study [43].

Empirical studies in the Indonesian context have shown that entrepreneurial mindset positively influences EI among students [44]. Similar findings have been reported in studies involving university students in Indonesia [45] and South Korea. A continuously evolving entrepreneurial mindset also encourages individuals to think more efficiently and to actively recognize and exploit available opportunities [46]. Based on these prior findings, it is reasonable to argue that individuals with a stronger entrepreneurial mindset are more actively engaged in entrepreneurial activities, which in turn positively influences their EI. Accordingly, the following hypothesis is proposed:

H1: Entrepreneurial mindset has a positive effect on entrepreneurial intention.

In the Human Capital perspective, Entrepreneurial Self-Efficacy (ESE) is not merely a psychological belief, but rather an individual's internal evaluation of the capacity of their human capital to achieve goals. Self-efficacy is defined as an individual's belief in their ability to successfully perform goal-oriented tasks [47]. It is also associated with an individual's tendency to achieve personal goals [48]. The concept of self-efficacy originates from Social Cognitive Theory, as proposed by [49], which suggests that individual behavior is shaped by various activities such as interpersonal interactions, engagement, and situational conditions. The interplay among these activities influences individuals' beliefs regarding their capacity to regulate specific behaviors and their expectations of behavioral outcomes [50].

Previous studies indicate that self-efficacy is a significant factor in explaining EI and behavior [51]. [52] further argue that self-efficacy influences individual behavior through cognitive processes, goal setting, and outcome expectations. Moreover, scholars have suggested that entrepreneurs with high task-specific self-efficacy are more likely to engage in entrepreneurial activities than those with lower levels of self-efficacy.

[53] examined the direct effects of creativity and proactive personality, with ESE as a mediating variable, on EI among university students in India. Their findings indicate that entrepreneurial mindset, operationalized through creativity, positively influences both ESE and EI. Accordingly, individuals with higher levels of ESE tend to demonstrate stronger engagement with entrepreneurship education, entrepreneurial mindset, and creativity. Based on these arguments, the following hypotheses are proposed:

H2: Entrepreneurial mindset has a positive effect on entrepreneurial self-efficacy.

H3: Entrepreneurial self-efficacy is positively related to entrepreneurial intention.

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

2. METHODOLOGY

This study employs a Structural Equation Modeling (SEM) approach based on covariance structure analysis to examine the relationships among latent variables. SEM is a statistical technique that enables the testing of relationships between latent constructs through measurable indicators. Covariance-based SEM is applied to ensure that the proposed model demonstrates a good fit with the empirical data and allows for rigorous theoretical interpretation. The population of this study consists of MSME actors, with a total sample of 129 respondents collected for analysis. The research instrument comprises a questionnaire using a Likert scale (e.g., 1 = strongly disagree, 5 = strongly agree) to measure the latent variables. Each latent variable is operationalized through multiple indicators adapted from previous studies.

The theoretical model is developed based on an extensive literature review, which maps the relationships between latent variables and their corresponding indicators. In the path diagram, latent variables are represented by circles, while indicators are depicted as rectangles. The proposed research model is shown in Figure 2.

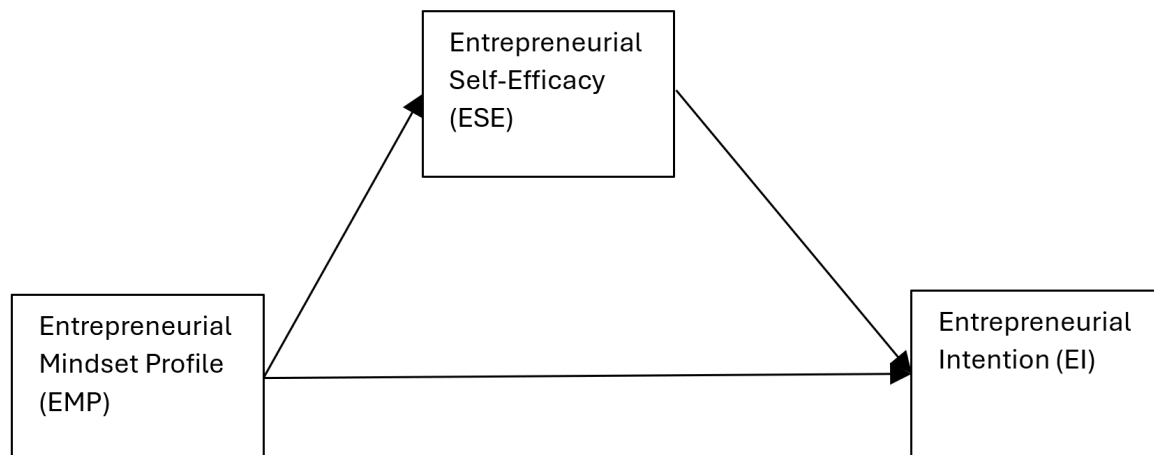


Figure 2. Research Model

The research model depicted in Figure 2 illustrates the relationships between entrepreneurial mindset, self-efficacy, and EI. The model suggests that entrepreneurial mindset plays a significant role in enhancing self-efficacy, which in turn influences EI. This framework is essential for understanding the mechanisms that drive entrepreneurial behavior, particularly in the context of small and medium-sized enterprises (SMEs) in Indonesia. The model emphasizes the importance of cultivating a positive entrepreneurial mindset to foster higher self-efficacy and ultimately strengthen EIs among entrepreneurs.

