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Mediated Influence of Entrepreneurship Education on MSME Business Performance: The Role of Orientation and Marketing

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ABSTRACT

Objective: The objective of this study is to develop a mediated model that elucidates the relationship between entrepreneurship education and business performance. **Methods:** In this study, entrepreneurial orientation and entrepreneurial marketing were employed as mediators, while environmental competitiveness and bird-in-hand principles were used as moderators. The data were collected from 326 respondents who had completed four semesters of entrepreneurship education and who owned MSMEs, achieving a 98.7% response rate. The relationships were analysed through the implementation of structural equation modelling. **Results:** The impact of entrepreneurship education on business performance was not direct; however, it exerted a positive influence on entrepreneurial orientation, as evidenced by the findings of the study. Consequently, this dynamic shift has led to a notable enhancement in the realm of entrepreneurial marketing, thereby contributing to an observed improvement in business performance. The study's findings indicated that environmental competitiveness did not moderate the relationship between entrepreneurial marketing and business performance. Furthermore, the bird-in-hand principle did not demonstrate a moderating effect. **Novelty:** The novelty statement is particularly strong, positioning the "sequential mediation pathway" as the "missing link" that resolves conflicting results in existing entrepreneurship education literature. It introduces a unique mediated framework where entrepreneurial orientation and marketing serve as the primary drivers. Unlike previous studies that yielded contradictory outcomes, this study demonstrates that these discovered mechanisms are the 'missing links' that determine the success or failure of education-led interventions in MSME performance.

INTRODUCTION

The micro, small, and medium-sized enterprises (MSMEs) have been demonstrated to play a crucial role in a country's economy (Sinha et al., 2024). This phenomenon is not exclusive to the United States; it also applies to Indonesia. According to data from the Ministry of Cooperatives and Micro, Small, and Medium Enterprises (MSMEs), the number of MSMEs in Indonesia has reached 64.2 million units, contributing IDR 8,573.89 trillion to the national GDP. These enterprises represent 90% of total business activities and account for 50% of the workforce in Indonesia. MSMEs are regarded as a principal catalyst for economic growth due to their inherent agility and adaptability, which are primarily attributed to their small-scale operational nature.

As illustrated in Figure 1, MSMEs have consistently bolstered the Indonesian economy from 2016 to 2022. This upward trajectory is further evidenced in Table 1, which details the sustained growth of Indonesia's GDP contributed by this sector. However, despite this domestic dominance, a broader regional perspective reveals a significant gap. Table 2 provides a comparative analysis of entrepreneurship rates

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across Asia, highlighting that Indonesia still requires a substantial increase in the quantity and quality of entrepreneurs to remain competitive. Consequently, enhancing MSME performance through structured entrepreneurship education has become a strategic necessity to transform these small-scale units into sustainable, high-performing economic drivers.

Table 1. Indonesia's GDP from 2016-2022

YEAR	GDP (%)
2016	5.03
2017	5.07
2018	5.17
2019	5.02
2020	-2.07
2021	3.70
2022	5.31

(Bowo et al., 2025)

As demonstrated in Table 1, MSMEs are crucial contributors to the nation's GDP. From 2016 to 2019, Indonesia's GDP demonstrated stability. However, in 2020, it underwent a decline due to the repercussions of the novel coronavirus (SARS-CoV-2) pandemic. In 2021, the considerable impact of MSMEs during the period of the pandemic was demonstrated, with growth rising again by 3.70% in 2021 and reaching a peak of 5.31% in 2022.

Indeed, the number of MSMEs in Indonesia, the nation's predominant economic foundation, continues to fall short when benchmarked against their counterparts in several Asian countries. Consequently, there is a necessity for programs from both government and private institutions to increase the number of MSME owners. This phenomenon is evident in Table 2, which provides a comparison of the number of entrepreneurs in Asia.

