







“Linking entrepreneurial intention to SME performance through competence and training: A study of SMES in East Java”

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LINKING ENTREPRENEURIAL INTENTION TO SME PERFORMANCE THROUGH COMPETENCE AND TRAINING: A STUDY OF SMEs IN EAST JAVA

Abstract

This study examines the intricate mechanisms by which entrepreneurial purpose affects the success of small and medium enterprises (SMEs) in East Java, Indonesia, focusing on the essential roles of entrepreneurial competence, education and training. Although the psychological factors influencing entrepreneurship have been extensively studied, empirical data linking these factors to concrete business outcomes in resource-limited emerging nations remain incomplete. This study uses PLS-SEM to analyze cross-sectional survey data of 280 small and medium-sized enterprise owners and administrators. The results suggest that entrepreneurial competence and entrepreneurial intention are both strongly predicted ($\beta = 0.714$, $p < 0.001$) by participation in education and training. However, it does not have a significant direct effect on an SME's efficacy ($\beta = 0.086$, $p = 0.297$; $p < 0.001$). Furthermore, entrepreneurial competence alone was insufficient to drive business success in this context. Conversely, entrepreneurial education and training emerged as a vital transformative mechanism, significantly enhancing firm performance and serving as a key bridge that converts motivational drive into measurable economic outcomes. These findings challenge the traditional assumption that intention and competence automatically lead to success, highlighting instead the necessity of structured, practice-oriented training to navigate structural market barriers. This study provides critical information for policymakers and practitioners, highlighting that the sustainable expansion of SMEs in emerging economies necessitates focused external capacity-building measures instead of only depending on individual psychological characteristics.

Keywords

entrepreneurial intention, SME performance,
entrepreneurial education and training, entrepreneurial
competence, PLS-SEM, emerging economies

JEL Classification

L26, M10, O15

INTRODUCTION

Small and medium-sized enterprises (SMEs) play a central role in economic development in emerging economies, including Indonesia, where they dominate the business landscape and contribute significantly to employment and value creation (Aprilia et al., 2025). However, despite their strategic importance, SMEs continue to face structural constraints such as limited financial resources, managerial capability gaps, and restricted access to broader markets (Manotas & Gonzalez-Perez, 2020; Fiernaningsih et al., 2024). These conditions create a highly competitive and uncertain environment, making it difficult for SMEs to achieve consistent and sustainable performance.

In such contexts, the expansion of SMEs does not necessarily lead to improved business performance. Firms often exhibit heterogeneous outcomes, indicating that participation in entrepreneurial activities

alone is insufficient to ensure success (Narmaditya et al., 2023; Sabihaini et al., 2023). A critical issue emerges from the gap between entrepreneurial intention and actual firm performance, where strong entrepreneurial motivation does not always result in measurable business outcomes. This discrepancy becomes more pronounced in environments characterized by resource constraints and institutional limitations, where the translation of intention into performance is frequently ineffective (Adam et al., 2024). Previous studies also report inconsistent findings regarding the relationship between entrepreneurial intention and firm performance, suggesting that this relationship is not universally direct or significant (Ismail et al., 2023).

This phenomenon reveals an unresolved scientific problem concerning how entrepreneurial intention is transformed into tangible organizational outcomes. Although entrepreneurial intention is widely recognized as a key psychological driver of entrepreneurial behavior, its direct relationship with firm performance remains theoretically and empirically inconsistent (Wiyono et al., 2026). This indicates that the relationship is not linear and likely depends on underlying mechanisms that enable the transformation of intention into productive capabilities and strategic actions.

However, the specific mechanisms that facilitate this transformation, particularly through capability development and structured learning processes, remain insufficiently understood, especially in emerging economies characterized by structural constraints. Therefore, a clear research problem arises in explaining how entrepreneurial intention can be effectively translated into SME performance within such contexts.