Furthermore, the proposed model positions self-efficacy as a mediating mechanism that explains how entrepreneurial mindset is translated into entrepreneurial intention. Entrepreneurial mindset represents the cognitive foundation that encourages individuals to recognize opportunities, develop innovative approaches, and adopt proactive behaviors, while self-efficacy reflects individuals' confidence in their ability to perform entrepreneurial tasks. Therefore, the interaction between these constructs provides a comprehensive perspective on how psychological resources contribute to entrepreneurial decision-making and business creation among MSME actors in Indonesia.

3. RESULT AND DISCUSSION

The respondent profile is predominantly composed of female entrepreneurs, as presented in Table 1, which illustrates the distribution of respondents by gender. Of the total 129 respondents, the majority are female, accounting for 121 individuals (93.8%), while male respondents comprise only 8 individuals (6.2%) of the sample. This strong female representation indicates a higher level of participation by women in this study and may reflect their significant role within the research context. Although the number of male respondents is relatively limited, their inclusion nevertheless contributes to diversity in perspectives and enriches the overall data analysis.

Table 1. Respondent Profile Based on Gender

Gender	Frequency	Percentage (%)
Male	8	6.2
Female	121	93.8
Total	129	100.0

The majority of respondents are involved in the food sector, representing 113 individuals (87.6%) of the total sample. Additionally, 10 respondents (7.8%) are engaged in the fashion sector, while 6 respondents (4.7%) fall under other business categories, indicating a broader spectrum of entrepreneurial activities beyond food and fashion. This diverse distribution highlights the multifaceted nature of entrepreneurial engagement in the study, and emphasizes the need for inclusive policies that can support entrepreneurs across various industries.

Structural analysis was conducted to evaluate the relationships among latent variables within the proposed research model. This process aims to assess the extent to which the causal relationships between exogenous and endogenous variables are supported by empirical data. The results of the structural model analysis examining the effect of the Entrepreneurial Mindset Profile (EMP) on Entrepreneurial Self-Efficacy (ESE) and its subsequent impact on Entrepreneurial Intention (EI), including their respective dimensions and indicators, are presented in Figure 3.