Table 2. Comparison of the Number of Entrepreneurs in Several Countries in Asia

Country	Number Of Entrepreneurs
Indonesia	3.18%
Singapore	8.76%
Thailand	4.26%
Malaysia	4.74%

Source: bps.go.id (2023)

Educational institutions have the capacity to enhance the entrepreneurial landscape by fostering the development of MSMEs from an early age. The entrepreneurial spirit can be inculcated within the academic environment through the implementation of a suitable curriculum (Dwi et al., 2024). Entrepreneurship education, whose curriculum is based on real-world problem cases, can contribute to an entrepreneur's success (Samsudin, 2024).

Contrary to the predominant notion that entrepreneurship education fosters an increase in the number of entrepreneurs (Aadland et al., 2024). The entrepreneurship education exerts no significant influence on business performance, despite the acquisition of such learning. In light of this phenomenon, researchers sought to develop a model that could mediate the relationship between entrepreneurship education and business performance.

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Education is conceptualized as a means to cultivate the competencies, acumen, and dispositions deemed essential for either becoming an entrepreneur or possessing an entrepreneurial spirit. The objective of this educational program is to provide individuals with the skills necessary to create, manage, and develop new businesses or projects. The domain of entrepreneurship education extends beyond the confines of conventional formal education (Suguna et al., 2024).

The term "entrepreneurial orientation" is employed in the field of business management to denote the extent to which an organization or individual exhibits entrepreneurial attitudes, behaviours, and orientations (Clark et al., 2024). Entrepreneurial orientation is defined as an entity's capacity to discern business opportunities, assume risk, and cultivate innovations. The term "entrepreneurial orientation" is a concept in business management that refers to the attitudes, behaviours, and orientations of an organization or individual toward entrepreneurship (Clark et al., 2025). The conceptualization of this phenomenon can be traced back to the 1980s, when it was pioneered by researchers such as Miller and Friesen. Entrepreneurial orientation is defined as the degree to which an entity exhibits entrepreneurial characteristics.

Entrepreneurial orientation is comprised of several key dimensions, including innovativeness, risk taking, proactiveness, competitiveness, aggressiveness, and autonomy (Guevara-Otero et al., 2025). The term "entrepreneurial marketing" refers to a marketing approach implemented by entrepreneurs or organizations with a strong entrepreneurial orientation (Jordan, 2025). This approach underscores creativity, flexibility, and innovation in the development and implementation of marketing strategies. The notion of entrepreneurial marketing is often linked to an entrepreneurial mindset, in which the primary objective is the generation of added value and the capitalization of business opportunities. A different definition posits that entrepreneurial marketing is a marketing approach that emphasizes creativity, innovation, and an entrepreneurial attitude in developing and implementing marketing strategies (Sulaiman et al., 2024). This approach is designed to address the rapidly changing and dynamic needs of the market. The notion of entrepreneurial marketing materialized from the acknowledgment that, within a dynamic business environment, it is imperative for companies to adopt an entrepreneurial mindset to sustain relevance and competitiveness.

A few different aspects that make up the idea of entrepreneurial marketing. These include being proactive, focusing on opportunities, taking risks, being innovative, putting customers first, focusing on value, and using resources effectively (Chukwuka & Abude, 2025). Business performance is defined as the extent to which a company achieves its business goals and objectives (Badghish & Soomro, 2024). This includes evaluating the company's performance across various aspects, including finance, operations, marketing, human resources, and others. This performance assessment uses a number of metrics and performance indicators to measure and evaluate the achievement of business objectives. Business performance is defined as the extent to which a company accomplishes its business goals and objectives (Liu, 2024). This encompasses the evaluation of the company's performance across various domains, including operations, finance, marketing, human resources, and other pertinent areas. Business performance is a multifaceted concept encompassing various metrics. One

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such metric is the extent to which a company can execute its business strategy. This is important because it provides added value to stakeholders, including shareholders, customers, and employees.

A comprehensive evaluation of business performance necessitates a multifaceted approach, encompassing various critical dimensions (Nogueira et al., 2025). These include the customer perspective, the financial perspective, the internal perspective, and the learning and growth perspective.