1. LITERATURE REVIEW AND HYPOTHESES

The study of small and medium-sized enterprise (SME) performance has attracted increasing scholarly attention as researchers attempt to understand the psychological, organizational, and capability-based factors that shape business outcomes. Despite the growing body of literature, empirical findings regarding the direct relationship between entrepreneurial intention and firm performance remain inconsistent across different contexts and populations (Narmaditya et al., 2023; Sandroto et al., 2024). This inconsistency is not merely empirical but also theoretical, as prior studies differ in how they conceptualize performance outcomes, ranging from objective financial indicators to subjective growth perceptions, leading to divergent conclusions. Moreover, inconsistencies also arise from differences in contextual settings, particularly between developed and emerging economies, where institutional environments and resource availability significantly shape entrepreneurial outcomes.

This inconsistency suggests that entrepreneurial intention alone may not be sufficient to explain firm performance, particularly in environments characterized by structural and institutional con-

straints. In particular, SMEs operating in emerging economies face structural constraints such as limited resources, institutional weaknesses, and restricted market access, which may hinder the effective translation of entrepreneurial motivation into measurable performance outcomes (Fiernaningsih et al., 2024; Subagyo et al., 2020). More importantly, these constraints act as boundary conditions under which entrepreneurial intention may lose its predictive power, indicating that contextual factors fundamentally reshape the intention–performance relationship.

Entrepreneurial intention is widely regarded as a key psychological antecedent of entrepreneurial behavior. Drawing on the Theory of Planned Behavior, intention reflects an individual's cognitive readiness to engage in entrepreneurial activities, shaped by attitudes, subjective norms, and perceived behavioral control (Amaliawati et al., 2019; Sandroto et al., 2024). However, while intention is necessary to initiate entrepreneurial action, it does not guarantee successful business outcomes. A growing number of studies highlight that individuals with strong entrepreneurial intentions often face managerial limitations and environmental uncertainties that constrain their ability to achieve sustainable performance

(Fiernaningsih et al., 2024; Sijabat, 2018). This reveals a fundamental limitation of the Theory of Planned Behavior when applied to organizational outcomes, as the theory primarily explains individual-level decision-making rather than firm-level performance dynamics. Thus, a theoretical gap emerges between intention formation and performance realization, indicating that the intention–performance relationship is contingent upon contextual and capability-related factors rather than being a direct causal linkage.

Furthermore, recent literature suggests that entrepreneurial intention may not directly influence firm performance but instead operates through intermediate mechanisms. In this regard, intention can be seen as a triggering factor that motivates individuals to acquire knowledge, develop skills, and engage in opportunity-seeking behavior (Raza et al., 2021; Wiyono et al., 2025). Nevertheless, differences in access to resources, learning opportunities, and absorptive capacity lead to heterogeneous performance outcomes among entrepreneurs with similar levels of intention (Firmansyah & Saepuloh, 2022). Such heterogeneity indicates that entrepreneurial intention functions as a latent potential that requires activation through enabling mechanisms, rather than as a direct determinant of performance. This heterogeneity implies that entrepreneurial intention functions as a necessary but insufficient condition, requiring complementary mechanisms to transform motivation into productive capability. Therefore, mediating variables become essential to explain the underlying processes through which intention is translated into measurable business performance.

From the perspective of the Resource-Based View, entrepreneurial competencies are considered strategic intangible resources that contribute to value creation and competitive advantage. These competencies, including analytical, strategic, and operational capabilities, enable entrepreneurs to respond effectively to dynamic market conditions (Khongrat, 2025; Prakasa, 2021). Empirical evidence suggests that firms led by individuals with strong entrepreneurial competencies tend to achieve superior performance due to their ability to innovate, manage risks, and exploit opportunities (Khan et al., 2021). However, this relationship is not universally consistent, as competencies

may fail to generate performance outcomes when they are not supported by adequate external resources or institutional conditions. This suggests that competencies are context-dependent assets whose effectiveness relies on complementary external conditions, such as access to markets, networks, and institutional support. Consequently, the value of entrepreneurial competencies cannot be fully realized in isolation but depends on their alignment with environmental opportunities and constraints.