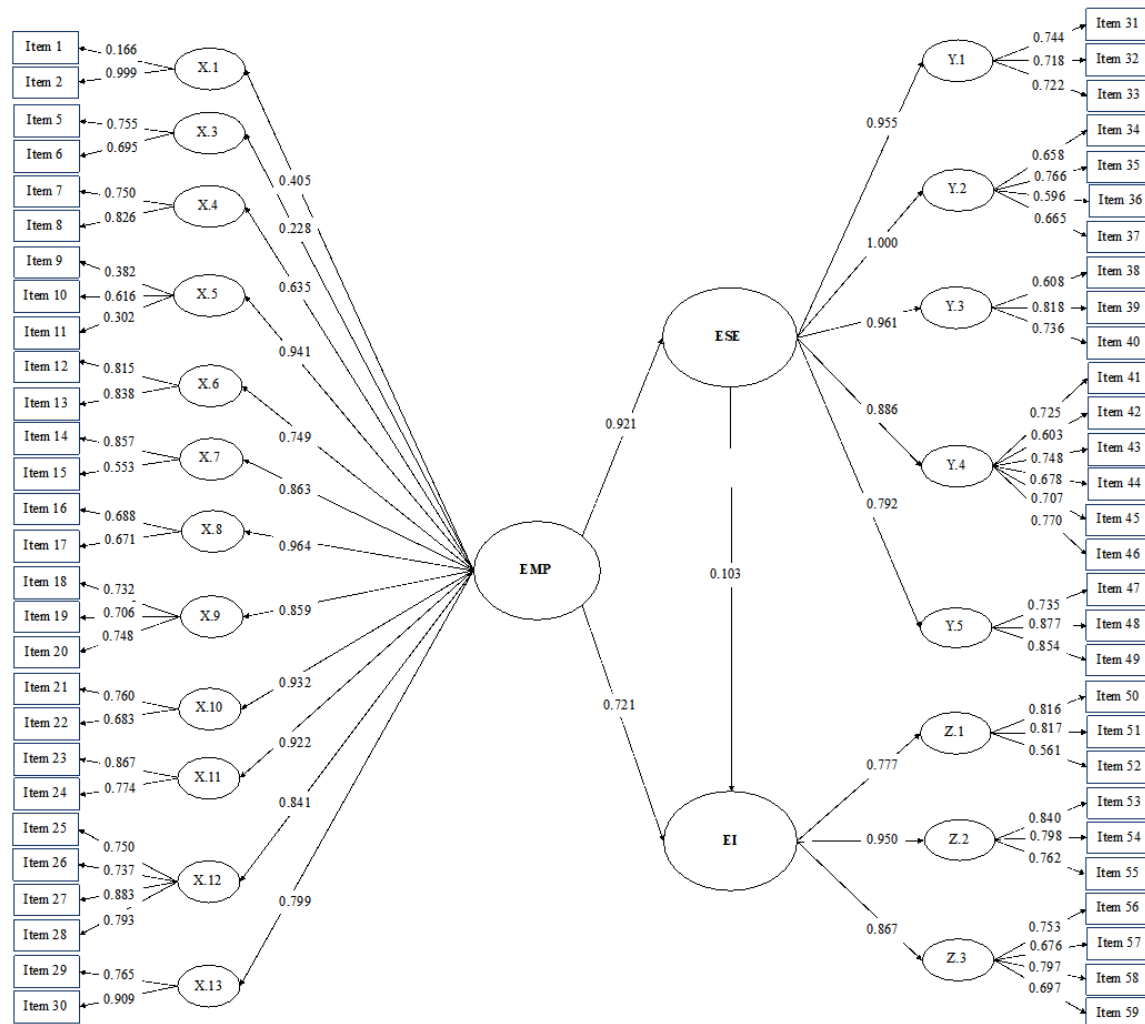


Figure 3. Structural Model Results of EMP, ESE, and EI Relationships

The Goodness-of-Fit results are presented in Table 3 to evaluate how well the estimated model fits the empirical data. Based on the model fit assessment, several statistical indices are employed, including the Chi-square ratio, Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA). These indices provide a comprehensive assessment of model fit by capturing aspects of model performance, including absolute, incremental, and parsimonious fit. The Chi-square ratio evaluates the discrepancy between observed and estimated covariance matrices, while CFI and TLI assess the comparative improvement over a baseline model. RMSEA measures approximation error per degree of freedom, reflecting how well the model fits the population covariance matrix. By integrating these indicators, the study ensures a robust evaluation of the structural model's adequacy.

- Chi-Square Ratio value of 1.355 meets the recommended criterion for model fit, as it is below the threshold of 2.0. This result indicates that the estimated model demonstrates a good fit with the empirical data.

- Comparative Fit Index (CFI) value of 0.868 falls within the acceptable range of 0.80–0.90, suggesting that the model exhibits an adequate level of fit. However, this value has not yet reached the threshold typically considered indicative of an excellent model fit (> 0.90).
- Tucker–Lewis Index (TLI) value of 0.861 lies within the range of 0.80–0.90, indicating an acceptable model fit. As with the CFI, this value does not meet the criterion for an ideal level of model fit.
- Root Mean Square Error of Approximation (RMSEA) value of 0.052 satisfies the criterion for good model fit, as it is below 0.08. This finding suggests a low level of approximation error and indicates that the proposed model adequately represents the observed data.

The results presented in Table 2 indicate that the estimated structural model demonstrates an acceptable level of fit with the empirical data. As illustrated in Figure 3, the structural model results indicate a strong positive relationship between EMP and ESE. This relationship is further supported by the data in Table 2, which presents the model fit indices, showing that the model fits the data adequately, even with moderate CFI and TLI values. Figure 3 provides a clear visualization of these relationships, reinforcing the significance of EMP in shaping EI. Therefore, the model can be considered adequate for further analysis, although there remains potential for improvement to achieve a more optimal level of model fit.

Table 2. Goodness of Fit Results

Model Fit Statistic	Value	Criteria	Conclusion
Chi-Square Ratio	1.355	< 2	Model fits the data
Comparative Fit Index (CFI)	0.868	> 0.90	Model fits the data
		0.80-0.90	Model reasonably fits the data
Tucker-Lewis Index (TLI)	0.861	> 0.90	Model fits the data
		0.80-0.90	Model reasonably fits the data
Root Mean Square Error Approximation (RMSEA)	0.052	< 0.08	Model fits the data
		0.80-1.00	Model reasonably fits the data

