

Research Paper

The Impact of Individual Entrepreneurial Orientation and Self-Efficacy on Entrepreneurial Action: A Study of The Central Java Exporters Association

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Abstract

This study investigates the impact of Individual Entrepreneurial Orientation (IEO) and Entrepreneurial Self-Efficacy (ESE) on Entrepreneurial Action (EA) among members of the Indonesia Exporters Association (IEA/GPEI) in Central Java. Acknowledging entrepreneurs as key drivers of economic growth, the research addresses the persistent challenge of business sustainability in Indonesia, where the number of entrepreneurs fluctuates. It highlights IEO (risk-taking, innovativeness, proactiveness) and ESE (belief in one's capacity to execute specific actions) as crucial internal factors for entrepreneurial success, drawing on effectuation theory to explain adaptive decision-making in dynamic environments. The research employed a quantitative approach, surveying 115 active GPEI members, predominantly young female entrepreneurs in the food and beverage sector. Using Partial Least Squares (PLS) for data analysis, the study confirmed both hypotheses: IEO has a significant positive influence on EA, and ESE also has a significant impact on EA. IEO demonstrated a stronger practical effect (medium effect size) on entrepreneurial action compared to ESE (small effect size). The findings corroborate effectuation theory, suggesting that high self-efficacy and strong orientation encourage entrepreneurs to adopt flexible, experimental effectual logic amidst uncertainty. This study contributes to the empirical understanding of psychological traits influencing entrepreneurial outcomes among early-stage exporters in Central Java, emphasizing the need for targeted capacity-building programs to strengthen entrepreneurial competencies.

Keywords: Individual Entrepreneurial Orientation (IEO), Entrepreneurial Self-Efficacy (ESE), Entrepreneurial Action (EA), Effectuation Theory, Indonesia.

INTRODUCTION

Entrepreneurs perform as key drivers of economic growth (Rivai et al., 2019; Sukavejworakit et al., 2018) and employment opportunities (Adeniyi et al., 2024). Entrepreneurs mobilize resources, identify new opportunities, start up their business, create job opportunities, and generate profit. (Jafar, 2017). According to The Global Entrepreneurship and Development Institute, Indonesia was ranked 103rd among 132 global countries in terms of the health of the entrepreneurial environment (Rivai et al., 2019). It implies that Indonesian entrepreneurs have struggled to survive in running their business. The number of stable entrepreneurs in Indonesia fluctuated around five million persons at the beginning of 2024. This fluctuating trend reflects challenges in sustaining business. Therefore, entrepreneurs should have risk-taking, innovativeness, and proactiveness to adapt in a dynamic business environment (Klein, 2008).

Entrepreneurs believe in their capacity to execute specific actions to take risky acts to sustain their business. This framework reflects the relationship between Entrepreneurial Self-Efficacy (ESE) and Entrepreneurial Action (Sarman et al., 2025). Entrepreneurs require good ESE to overcome challenges to lead business success (Khan & Abdullah, 2019). When they encounter obstacles, their ESE provides them with resilience to persevere, learn from setbacks, and adapt their strategies. When they have low ESE, they are more susceptible to failure in business (Sarman et al.,

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2025). Individual Entrepreneurial Orientation makes a significant contribution to business success. Innovativeness and proactiveness create and act on new opportunities, which are vital for new venture performance. For an established business, IEO can guide strategic decision-making. The efficacy of risk-taking and competitive aggressiveness is highly context-dependent.

These conditions highlight the importance of internal factors such as Individual Entrepreneurial Orientation (IEO) and Entrepreneurial Self-Efficacy (ESE) in shaping entrepreneurial action to support business (Lee et al., 2022). Individuals with strong IEO and high ESE are more inclined to proactively seek alternative pathways, take calculated risks, and adapt their strategies, even amidst systemic limitations (Diego & Noble, 1998). The effectuation theory offers a relevant perspective to understand how entrepreneurs recognize their orientation and self-efficacy (Lubis, 2022) as dynamic capabilities for supporting sustainable business (Zahra, 2021). This study uncovers how entrepreneurs in Central Java are taking action to manage their businesses. This research contributes to extending empirical discussion on how Individual Entrepreneurial Orientation and Entrepreneurial Self-Efficacy contribute to influencing entrepreneurial action to sustain and grow their business. While prior studies have often examined IEO and ESE among students or early-stage entrepreneurs, limited research has focused on active practitioners within formal business organizations (Klein, 2008). This study aims to discovers the influence of IEO and ESE on Entrepreneurial Action among members of the Indonesia Exporters Association (GPEI) in Central Java.