In this context, education and training play a crucial role in enhancing entrepreneurial capabilities. According to Human Capital Theory, investments in education increase individual productivity by improving knowledge and skills (Hairudinor et al., 2020; He et al., 2024). Nevertheless, the effectiveness of entrepreneurship education remains debated. While some studies report positive impacts on business performance, others argue that theoretical training alone is insufficient to produce meaningful outcomes without practical application (Amaliawati et al., 2019). This debate reflects a deeper issue concerning the transferability of knowledge into practice, particularly in SME contexts where learning is often experiential and context-specific. It also highlights a fundamental distinction between declarative knowledge (knowing what) and procedural knowledge (knowing how), where only the latter has a direct impact on business performance.

In addition to competencies and learning processes, cognitive factors such as entrepreneurial self-efficacy also influence business performance. Self-efficacy reflects an individual's belief in their ability to perform entrepreneurial tasks and has been linked to persistence, innovation, and adaptability under uncertainty (Firmansyah & Saepuloh, 2022; Hairudinor et al., 2020). However, high self-efficacy without adequate knowledge and skills may lead to suboptimal decision-making. This indicates that overconfidence may even become detrimental when not supported by actual competence, reinforcing the need for balanced development between psychological readiness and practical capability. Therefore, psychological confidence must be complemented by structured learning and capability development to produce optimal performance outcomes.

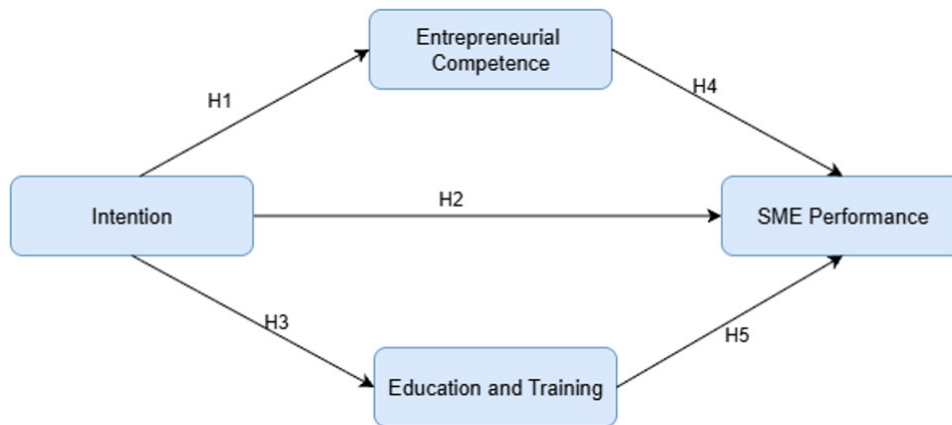


Figure 1. Research model

Overall, SME performance can be understood as the result of a dynamic interaction between entrepreneurial intention, capability development, and continuous learning processes (Fiernaningsih et al., 2023). Rather than operating independently, these elements interact in a complementary manner, where intention provides direction, competencies enable execution, and education and training facilitate capability enhancement. This interaction reflects a systemic perspective in which performance emerges from the alignment of multiple interdependent factors rather than from isolated variables.

Despite the extensive literature, existing studies remain fragmented and often lack theoretical integration in explaining how entrepreneurial intention translates into firm performance. Most prior research focuses on direct relationships, overlooking the mediating roles of competencies and learning processes. Moreover, limited attention has been given to emerging economy contexts, where structural constraints may significantly alter these relationships. Consequently, there is a need to move beyond linear and reductionist models and develop integrative frameworks that capture the complexity, conditionality, and context-dependence of the intention-performance relationship.

Building on these conclusions, this study aims to develop and empirically test an integrative model that explains how entrepreneurial intention is transformed into SME performance through entrepreneurial competence and education and training, particularly within the context of emerging economies.

Furthermore, this study contributes to the literature by integrating psychological, capability-based, and learning perspectives into a single theoretical framework, thereby addressing the fragmentation in prior research and providing a more comprehensive explanation of SME performance.