The results presented in Table 2 indicate that the estimated structural model demonstrates an acceptable level of fit with the empirical data. The Chi-square ratio and RMSEA fall within the criteria for a good model fit, while the CFI and TLI indicate a moderate but acceptable fit. Although the Comparative Fit Index (CFI = 0.868) and Tucker–Lewis Index (TLI = 0.861) do not exceed the ideal threshold of 0.90, these values remain within the acceptable range of 0.80–0.90, which is commonly reported in SEM studies involving complex behavioral constructs and relatively small sample sizes. This indicates that the proposed model demonstrates a moderate yet reliable level of robustness, particularly when supported by a low RMSEA value (0.052) and a satisfactory Chi-square ratio (1.355). The Chi-square ratio and RMSEA meet the criteria for a good model fit, suggesting that the model is well-suited to the data. The Comparative Fit Index (CFI) and Tucker–Lewis Index (TLI) fall within a moderate range, suggesting that while the model reasonably fits the data, there is room for further improvement. Nevertheless, the model can still be considered adequate for further analysis. Moving forward, the results of hypothesis testing, as detailed in Table 3, provide deeper insight into the relationships between the constructs.

The finding that Self-Efficacy does not significantly influence intention can be explained through the lens of Strategic Human Capital. For micro-SMEs in developing countries, such as the respondents in this study, confidence in technical capabilities, namely self-efficacy, is often considered a basic capital that is already necessary, but not the main driver of sustainability. In contrast, Entrepreneurial Mindset functions as a more dominant strategic capital. In modern HR management, an adaptive and action-oriented mindset is considered more crucial to maintaining business intentions amid market uncertainty than simply feeling capable. This means that to increase entrepreneurial intentions in Indonesia, investing in character and mentality development, such as a framework for thinking, is far more valuable than just technical training to increase self-confidence alone. This perspective is further supported by the hypothesis testing results presented in Table 3, which demonstrate the extent to which EMP, ESE, and EI are statistically related within the proposed structural model. This is confirmed by the test results of the total effect of EMP on EI, which remained significant with a coefficient of 0.816, although the mediation pathway was insignificant. With an R-square value of 0.667, 66.7% of the variation in EI can be predominantly explained by this mindset factor.

Table 3. Hypothesis Testing Results

Effect	Coefficient	z-value	p-value	Conclusion
Direct Effect				
Entrepreneurial Mindset Profile (EMP) → Entrepreneurial Self Efficacy (ESE)	0.921	2.037	0.042	Reject H_0
R-square	-	-	0.849	-
Entrepreneurial Mindset Profile (EMP) → Entrepreneurial Intention (EI)	0.721	1.794	0.073	Reject H_0
Entrepreneurial Self Efficacy (ESE) → Entrepreneurial Intention (EI)	0.103	0.426	0.670	Accept H_0
R-square	-	-	0.667	-
Indirect Effect				
Entrepreneurial Mindset Profile (EMP) → Entrepreneurial Self Efficacy (ESE) → Entrepreneurial Intention (EI)	0.095	0.411	0.681	Accept H_0
Total Effect				
Total Effect Entrepreneurial Mindset Profile (EMP) → Entrepreneurial Intention (EI)	0.816	2.066	0.039	Reject H_0

The direct effect coefficient of 0.921 indicates a very strong positive relationship between EMP and ESE. The z-value of 2.037 and p-value of 0.042 (which is less than 0.05) show that this effect is statistically significant, meaning the null hypothesis (H_0) is rejected. The R-square value of 0.849 indicates that 84.9% of the variation in ESE can be explained by EMP. The coefficient of 0.721 indicates a fairly strong positive relationship between EMP and EI. With a z-value of 1.794 and a p-value of 0.073, the null hypothesis is rejected at the 10% significance level (0.10), though this result is on the threshold of significance. This indicates that the effect of EMP on EI is close to statistically significant.

The coefficient of 0.103 indicates a very weak positive relationship between ESE and EI. The z-value of 0.426 and p-value of 0.670 show that this effect is not statistically significant, meaning the null hypothesis is accepted. The R-square value of 0.667 shows that 66.7% of the variation in EI can be explained by ESE and EMP. The indirect effect coefficient of 0.095 shows a very weak relationship. With a z-value of 0.411 and p-value of 0.681, this effect is not statistically significant, meaning the null hypothesis is accepted. This suggests that ESE is not a significant mediator between EMP and EI.

The total effect coefficient of 0.816 indicates a strong positive relationship between EMP and EI. The z-value of 2.066 and p-value of 0.039 show that this total effect is statistically significant, meaning the null hypothesis is rejected. This shows that overall, EMP contributes significantly to EI. These findings imply that practical efforts to improve EI in Indonesia should focus primarily on strengthening entrepreneurial mindset rather than relying solely on enhancing self-efficacy. Programs that emphasize opportunity recognition, innovative thinking, and adaptive problem-solving are more likely to be effective in fostering EI among MSME actors, as entrepreneurial mindset demonstrates a stronger and more consistent influence on EI.