LITERATURE REVIEW

Effectuation is an emerging theory of entrepreneurship that explains how entrepreneurs build new businesses. They acknowledge their self-orientation capacity in terms of taking risks, being innovative, and proactive in setting up a business. Effectuation illustrates how to embody and leverage an entrepreneurial orientation in their businesses. This theory offers a practical guide for decision-making that allows businesses to remain innovative, proactive, and strategically risktaking in dynamic environments, ultimately contributing to their ability to run and sustain ventures (Matalamäki, 2017; Mcgee et al., 2009). Entrepreneurs pre-commit to what they are willing to lose or to succeed. When entrepreneurs know they can absorb the potential losses, they are more willing to anticipate the potential loss. This willingness provides valuable learning experiences. Entrepreneur evaluates their business and identify areas for improvement or new opportunities; their entrepreneurial self-efficacy will strongly influence their intention to anticipate. A high entrepreneurial self-efficacy will make them more likely to develop concrete plans and commit to the actions needed to implement changes, launch new initiatives, or strategically pivot their business based on the evaluation (Mcgee et al., 2009). Entrepreneurs respond to uncertainty, changes, and possible profit opportunities. Entrepreneurial actions, which emerge from the evaluation stage, generate both economic and non-economic outcomes. Economically, these actions can maximize profit opportunities. Non-economically, they can foster informal institutional changes and developmental benefits for various stakeholders. It underscores that through their actions, entrepreneurs both create and respond to changes (Duarte Alonso & Kok, 2021). This study hypothesizes that individual entrepreneurial orientation (IEO) and entrepreneurial self-efficacy (ESE) both positively influence entrepreneurial action (EA).

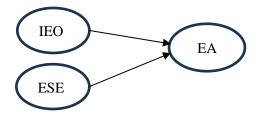


Figure 1. Hypothetical Framework

RESEARCH METHOD

The population for this research comprises 250 active members of the Indonesia Exporter Association (GPEI) in Central Java who fulfill the following criteria: 1). possess official registration as active members of GPEI within the Central Java Region; 2). Occupy managerial or strategic decision-making capacities within their respective companies (e.g., owners, directors, export managers); 3). Demonstrate willingness to participate in the research and commitment to furnishing truthful, precise, and comprehensive responses to the questionnaire. Respondents were selected using a purposive sampling technique, and a total of 115 participants met the criteria and completed the survey. Respondents were selected using a purposive sampling technique. A total of 115 participants who met the specified criteria completed the survey.

This research employed two independent variables: individual entrepreneurial orientation (X1) and entrepreneurial self-efficacy (X2). Individual entrepreneurial orientation was assessed using indicators of risk-taking, innovativeness, and proactiveness. Entrepreneurial self-efficacy encompassed magnitude (X2.1), strength (X2.2), and generality (X2.3). The dependent variable, entrepreneurial action (Y), comprised contingent effects, learning by doing, and entrepreneurial activities. A Likert scale ranging from 1 to 5 was utilized for measurement, with 1 representing "highly disagree," 2 "disagree," 3 "neutral," 4 "agree," and 5 "highly agree". The complete list of indicators was included in the attachment section. The questionnaire underwent initial validation and reliability testing.