Therefore, the research hypotheses are as follows:

- H1: Entrepreneurial intention positively influences entrepreneurial competence.*
- H2: Entrepreneurial intention positively influences SME performance.*
- H3: Entrepreneurial intention positively influences participation in entrepreneurial education & training.*
- H4: Entrepreneurial competence positively influences SME performance.*
- H5: Entrepreneurial education & training positively influence SME performance.*

This study develops a conceptual model in which entrepreneurial intention is positioned as the primary driver, while entrepreneurial competence and education and training function as key mediating mechanisms that bridge the gap between intention and performance. The model integrates the Theory of Planned Behavior, Resource-Based View, and Human Capital Theory to provide a comprehensive explanation of SME performance. This integrative approach

offers a more holistic explanation compared to prior studies that predominantly examine direct relationships. Schematically, the relationship between variables can be depicted as in Figure 1.

2. METHOD

This investigation employed a cross-sectional survey design that included an empirical focus on East Java, Indonesia, a strategic region for the development of entrepreneurship and SME ecosystems (Bernardus et al., 2024). Respondents were selected using purposive sampling, with SME owners who had participated in entrepreneurship training or education programs as the criterion to ensure data relevant to business capability development. The number of measurement indicators was used to determine the sample size, with a total of 280 observations collected to meet statistical power requirements in the PLS-SEM analysis, in accordance with the latest methodological recommendations (Becker et al., 2022). To collect primary data, a structured five-point Likert scale was implemented, derived from an instrument used in prior research to investigate the effect of entrepreneurial education on intentions (Lv et al., 2021), entrepreneurial competencies, and SME business success (Umar et al., 2018).

From East Javan SME owners, 280 valid questionnaires were gathered. This sampling approach was deemed valid given the frequent fluctuations in the SME sector and the lack of a comprehensive sampling frame. The minimum criteria for PLS-SEM analysis were satisfied by this sample size. Demographic data are summarized in Table 1. Female entrepreneurs comprised 66.43% of the total sample, while male entrepreneurs comprised 33.57%. The age category of 21–31 comprised nearly half of the respondents (48.93%), indicating a predominance of the younger generation in the SME sector. The majority of businesses (81%) had 1 to 10 employees, a typical characteristic of micro-enterprises in East Java. These demographic characteristics indicate that the sample is dominated by young micro-enterprises, which is consistent with the structure of SMEs in East Java.

Table 1. Demographic characteristics of respondents

Characteristic	Category	Frequency	Percentage (%)
Gender	Female	186	66.43
	Male	94	33.57
Age	21-31	137	48.93
	32-42	103	36.79
	43-53	32	11.43
	54-64	8	2.86
	65-75	0	0.00
Business Duration (Years)	1-11	259	92.50
	12-22	19	6.79
	23-33	2	0.71
Number of Employees	1-10	227	81.07
	11-21	29	10.36
	22-32	16	5.71
	33-43	1	0.36
	44-54	2	0.71
	55-65	4	1.43
	66-76	1	0.36

To evaluate the quality of the measurement model, comprehensive validity and reliability experiments were implemented. All constructs in this study met the criteria for AVE > 0.50, and Composite Reliability and Cronbach’s Alpha > 0.70, indicating acceptable internal consistency and convergent validity (Becker et al., 2022). To verify discriminant validity and to ensure empirical distinctions among the model’s constructs, the Fornell-Larcker criterion and the Heterotrait-Monotrait ratio were used. Participants in this study were not identified, and the potential multicollinearity of the Variance Inflation Factor (VIF) values was examined. This lowers the chance of common method bias that often shows up in self-report data (Becker et al., 2022; Bocoya-Maline et al., 2024). Data were analyzed using PLS-SEM with SmartPLS 4, including testing path coefficients (H1–H5) and assessing mediation via bootstrapping with 5,000 resamples (Becker et al., 2022).