4. MANAGERIAL IMPLICATIONS

The managerial implications of this study highlight the strategic importance of strengthening the EMP within both organizational and educational contexts. Given its dominant influence on ESE and EI, managers are encouraged to prioritize initiatives that cultivate entrepreneurial mindsets as a means of stimulating entrepreneurial engagement. From a broader development perspective, these findings are closely aligned with SDG 8 (Decent Work and Economic Growth), as enhancing entrepreneurial mindset among MSME actors supports job creation, promotes productive self-employment, and contributes to the long-term sustainability of small businesses as drivers of inclusive economic growth.

By emphasizing key entrepreneurial attributes such as risk-taking, innovation, and problem-solving, organizations and educational institutions can indirectly strengthen individuals' self-efficacy and, in turn, their EI. Such efforts may be implemented through targeted training programs, mentorship schemes, and workshops that foster entrepreneurial thinking. In practical terms, SME managers and policymakers can translate these

findings into actionable strategies by adopting experiential learning approaches, problem-based training, and innovation-oriented activities aimed at reinforcing entrepreneurial mindset. Simultaneously, ESE can be developed through mentoring, role modeling, and gradual exposure to entrepreneurial tasks, enabling SME actors to build confidence in their capabilities while being supported by a strong cognitive entrepreneurial orientation. Although ESE does not significantly mediate the relationship between EMP and EI, strengthening self-efficacy remains important for enhancing entrepreneurial confidence and encouraging sustained entrepreneurial engagement.

5. CONCLUSION

The research findings indicate that EMP plays a significant role in enhancing individuals' self-confidence in their entrepreneurial abilities. EMP also has a direct effect on EI, showing a relatively strong positive relationship, even though it is on the threshold of statistical significance. On the other hand, the study shows that the direct effect of ESE on EI is not significant. This suggests that self-confidence in one's entrepreneurial abilities does not directly influence the intention to engage in entrepreneurship.

The indirect effect of EMP on EI through ESE also does not show any statistically significant influence. This suggests that ESE is not an effective mediator in the relationship between EMP and EI. Nevertheless, the total effect of EMP on EI, which includes both direct and indirect effects, is statistically significant. This finding confirms that EMP as a whole is a key factor influencing EI.

Based on these findings, it can be concluded that EMP is the most dominant factor in shaping EI, both through direct and total effects, while the role of ESE as a mediator between EMP and EI is not significant. These results highlight that entrepreneurial mindset has a much greater contribution than self-confidence in determining EI. It is recommended that entrepreneurship development programs, both in educational and professional settings, focus on strengthening individuals' entrepreneurial mindset. Training and workshops aimed at enhancing dimensions of EMP, such as independence, risk-taking, action orientation, and optimism, can significantly encourage EI. Although the role of ESE is not significant as a mediator, improving self-confidence remains important for supporting success in entrepreneurial activities. Future research is recommended to further explore other factors that may influence the relationship between EMP, ESE, and EI, such as social support, the entrepreneurial environment, or economic conditions, to provide a more comprehensive understanding.

6. DECLARATIONS

6.1. About Authors

Dian Indiyati (DI)  <https://orcid.org/0000-0003-2521-9415>

Adhi Prasetyo (AP)  <https://orcid.org/0000-0002-4025-0237>

Fetty Poerwita Sary (FP)  <https://orcid.org/0000-0002-9870-4641>

Nidya Dudija (ND)  <https://orcid.org/0000-0003-1354-1669>

Untung Rahardja (UR)  <https://orcid.org/0000-0002-2166-2412>

6.2. Author Contributions

Conceptualization: DI; Methodology: AP; Software: FP; Validation: ND; Formal Analysis: DI; Investigation: AP; Resources: UR; Data Curation: FP and ND; Writing Original Draft Preparation: UR; Writing Review and Editing: UR and DI; Visualization: DI and UR; All authors, DI, AP, FP, ND and UR, have read and agreed to the published version of the manuscript.

6.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6.4. Funding

This research received funding from the West Java Competitive Development Funding Innovation Grant and the West Java Province Regional Development Planning Agency Competitive Grant, under Agreements Number 3996/KU.03.11.02/BPK and 399/LIT07/PPM-LIT/2024, and Telkom University Rector's Decree Number KR. 504/LIT07/PPM-LIT/2024.