This study employed Partial Least Squares (PLS) for model and hypothesis analysis. PLS is a variance-based structural equation modeling (SEM) technique that facilitates the simultaneous evaluation of both the measurement model and the structural model. PLS-SEM is well-suited for model construction and hypothesis prediction. As a robust method, PLS can be applied to all data scale types, requires minimal statistical assumptions, and accommodates small sample sizes. Subsequent to the first analysis, it was determined that several items did not satisfy the requisite validity criteria. Specifically, certain items exhibited low factor loadings during the evaluation of the measurement model. Consequently, these items were excluded from further analysis to enhance construct validity and overall model fit. Within the Individual Entrepreneurial Orientation (IEO) construct, several items—X1.1 (0.610), X1.3 (0.429), X1.4 (0.516), X1.6 (0.667), X1.8 (0.594), and X1.9 (0.691)—demonstrated loading values below the 0.7 threshold. Additionally, item X2.2 from the Entrepreneurial Self-Efficacy (ESE) construct recorded a loading of 0.691, also slightly below the stipulated threshold. Therefore, these seven items were systematically removed from subsequent analyses to improve the validity and reliability of the measurement model. The remaining items, all with loadings equal to or greater than 0.7, were then utilized in the final measurement model evaluation.

FINDINGS AND DISCUSSION Respondents Profile

This research obtained 115 respondents. The majority of respondents from the Indonesia Exporters Association (IEA) were female, comprising 80 individuals (69.6%), while male respondents accounted for 35 individuals (30.4%). This gender distribution indicates a predominantly female sample. The largest proportion of respondents fell within the 20-30 age group, classified as Gen Z and young millennials, representing 60.7% of the total sample. This was followed by respondents aged 41-50 years old (13.9%), with both the 31-40 and above 50 age groups each representing 9.6%. The smallest segment of respondents was in the under-20 age group, at 5.2%. The predominant sector of engagement among respondents was food and beverage (F&B), accounting for 58 individuals (50.4%). This was succeeded by the fashion sector with 16 respondents (13.9%), and handicraft businesses with 12 respondents (10.4%). The remaining 29 respondents (25.2%) were categorized under "others," potentially encompassing sectors such as services, agriculture, or technology-based enterprises. A significant portion of respondents reported a monthly income in the last month ranging between IDR 1,000,000 and IDR 5,000,000, with 53 individuals (46.1%) falling into this category. Subsequently, 30 respondents (26.1%) reported earning less than IDR 1,000,000, and 19 respondents (16.5%) reported an income exceeding IDR 10,000,000. Concurrently, 13 respondents (11.3%) earned between IDR 5,000,001 and IDR 10,000,000.

Results

Outer Model

This study tested the outer and inner models. The outer model illustrates the relationships between latent variables (constructs) and their observed indicators. The outer model evaluated the reliability and validity of the measurement scales. This evaluation typically includes assessing convergent validity (via outer loadings and Average Variance Extracted - AVE), discriminant validity (via Fornell-Larcker criterion and cross-loadings), and construct reliability (via Cronbach's Alpha, Composite Reliability, and Dillon-Goldstein's Rho-A). This research confirmed that the outer model fulfilled the assessment of convergent validity, discriminant validity, and construct reliability.

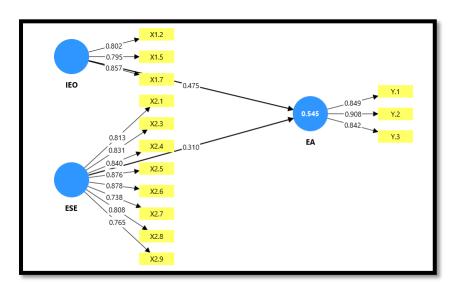


Figure 2. Results of the Model, analyzed in 2025.

Inner Model

Inner model testing, also referred to as structural model testing within the framework of Structural Equation Modeling (SEM) and particularly in Partial Least Squares Structural Equation Modeling (PLS-SEM), aims to assess the relationships among latent variables and the overall predictive capacity of the model. This evaluation typically encompasses the assessment of path coefficients, R-squared (R^2) values, f-squared (R^2) values, and Q-squared (R^2) or predictive relevance, culminating in the testing of structural hypotheses.

Path Coefficient

Path coefficients serve to evaluate the magnitude and direction of the direct influence between exogenous (independent) and endogenous (dependent) latent variables. The statistical significance of path coefficients is ascertained through the bootstrapping method (by examining p-values and t-statistics).

Table 1. Path Coefficient

Effect	Coefficient
ESE -> EA	0.310
IEO -> EA	0.475

Source: Primary data, analyzed 2025

Table 1 shows that both Individual Entrepreneurial Orientation (IEO) and Entrepreneurial Self-Efficacy (ESE) have a positive effect on Entrepreneurial Action. Individual Entrepreneurial Orientation (IEO) exhibits a stronger positive effect on Entrepreneurial Action, with a coefficient of 0.475, than Entrepreneurial Self-Efficacy (ESE), which has a positive effect with a coefficient of 0.310.