3. RESULTS AND DISCUSSION

Good convergent validity is indicated by loading scores all above 0.70. The measurement model (Table 2) satisfies the recommended criteria, with AVE values exceeding 0.50 and Composite Reliability and Cronbach’s Alpha values above 0.70 (Table 3). This confirms that each measurement item accurately reflects its respective construct.

The HTMT ratio and Fornell-Larcker criteria were implemented to evaluate discriminant validity, and the results indicate that each construct is empirically distinct from the others. Therefore, the constructs of SME Performance, Entrepreneurial Competence, Entrepreneurial Education and Training, and Entrepreneurial Intention meet the requirements for structural model analysis.

Cronbach’s Alpha and Composite Reliability were implemented to assess the construct’s reliability. Every construct demonstrated satisfactory internal consistency by meeting the suggested criteria (CR > 0.70; CA > 0.70). Additionally, the AVE values exceeded 0.50, suggesting that the convergent validity was adequate.

Table 2. Measurement model: outer loadings

No.	Variable	Item	Statement	Loading Factor
1	Entrepreneurial Intention (EI)	EI1	I’m going to do everything I can to start my own company	0.789
		EI2	I aspire to become an entrepreneur through my business	0.880
		EI3	To start my own business, I’ll do anything	0.885
		EI4	My business is going to get bigger.	0.837
		EI5	I aspire to establish an enterprise in the future	0.846
2	Entrepreneurial Competence (EC)	EC1	I can create a business working with other people	0.818
		EC2	I can negotiate with other people in business	0.834
		EC3	I can relate other ideas, problems, and observations to other areas	0.806
		EC4	I can see the future, and I can identify problems or opportunities	0.809
		EC5	I run my business well	0.802
3	Entrepreneurial Education & Training (EET)	TE1	Through active engagement with external stakeholders, my institution prepares me for digital professions	0.840
		TE2	My institution provides internet access and mobile data to support a digital entrepreneurial environment	0.859
		TE3	My organization expands opportunities for digital start-ups	0.891
		SM1	Digital training enhances my entrepreneurial skills	0.818
		SM2	Digital training improves my communication skills	0.885
		SM3	Digital training strengthens my teamwork abilities	0.862
		SM4	Digital training prepares me for future readiness	0.838
		PEV1	Digital training enhances lifelong learning and information-management capabilities	0.896
		PEV2	Digital training improves my critical thinking and problem-solving skills	0.898
		PEV3	Digital training expands my understanding of morality and professional ethics	0.891
		POT1	I have started using digital tools to learn entrepreneurial skills	0.796
		POT2	Digital training opens new opportunities for me to create new business models	0.906
		POT3	Digital training helps me create new business models, innovations, and value	0.863
4	SME Performance (SME)	SME1	My business has experienced an increase in sales growth	0.890
		SME2	My business has achieved improved returns on investment	0.935
		SME3	My business cash flows have increased	0.902
		SME4	My net profit from the business has gone up	0.909
		SME5	My organization’s market share has expanded	0.840

Table 3. Convergent validity and reliability of constructs

Variables	Cronbach’s Alpha	rho_A	Reliability Composite	AVE
Intention	0.902	0.908	0.927	0.719
Entrepreneurial Competence	0.873	0.875	0.907	0.662
Entrepreneurial Education and Training	0.943	0.944	0.950	0.594
SME Performance	0.939	0.942	0.953	0.804

Table 4. Endogenous constructs' R2 values

Endogenous Variable	R ²	Adjusted R ²	Interpretation
Entrepreneurial Competence	0.509	0.507	Moderate
Entrepreneurial Education and Training	0.469	0.467	Moderate
SME Performance	0.391	0.387	Moderate

The coefficient of determination (R2) was used to assess the model's explanatory power. According to Chin (1998), the endogenous constructs demonstrate moderate predictive power. Entrepreneurial Competence shows an R2 value of 0.509, while Entrepreneurial Education and Training has an R2 of 0.469. In addition, SME Performance records an R2 value of 0.391 (Table 4). Overall, the model demonstrates an adequate ability to explain variations in the endogenous constructs.