6.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

REFERENCES

- [1] J.-J. Nájera-Sánchez, C. Pérez-Pérez, and T. González-Torres, "Exploring the knowledge structure of entrepreneurship education and entrepreneurial intention," *International Entrepreneurship and Management Journal*, vol. 19, no. 2, pp. 563–597, 2023.
- [2] R. Sulistyowati, T. Sudarwanto, D. Y. Rakhmawati, F. I. Maula, T. S. Biantoro, B. S. Narmaditya, and M. F. Ahmad, "Enhancing entrepreneurial intentions among vocational high school students in online business and marketing in east java, indonesia: The role of passion, education, and entrepreneurial skills in supporting sdgs," in *E3S Web of Conferences*, vol. 568. EDP Sciences, 2024, p. 04003.
- [3] Heaptalk, "Apjii: Indonesia internet users attain 221.5 million people," <https://heaptalk.com/insight/apjii-indonesia-internet-users-attain-221-5-million-people/>, 2024, accessed: 2025-02-02.
- [4] Katadata, "Indonesia's number of entrepreneurs increases at the start of 2025, a new record high," <https://databoks.katadata.co.id/en/employment/statistics/6819b9f13c428/indonesias-number-of-entrepreneurs-increases-at-the-start-of-2025-a-new-record-high>, 2025, accessed: 2025-12-23.
- [5] M.-H. Lin, R. Sivaraman, Z. Nan, U. Rahardja, I. Muda, F. S. Fahim, B. S. Bashar, L. Li, and I. Husein, "Capacity optimization design of hybrid energy power generation system," *Mathematical Modelling of Engineering Problems*, vol. 10, no. 4, 2023.
- [6] T. Bustomi, C. Aurora, S. Millah, F. A. Ramahdan, and F. Kruger, "Integrating artificial intelligence and smartpls for data driven educational innovation," *Smart Human-centered Emerging Research in Machine Intelligence*, vol. 1, no. 2, pp. 74–81, 2025.
- [7] B. N. Neneh, "Entrepreneurial passion and entrepreneurial intention: the role of social support and entrepreneurial self-efficacy," *Studies in higher education*, vol. 47, no. 3, pp. 587–603, 2022.
- [8] R. Anindita, V. H. Prastowo, and J. Parker, "Reinforcing the role of cyber village in improving indonesia msme through an exploratory study," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 7, no. 3, pp. 726–737, 2025, <https://doi.org/10.34306/att.v7i3.401>.
- [9] M. S. S. Siqueira, P. O. Nascimento, and A. P. Freire, "Reporting behaviour of people with disabilities in relation to the lack of accessibility on government websites: Analysis in the light of the theory of planned behaviour," *Disability, CBR & Inclusive Development*, vol. 33, no. 1, pp. 52–68, 2022.
- [10] N. L. DA Putri, "Optimizing termination of employment: Implementation of personal extreme programming and evaluation of eucs pieces," *Technomedia Journal*, vol. 9, no. 3, pp. 296–308, 2025.
- [11] C. Lukita, T. Handra, F. P. Oganda, and M. Laurens, "Data-driven innovation for circular digital economy in sustainable urban development," *IAIC Transactions on Sustainable Digital Innovation (ITSIDI)*, vol. 7, no. 1, pp. 97–105, 2025.
- [12] T. Suhara, C. S. Bangun *et al.*, "Human resource competence and innovation of small and medium micro enterprises (umkm) tangerang regency," *APTISI Transactions on Management*, vol. 6, no. 2, pp. 181–190, 2022.
- [13] D. Zhou, M. Liao, and W. Dai, "How long-term orientation affects corporate entrepreneurship: The role of entrepreneurs' prior experience," *Journal of Management & Organization*, vol. 30, no. 1, pp. 121–147, 2024.
- [14] D. Bozward and M. Rogers-Draycott, "Exploring the impact of entrepreneurial experience on future entrepreneurship aspirations," *Entrepreneurship Education*, vol. 7, no. 4, pp. 417–440, 2024.
- [15] A. Ratnawati, T. Irawan, S. M. Wahid, and O. A. Al-Kamari, "Integrating ai for dynamic personalization in gamichain systems: Enhancing engagement, ownership, and value in digital business," *AI, Innovation, and Resilience for the Environment (AIR)*, vol. 1, no. 1, pp. 50–57, 2026.
- [16] Z. Zainol, G. Brotosaputro, S. C. Chen, and E. A. Natasya, "Designing ethical ai systems for sustainable technology development," *ADI Journal on Recent Innovation*, vol. 6, no. 2, pp. 201–211, 2025.
- [17] T. S. Taleb, N. Hashim, and N. Zakaria, "Entrepreneurial leadership and entrepreneurial success: The mediating role of entrepreneurial opportunity recognition and innovation capability," *Sustainability*, vol. 15, no. 7, p. 5776, 2023.