Environmental competitiveness refers to a company's capacity to maintain competitiveness and prosper within a framework that considers environmental impacts and sustainability (Olaleye et al., 2024). Environmental competitiveness could be understood as the ability of an entity whether it's a company or a nation to engage in meaningful competition within a framework that incorporates environmental considerations (Amin et al., 2024). This encompasses the manner in which an entity administers and coordinates its operations in accordance with environmental policies, corporate social responsibility (CSR), and sustainability initiatives. An entity that is regarded as having strong environmental competitiveness may have the capacity to integrate sustainable practices and environmental policies into its business strategy. This, in turn, may have a positive or negative effect on its competitiveness in a market that is progressively concerned with environmental issues. There are several reasons why companies should prioritize environmental competitiveness (Elder, 2025): The following factors must be considered when assessing the challenges faced by contemporary businesses:

1. Demand for products and services is subject to constant change.
2. Government regulations are subject to change.
3. Access to global markets is essential for business success.
4. Stakeholder satisfaction is a critical factor in maintaining a positive reputation.
5. Continuous innovation is necessary to remain competitive.
6. Reputation and image are crucial factors in business success.

The seventh point pertains to the concept of competitive advantage.

Bird in Hand

Seminal work on effectuation theory, the concept of "bird in hand" is of particular significance (Devi & Bhardwaj, 2025). This concept remains a subject of ongoing development and integration within the domain of entrepreneurship science. Entrepreneurs tend to enjoy greater success when they leverage their extant resources and skills rather than concentrating on resources they might acquire in the future (Chen & Chen, 2024). By leveraging existing resources and optimizing their utilization, entrepreneurs can enhance their effectiveness and efficiency in managing their businesses. The application of this principle engenders greater flexibility and responsiveness to change in entrepreneurs, given their reduced reliance on predictions or projections of an uncertain future (Terchila, 2025). Instead, they prioritize leveraging the resources, skills, and opportunities that are already available to them. Effectuation is predicated on a departure from conventional planning paradigms, which are predicated on the prediction and control of the business environment. Effectuation places greater emphasis on adapting to complex and uncertain environments while maximizing the use of existing resources.

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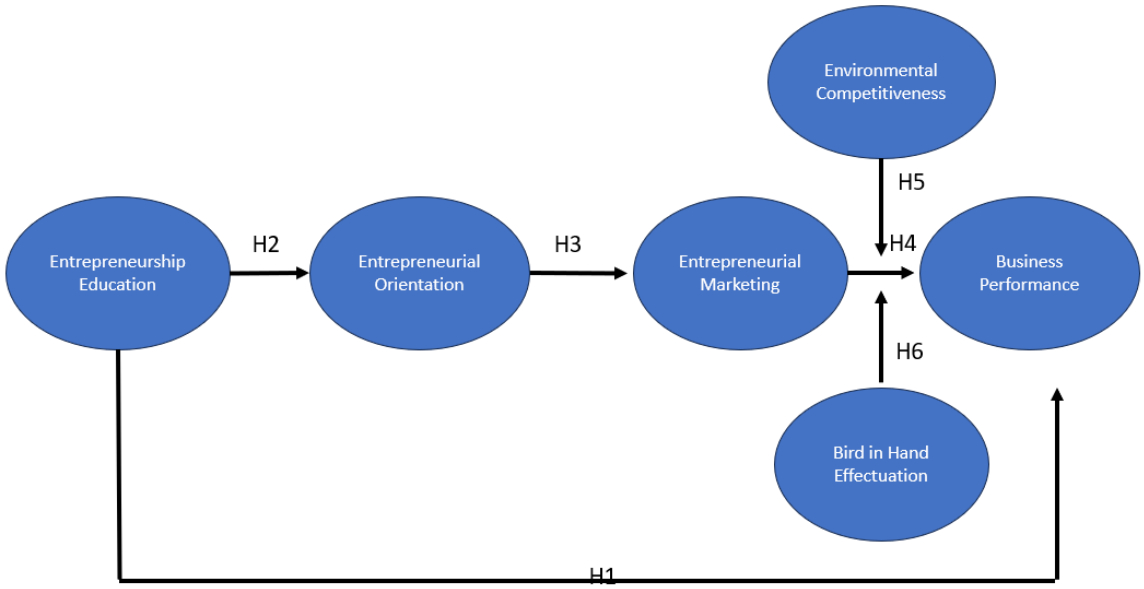
ANALYSIS MODEL