The Standardized Root Mean Square Residual (SRMR) was used to assess model fit. The estimated model shows a value of 0.113, which is slightly above the conventional threshold, while the saturated model value of 0.080 indicates an acceptable

fit. In PLS-SEM, SRMR values should be interpreted cautiously, particularly in complex predictive models where slightly higher values may still be acceptable.

The structural model was evaluated using SmartPLS, as illustrated in Figure 2. The hypothesis testing results based on bootstrapping with 5,000 resamples are presented in Table 5. The results show that entrepreneurial intention has a significant positive effect on entrepreneurial competence ($\beta = 0.714, t = 20.360, p < 0.001$) and entrepreneurial education and training ($\beta = 0.686, t = 20.818, p < 0.001$). However, entrepreneurial intention does not significantly affect SME performance ($\beta = 0.086, t = 1.043, p = 0.297$).

Source: Authors' calculation using SmartPLS 4.0.

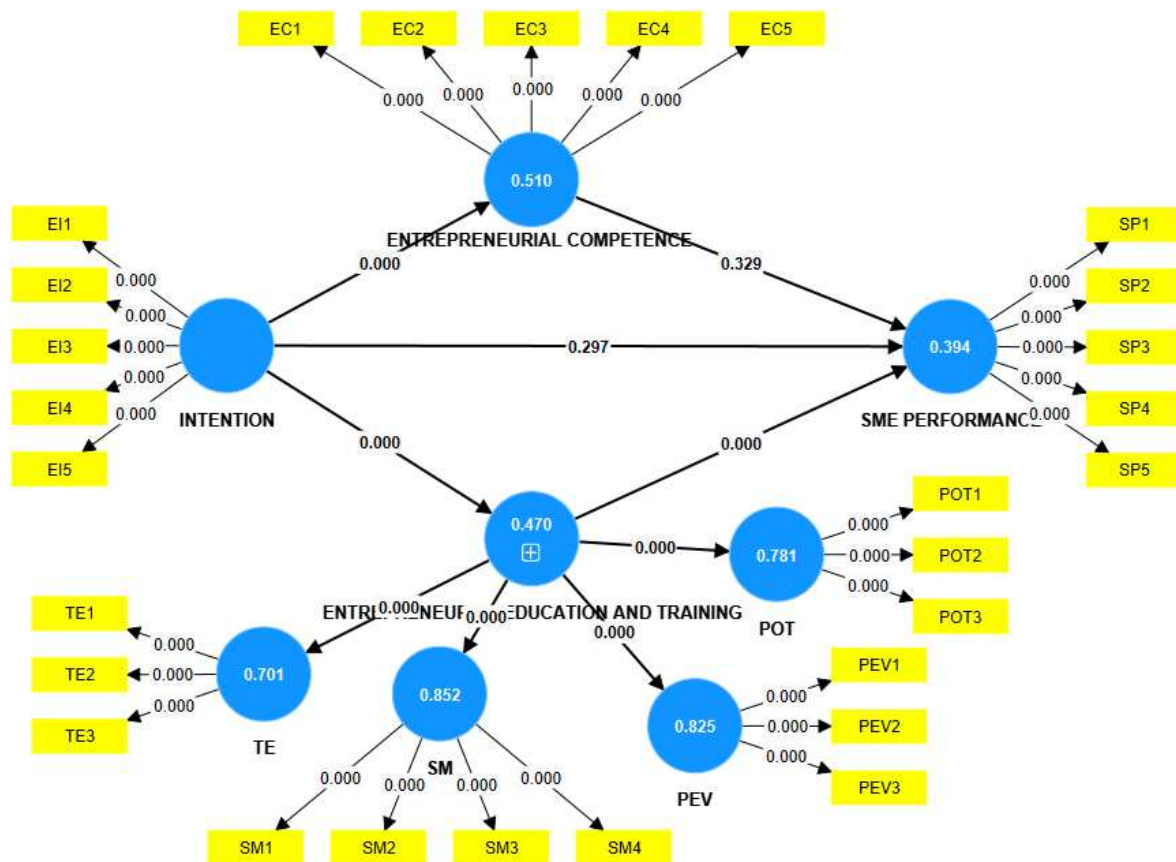


Figure 2. Standardized path coefficients in a structural model

Table 5. Direct impacts of the structural model results

Hypothesis	Path Coefficient	SE	T Statistics	P Values	Information
Intention → Entrepreneurial Competence	0.714	0.035	20.360	0.000	Accepted
Intention → SME Performance	0.086	0.082	1.043	0.297	Not Accepted
Intention → Entrepreneurial Education and Training	0.686	0.033	20.818	0.000	Accepted
Entrepreneurial Competence → SME Performance	0.123	0.126	0.976	0.329	Not Accepted
Entrepreneurial Education and Training → SME Performance	0.461	0.121	3.809	0.000	Accepted

Furthermore, entrepreneurial competence does not significantly influence SME performance ($\beta = 0.123$, $t = 0.976$, $p = 0.329$). In contrast, entrepreneurial education and training significantly and positively affects SME performance ($\beta = 0.461$, $t = 3.809$, $p < 0.001$). Therefore, H1, H3, and H5 are accepted, whereas H2 and H4 are not accepted.

The mediation analysis, presented in Table 6, reveals contrasting results for the two indirect pathways. Statistically, there was no significant relationship between entrepreneurial intention and SME performance through entrepreneurial competence ($\beta = 0.088$, $p = 0.336$), suggesting that merely increasing competence does not automatically result in better firm performance.