- [18] A. Williams, Y. Hasudungan, and N. Azizah, "The implementation of effective financial management to increase the profitability of startups," *Startupreneur Business Digital (SABDA Journal)*, vol. 4, no. 1, pp. 47–54, 2025.
- [19] M. Hardini, V. Agarwal, D. Apriani, I. A. Widjaya, E. Setiawaty, and N. Nurasiah, "Application of database normalization in increasing data storage efficiency," *International Transactions on Artificial Intelligence*, vol. 3, no. 2, pp. 201–211, 2025.
- [20] C. Yu, G. Yao *et al.*, "Enhancing student engagement with ai-driven personalized learning systems," *International Transactions on Education Technology (ITEE)*, vol. 3, no. 1, pp. 1–8, 2024.
- [21] T. Pujiati, I. Sasono, S.-C. Chen, N. P. L. Santoso, and N. S. Arasid, "The influence of artificial intelligence learning systems on student learning effectiveness," *Health, Empathy, and AI Learning (HEAL)*, vol. 1, no. 1, pp. 50–58, 2025.
- [22] S. Watini, T. Nurhaeni, and L. Meria, "Development of village office service models to community based on mobile computing," *International Journal of Cyber and IT Service Management*, vol. 1, no. 2, pp. 189–196, 2021.
- [23] M. S. Gunawan, U. Rahardja, A. Ardien, J. Edwards, and D. I. Desrianti, "Enhancing audience engagement through interactive aidriven narrative structures," *Bridging of Emerging AI and Media Broadcasting (BEAM)*, vol. 1, no. 2, pp. 87–98, 2026.
- [24] M. N. Ferreira-Neto, J. L. de Carvalho Castro, J. M. de Sousa-Filho, and B. de Souza Lessa, "The role of self-efficacy, entrepreneurial passion, and creativity in developing entrepreneurial intentions," *Frontiers in psychology*, vol. 14, p. 1134618, 2023.
- [25] L. Sitoay, M. V. A. Sin, S. Riyadi, M. Daeli, and J. Parker, "Smart urban mental health mapping through iot sensor networks and ai analysis," *Journal of Orange Technology*, vol. 1, no. 1, pp. 19–28, 2024.
- [26] R. Ahli, M. F. Hilmi, and A. Abudaqa, "Moderating effect of perceived organizational support on the relationship between employee performance and its determinants: A case of entrepreneurial firms in uae," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 6, no. 2, pp. 199–212, 2024, <https://doi.org/10.34306/att.v6i2.425>.
- [27] M. R. Tsani, H. D. Purnomo, W. Sulisty, B. Susanto, K. D. Hartomo, I. Sembiring, A. Iriani, and Sugianto, "Integration chi square and bootstrapping in svm for electric car sentiment analysis," in *AIP Conference Proceedings*, vol. 3234, no. 1. AIP Publishing LLC, 2025, p. 050003.
- [28] A. K. Jaya, U. Ependi, A. A. Setyawan, A. Jaiswal, G. P. Cesna, R. Kurniaji *et al.*, "Artificial intelligence analysis of cultural narratives shaping emotional responses to infertility," in *2025 4th International Conference on Creative Communication and Innovative Technology (ICCIT)*. IEEE, 2025, pp. 1–7.
- [29] O. Candra, N. B. Kumar, N. K. A. Dwijendra, I. Patra, A. Majdi, U. Rahardja, M. Kosov, J. W. G. Guerrero, and R. Sivaraman, "Energy simulation and parametric analysis of water cooled thermal photovoltaic systems: energy and exergy analysis of photovoltaic systems," *Sustainability*, vol. 14, no. 22, p. 15074, 2022.
- [30] C. Lukita, A. W. A. Rahman, I. N. Hikam, and U. Rahardja, "Integrating strategic management with sdg 10 for sustainable development and equity," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 7, no. 2, pp. 638–649, 2025, <https://doi.org/10.34306/att.v7i2.507>.
- [31] J. Billingsley, N. P. Lipsey, J. L. Burnette, and J. M. Pollack, "Growth mindsets: defining, assessing, and exploring effects on motivation for entrepreneurs and non-entrepreneurs," *Current Psychology*, vol. 42, no. 11, pp. 8855–8873, 2023.
- [32] Y. Ariella, C. Hongdiyanto, W. Hartono, and G. Ongkowijoyo, "The impact of entrepreneurial education, mindset, and creativity on entrepreneurial intention: mediating role of entrepreneurial self-efficacy of students in indonesia," in *International Conference on Mathematical and Statistical Physics, Computational Science, Education and Communication (ICMSCE 2023)*, vol. 12936. SPIE, 2023, pp. 564–575.
- [33] S. H. S. S. N. L. F Delia, HR Ngemba, "Application of k-means clustering algorithm in population density grouping," *Technomedia Journal*, vol. 9, no. 3, pp. 373–385, 2025.
- [34] H. Wiyanto and C. Widayati, "The impact of sustainable entrepreneurship education and self-efficacy on students' entrepreneurial mindset and attitude," *Edelweiss Applied Science and Technology*, vol. 8, no. 5, pp. 2504–2518, 2024.
- [35] V. A. Srimulyani, Y. B. Hermanto, S. Rustiyaningsih, and L. A. S. Waloyo, "Internal factors of entrepreneurial and business performance of small and medium enterprises (smes) in east java, indonesia," *Heliyon*, vol. 9, no. 11, 2023.