Coefficient Determinant (R Squared)

Table 2. Coefficient Determinant (R²)

Variable	R ²	R ² Adjusted
EA	0.545	0.535

Source: Primary data, analyzed 2025

Table 2 presents the results of the Coefficient of Determination test, specifically the R-squared value for the Entrepreneurial Action (EA) variable. The R-squared value for EA is 0.545, signifying that 54.5% of the variance in Entrepreneurial Action can be attributed to the independent variables within the model. The adjusted R^2 value is 0.535, which demonstrates the substantial explanatory power of the independent variables over Entrepreneurial Action.

Effect Size (f^2)

Table 3. Effect Size (f²)

		(-)
Variable	\mathbf{f}^2	Description
IEO	0.211	Medium

ESE	0.090	Small	

Source: Primary data, analyzed 2025

The f-squared (f^2) metric measures the effect size of each independent latent variable on a specific dependent latent variable, indicating practical significance and contribution to the dependent variable's R^2 . Small effects are f^2 values of g^2 o.02 and g^2 o.15; medium effects are g^2 o.15 and g^2 o.35; and large effects are g^2 o.35. Table 3 shows that Individual Entrepreneurial Orientation (IEO) has a medium effect (g^2 = 0.211), and Entrepreneurial Self-Efficacy has a small effect (g^2 = 0.090). Both independent variables contribute to the model's explanatory power, with IEO having the most substantial practical effect, making it a more influential predictor of Entrepreneurial Action.

Model Fit Testing

Table 4. Model Fit Testing

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Model Fit	Rule of Tumb	Value	Description	
SRMR	<0.10	0.063	Acceptable Fit	
d_ULS	<0.10	0.411	Acceptable Fit	
d_G	<0.10	0.271	Acceptable Fit	
Chi_square	>3	151.950	Acceptable Fit	
NFI	>0.90	0.843	Marginal Fit	

Source: Primary data, analyzed 2025

Model Fit Testing assesses how well a theoretical model aligns with empirical data by evaluating the overall goodness of fit of the structural equation model. While indicators like SRMR (0.063), d_ULS (0.411), d_G (0.271), and Chi_square (151.950) suggest a good model fit, the NFI (0.843) falls below the recommended threshold of >0.90, indicating some concerns about the model's overall fit despite support from other indicators.

Hypothesis Testing

Table 5. Hypothesis Testing

Hypothesis	Variable Correlation	T Statistic	P value	Result
H1	IEO -> EA	3.684	0.000	Accepted
H2	ESE -> EA	2.235	0.025	Accepted

Source: Primary data, analyzed 2025

This study accepted two hypotheses. Hypothesis 1 stated a significant positive impact of Individual Entrepreneurial Orientation (IEO) on Entrepreneurial Action (EA). This finding aligns with prior research conducted by Langkamp et al. (2012) and Linda and Tjutju (2022). Specifically, the substantial positive path coefficient value for IEO provides robust empirical support for this

relationship. This suggests that individuals within the IEA who demonstrate elevated levels of innovativeness, a greater propensity for calculated risk-taking, and a proactive approach are more inclined to undertake concrete entrepreneurial actions. Such actions encompass the initiation of new export strategies, adaptation to evolving market conditions, and continuous development of products or services, as delineated by Masango and Lassalle (2020).

Hypothesis 2 (H2), which posited a positive influence of Entrepreneurial Self-Efficacy (ESE) on Entrepreneurial Action (EA), is likewise substantiated by the study's findings. The mean index value for ESE registered at 72.73, signifying a high interpretation, thereby suggesting that IEA members generally exhibit a robust conviction in their aptitude for undertaking entrepreneurial endeavors. This suggests that IEA members who possess confidence in their resource mobilization capabilities, event management skills, and perseverance through challenges are more prone to initiate and succeed in entrepreneurial endeavors. This study corroborates previous studies, namely Sri Mulyani and Hermanto (2022) and Agung et al. (2024). It was disclosed that entrepreneurs exhibiting high ESE demonstrate increased optimism, resilience, and employ innovative approaches to problem-solving, resulting in enhanced business performance.