In contrast, the correlation between entrepreneurial intention and the performance of small and medium-sized enterprises was significantly mediated by entrepreneurial education and training ($\beta = 0.316$, $p < 0.001$). This demonstrates that structured training programs serve as a vital mechanism for translating entrepreneurial drive into measurable performance improvements. Such initiatives provide entrepreneurs with the strategic insights and practical capabilities required for growth. Overall, these results emphasize the essential role of external capacity-building efforts in enhancing SME success.

The findings confirm that entrepreneurial intention significantly enhances entrepreneurial competence. This suggests that individuals with strong entrepreneurial aspirations are more likely to develop

managerial and technical capabilities to support their business activities. In line with the Theory of Planned Behavior (TPB), cognitive intention serves as an important driver of capability-building behavior (Al-Jubari et al., 2019). Among SMEs in East Java, entrepreneurs with strong intentions tend to engage more actively in experiential learning and strategic skill development (Kaijun & Sholihah, 2015; Prabandari & Chong, 2022). This finding is also consistent with previous studies emphasizing entrepreneurial intention as a precursor to human capital development in emerging economies (Ndofirepi, 2022; Wach & Głodowska, 2019).

The study also reveals that entrepreneurial intention does not directly influence SME performance. Although entrepreneurial motivation is essential for initiating business activities, it may not automatically translate into improved firm performance. External constraints, including limited access to financing and low digital literacy, may weaken the ability of entrepreneurs to convert motivation into tangible business outcomes (Fiernaningsih et al., 2024). This result supports prior studies arguing that entrepreneurial intention requires institutional support and practical implementation mechanisms to generate superior performance outcomes (Ahsan et al., 2021; Donbesuur et al., 2020).

Furthermore, entrepreneurial intention significantly influences participation in entrepreneurial education and training. Entrepreneurs with clear business goals are generally more motivated to seek structured learning opportunities and professional development programs (Maheshwari et

Table 6. Effects of mediation

Mediation Path	Path Coefficient	SE	T Statistics	P Values	Information
Intention → Entrepreneurial Competence → SME Performance	0.088	0.091	0.962	0.336	Not Accepted
Intention → Entrepreneurial Education & Training → SME Performance	0.316	0.084	3.766	0.000	Accepted

al., 2023). In East Java, this is evident in the increasing participation of SME owners in government- and private-sector training initiatives aimed at improving entrepreneurial knowledge and digital capabilities (Ndofirepi, 2022).