- [36] A.-C. Grözinger, S. Wolff, P. J. Ruf, and P. Moog, "The power of shared positivity: organizational psychological capital and firm performance during exogenous crises," *Small Business Economics*, vol. 58, no. 2, pp. 689–716, 2022.
- [37] M. Fernández-Alles, D. Hernández-Roque, M. Villanueva-Flores, and M. Díaz-Fernández, "The impact of human, social, and psychological capital on academic spin-off internationalization," *Journal of International Entrepreneurship*, vol. 20, no. 3, pp. 433–473, 2022.
- [38] B. K. Bintoro, N. Lutfiani, D. Julianingsih *et al.*, "Analysis of the effect of service quality on company reputation on purchase decisions for professional recruitment services," *APTISI Transactions on Management*, vol. 7, no. 1, pp. 35–41, 2023.
- [39] N. N. Rafiana, "Technopreneurship strategy to grow entrepreneurship career options for students in higher education," *ADI Journal on Recent Innovation*, vol. 5, no. 2, pp. 110–126, 2024.
- [40] W. Usino, M. M. Sari, F. P. Oganda, O. P. M. Daeli, and E. Smith, "Artificial intelligence integration for sustainable business model innovation insights from global startups," *Smart Human-centered Emerging Research in Machine Intelligence*, vol. 1, no. 2, pp. 82–89, 2025.
- [41] B. Any, S. Four, and C. Tariazela, "Technology integration in tourism management: Enhancing the visitor experience," *Startuppreneur Business Digital (SABDA Journal)*, vol. 3, no. 1, pp. 81–88, 2024.
- [42] T. W. Lim, *East asian entrepreneurs: A study of state role, Education and Mindsets*. World Scientific, 2022.
- [43] A. Wilson and M. R. Anwar, "The future of adaptive machine learning algorithms in high-dimensional data processing," *International Transactions on Artificial Intelligence*, vol. 3, no. 1, pp. 97–107, 2024.
- [44] V. Melinda and A. E. Widjaja, "Virtual reality applications in education," *International Transactions on Education Technology*, vol. 1, no. 1, pp. 68–72, 2022.
- [45] S. Ginting, E. Rakhmawati, A. A. Setyawan, S. P. Anantadjaya, and I. M. Nawangwulan, "Leadership and conflict management training for hr empowerment in non-profit organizations," *TRANSFORMASI: JURNAL PENGABDIAN PADA MASYARAKAT*, vol. 4, no. 3, pp. 373–385, 2024.
- [46] F. Zidan, D. Nugroho, and B. A. Putra, "Securing enterprises: harnessing blockchain technology against cybercrime threats," *International Journal of Cyber and IT Service Management*, vol. 3, no. 2, pp. 168–173, 2023.
- [47] I. OLIVO and C. BARBARANELLI, "Checking your chess! development and validation of the chess self-efficacy scale in a competitive setting," *TPM: Testing, Psychometrics, Methodology in Applied Psychology*, vol. 30, no. 3, 2023.
- [48] H. Heckhausen and J. Kuhl, "From wishes to action: The dead ends and short cuts on the long way to action," in *Goal directed behavior*. Routledge, 2022, pp. 134–159.
- [49] C. Churiyah and R. Hasibuan, "Exploring the implementation and success of nutrition education programs in early childhood education settings," *Journal of Islamic Education Students (JIES)*, vol. 5, no. 1, pp. 135–143, 2025.
- [50] M. Yang, H. Chen, R. Long, and J. Yang, "How does government regulation shape residents' green consumption behavior? a multi-agent simulation considering environmental values and social interaction," *Journal of Environmental Management*, vol. 331, p. 117231, 2023.
- [51] K. Hameli, L. Ukaj, and L. Çollaku, "The role of self-efficacy and psychological empowerment in explaining the relationship between emotional intelligence and work engagement," *EuroMed Journal of Business*, vol. 20, no. 2, pp. 378–398, 2025.
- [52] L. M. Warner and R. Schwarzer, "Self-efficacy and health," in *Handbook of concepts in health, health behavior and environmental health*. Springer, 2024, pp. 1–26.
- [53] R. Kumar and S. Shukla, "Creativity, proactive personality and entrepreneurial intentions: examining the mediating role of entrepreneurial self-efficacy," *Global Business Review*, vol. 23, no. 1, pp. 101–118, 2022.