Discussion

The intrinsic innovativeness, risk-taking propensity, and proactiveness of IEA members are pivotal internal drivers that enable their effective navigation of global market complexities and the pursuit of export opportunities. In Indonesia, where the number of entrepreneurs tends to increase annually but subsequently declines, IEO emerges as a critical factor. It reflects an entrepreneur's capacity to withstand challenges commonly encountered during the post-startup or early growth phases. The particular relevance of this research is underscored by its focus on established entrepreneurs in Central Java, a province renowned as one of Indonesia's most active regions in terms of SME development and entrepreneurial activity. However, despite its inherent potential, Central Java continues to contend with persistent issues such as limited innovation capability, insufficient market access, and a fragmented business ecosystem. These limitations frequently become more pronounced after the initial growth phase, when entrepreneurs face more intricate challenges demanding resilience, adaptability, and strategic capabilities.

Entrepreneurial Self-Efficacy (ESE) directly contributes to perceived behavioral control. Individuals with higher ESE perceive entrepreneurial tasks as more manageable, thereby augmenting their intention and likelihood of engaging in such actions. Furthermore, this finding aligns with Effectuation Theory, which highlights the necessity of high self-efficacy for entrepreneurs to act confidently amidst uncertainty, embrace change, and initiate action through trial and adaptive learning. The small effect size (f2) of 0.090, while statistically significant, suggests that although ESE is a meaningful predictor, its practical impact on entrepreneurial action is less pronounced compared to IEO within this specific context. Nevertheless, it remains a vital internal factor that empowers IEA members to pursue and sustain their export ventures. Moreover, these findings corroborate Effectuation Theory, which emphasizes decision-making under uncertainty. Entrepreneurs possessing high self-efficacy and strong orientation are more inclined to adopt effectual logic by experimenting with strategies and maintaining flexibility in uncertain export conditions. This reinforces that entrepreneurial action is not solely predicated on predictive planning but also on adaptability and self-belief. In the context of Central Java, where local entrepreneurs frequently confront structural and market limitations, high ESE becomes a crucial asset. It enables them to navigate these limitations with confidence and action-oriented behavior, thereby contributing to the stability of regional entrepreneurship. Consequently, enhancing ESE through targeted support, mentoring, and exposure to success could constitute a practical approach for regional policy and entrepreneurial development.

CONCLUSIONS

The study substantiates that both Individual Entrepreneurial Orientation (IEO) and Entrepreneurial Self-Efficacy (ESE) exert a significant influence on Entrepreneurial Action (EA) among active members of the Indonesia Exporters Association (IEA). Individuals exhibiting a robust entrepreneurial orientation, characterized by innovativeness, risk-taking, and proactiveness, are more prone to engage in entrepreneurial actions. Similarly, those possessing higher self-efficacy tend to act with confidence and persistence in navigating business challenges, thereby translating intention into sustained action. These findings are further corroborated by the characteristics of the respondents, who primarily operate within the food and beverage sector, and largely comprise new entrepreneurs active in domestic markets. Such characteristics underscore the salience of IEO and ESE as pivotal factors in stimulating entrepreneurial action among nascent business actors in Central Java. This research contributes to the ongoing discourse concerning the impact of psychological traits on entrepreneurial outcomes among beginner-level exporters and highlights the imperative for targeted capacity-building programs aimed at strengthening entrepreneurial competencies within the local business ecosystem. By utilizing empirical data from early-stage entrepreneurs within a regional export organization, this study extends prior conceptual frameworks, demonstrating the complementary and applicable nature of these theories within the Indonesian entrepreneurial context, particularly for those navigating the nascent phases of business development.

LIMITATIONS & FURTHER RESEARCH

Future investigations are recommended to broaden the research scope by incorporating additional variables such as entrepreneurial intention, organizational support, or digital readiness, which may function as mediators or moderators in the relationship between IEO, ESE, and entrepreneurial action. Furthermore, the adoption of a mixed-methods approach could yield more profound qualitative insights into the personal and contextual challenges encountered by exporters.

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