The findings further indicate that entrepreneurial competence does not significantly affect SME performance. This suggests that technical and managerial skills alone may not be sufficient to improve firm performance without broader business support systems and market integration (Srimulyani et al., 2023). In resource-constrained environments, competent entrepreneurs may still encounter operational barriers that limit business growth (Idrus et al., 2023; Sukma, 2025).

In contrast, entrepreneurial education and training significantly improve SME performance. This finding highlights the important role of structured training programs in enhancing entrepreneurial competitiveness (Hairudinor et al., 2020; Martin et al., 2013). Programs focusing on digital

marketing, financial management, and innovation capability provide entrepreneurs with practical competencies needed to compete in dynamic markets (Anjaningrum et al., 2024; Ayatse, 2024). Previous evidence in Indonesia also demonstrates that practical entrepreneurial training contributes positively to market expansion and business effectiveness (Chasanah et al., 2025).

Finally, the mediation analysis demonstrates that entrepreneurial education and training significantly mediate the relationship between entrepreneurial intention and SME performance, whereas entrepreneurial competence does not. This finding indicates that structured entrepreneurial training acts as a critical mechanism for transforming entrepreneurial motivation into measurable business performance (Alshebami et al., 2020; Raza et al., 2021). Therefore, strengthening practice-oriented training ecosystems may be more effective for improving SME performance than relying solely on motivational or competence-based approaches (Arif & Herawan, 2025; Fiernaningsih et al., 2024).

CONCLUSION

This study examines the influence of entrepreneurial intention on SME performance through entrepreneurial competence and entrepreneurial education and training in East Java. The findings demonstrate that entrepreneurial intention significantly improves entrepreneurial competence and participation in entrepreneurial education and training programs. However, entrepreneurial intention does not directly influence SME performance. Similarly, entrepreneurial competence does not significantly affect SME performance. In contrast, entrepreneurial education and training significantly enhance SME performance and serve as a mediating mechanism between entrepreneurial intention and SME performance.

These findings suggest that entrepreneurial motivation alone is insufficient to generate superior business outcomes without practical support mechanisms. Structured entrepreneurial education and training play a crucial role in transforming entrepreneurial intention into measurable business performance by equipping SME owners with practical managerial, financial, and digital capabilities. Therefore, entrepreneurial training programs should be prioritized as strategic instruments for strengthening SME competitiveness and sustainability, particularly in emerging economies such as Indonesia.

From a theoretical perspective, this study contributes to the Theory of Planned Behavior by demonstrating that entrepreneurial intention affects SME performance indirectly through external capability-development mechanisms rather than through direct behavioral outcomes. The study also enriches the entrepreneurship literature by highlighting the stronger role of entrepreneurial education and training compared to entrepreneurial competence in improving SME performance. In practice, the findings imply that government agencies, universities, and business development institutions should intensify practice-oriented entrepreneurial training programs focused on digital transformation, innovation capability, financial literacy, and market expansion. Such initiatives may help SMEs improve resilience and competitiveness in increasingly dynamic business environments.

This study has several limitations. First, the research focuses only on SMEs in East Java, which may limit the generalizability of the findings to other regions. Second, the cross-sectional design restricts the ability to observe long-term causal relationships among variables. Future studies are therefore encouraged to employ longitudinal approaches and include additional variables, such as digital capability, innovation orientation, access to finance, and government support, to obtain a more comprehensive understanding of the determinants of SME performance.

AUTHOR CONTRIBUTIONS

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Data curation: Pudji Herijanto.

Formal analysis: Nilawati Fiernaningsih, Pudji Herijanto.

Funding acquisition: Anna Widayani, Pudji Herijanto.

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Project administration: Nilawati Fiernaningsih, Pudji Herijanto.

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Visualization: Pudji Herijanto, Nilawati Fiernaningsih.

Writing – original draft: Pudji Herijanto.

Writing – review & editing: Pudji Herijanto.

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