H1 : Entrepreneurship education has an impact on business performance
H2 : Entrepreneurship education has an effect on entrepreneurial orientation
H3 : Entrepreneurial orientation has an influence on entrepreneurial marketing
H4 : Entrepreneurial marketing has an impact on business performance
H5 : Environmental competitiveness moderates the relationship between entrepreneurial marketing and business performance.
H6 : Bird in hand moderates the relationship between entrepreneurial marketing and business performance.

RESEARCH METHODS

The research method employed in this study is quantitative, utilizing a moderation effect test. Quantitative research is defined as research that draws conclusions based on the results of hypothesis testing through statistical procedures using empirical data from data collection using measurement or quantification (Alford & Teater, 2025). A population is defined as a group of individuals who can be utilized as research subjects, characterized by predetermined standards and specific attributes (Willie, 2024). In order to be considered a member of the population under study, a respondent must meet the following criteria: The first criterion is as follows: students of University X who have successfully completed a minimum of four semesters of entrepreneurship education. The second criterion is as follows: students of University X who own MSMEs. The third criterion is as follows: students of University X who have demonstrated a marked improvement in their business performance. According to these criteria, the population of this study is 425 respondents. For the purpose of data collection, the researcher will implement a saturated sampling method. A saturated sample is defined as one that encompasses the entire population as respondents in a given study (Ahmed, 2025). The mediation testing is incorporated into component-based Structural Equation Modeling (SEM) employing Partial Least Square (PLS) for the purpose of data analysis (Angelelli et al., 2025). The rationales

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underlying the utilization of this approach by researchers are as follows: 1. The primary factors contributing to the complexity of the analysis are the substantial number of variables and paths that require examination, as well as the incorporation of formative and reflective indicators. A key objective is the capacity to analyze variables directly based on the indicators.

The use of component-based SEM with Partial Least Square (PLS) is technically sound for a model with a substantial number of variables and complex paths. The "saturated sampling" method, involving all 425 eligible respondents from University X who own MSMEs, ensures maximum representation of the specific target population. The series of tests must be executed in the context of structural equation modelling (Moshagen & Bader, 2024). These include: 1. Convergent validity is demonstrated by the outer loading or loading factor test for each indicator, with a minimum value of 0.70. 2. The convergent validity of the average variance extracted (AVE) for each variable is demonstrated by the minimum value of 0.50. 3. The discriminant validity of cross loading for each corresponding variable must have the highest value compared to other variables and have a value above 0.70. 4. Cronbach alpha reliability was determined for each variable, with a minimum value of 0.70. 5. The composite reliability for each variable is determined to be a minimum of 0.70. 6. The hypothesis testing procedure involves the utilization of t-statistics, with a value greater than 1.96 and a p-value below 0.05. 7. The evaluation of the moderation effect is to be conducted by means of a t-statistic with a value greater than 1.96 and a p-value below 0.05. The effects of moderation are classified into four types: pure moderator, quasi-moderator, homogenizer moderator, and predictor moderator (Moshagen & Bader, 2024). Pure moderator is moderation that can occur if variable M has no effect on Y and the moderation effect test has an effect on Y. Quasi moderator (pseudo moderator) is moderation that can occur if M has an effect on Y and the moderation effect test has an effect on Y. Homogenizer moderator (potential moderator) is a moderation that can occur if M has no effect on Y, and the moderation effect test has no effect on Y. Predictor moderator (moderator predictor) is a moderation that can occur if M has an effect on Y but the moderation effect test does not have an effect on Y.

RESULTS AND DISCUSSIONS

Results

Based on the research conducted, the first respondent characteristic used was based on gender. Table 3 shows the respondent characteristics based on gender.

Table 3. Respondent Characteristics Based on Gender

Gender	Amount	Percentage
Man	238	62.30%
Woman	144	37.70%

Source: Processed Data (2023)

As illustrated in Table 3, the majority of respondents in this study were male, with 238 respondents constituting 62.30% of the total. This was followed by 144 female respondents, representing 37.70% of the total.

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Age Characteristics

The second respondent characteristic that has been identified is based on age. Table 4 presents the characteristics of the respondents categorized by age.

Table 4. Respondent Characteristics Based on Age

Age	Amount	Percentage
18 years	17	4.45%
19 years old	233	60.9%
20 years	109	28.53%
21 years	16	4.18%
22 years	7	1.83%

Source: Processed data (2023)

As indicated by the data presented in Table 4, the predominant age group among the respondents in this study was 19 years old, constituting a total of 233 respondents and representing 60.9% of the total sample. This was followed by respondents aged 20 years old, with a total of 109 respondents, representing 28.53%.

Characteristics of the Industry of Work Field

The third respondent characteristic that was utilized is based on the industry of employment, as indicated by the findings of the research. Table 5 presents a detailed breakdown of the respondents' characteristics, categorized according to the industry in which they are employed.

Table 5. Respondent Characteristics Based on Industry and Field of Work

Industry of work	Amount	Percentage
Trading	6	1.57%
Skincare	24	6.28%
Livestock and agribusiness	5	1.31%
Service	46	12.04%
Food and beverages	166	43.45%
Fashion	87	22.77%
Creative Industry	48	12.56%

Source: Processed data (2023)

As indicated by the data presented in Table 5, the predominant proportion of respondents in this study are employed within the food and beverage industry, constituting a total of 166 individuals, which corresponds to 43.45% of the total sample. The subsequent category is that of respondents working in the fashion industry, with a total of 87 individuals, representing 22.77%.

Characteristics of Provincial Origin

The fourth respondent characteristic that was utilized is based on provincial origin, as demonstrated by the research that has been conducted. Table 6 presents the characteristics of the respondents categorized by their provincial origins.

Based on table 6, the majority of respondents came from East Java, with a total of 232 respondents representing 60.74%. This was followed by respondents from Central Java, with a total of 49 respondents representing 12.82%.

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Table 6. Respondent Characteristics Based on Province of Origin

Province of origin	Amount	Percentage	Province of origin	Amount	Percentage
Bali	22	5.76%	Riau	8	2.09%
Maluku	2	0.52%	East Nusa Tenggara	18	4.72%
DKI Jakarta	1	0.26%	West Nusa Tenggara	9	2.36%
West Java	4	1.04%	Sulawesi	13	3.40%
Central Java	49	12.82%	Sumatra	1	0.26%
East Java	232	60.74%	Kalimantan	23	6.02%

Source: Processed data (2023)

Business Age Characteristics

Based on the research conducted, the fifth respondent characteristic used was based on business age. Table 7 shows the respondent characteristics based on business age.

Table 6. Respondent Characteristics Based on Business Age

Business Age	Amount	Percentage
< 1 year	92	24.08%
1 year	290	75.92%

Source: Processed data (2023)

As indicated by the findings presented in Table 6, the predominant proportion of respondents in this study, constituting 290 individuals, have been operating their businesses for a period of one year, representing 75.92% of the total sample. A subsequent analysis of the survey's results revealed that 92 respondents, constituting 24.08% of the total, had been operating their businesses for less than one year.

Characteristics of Parents' Occupations

The sixth respondent characteristic that has been identified is based on parental occupation. Table 8 presents a detailed exposition of the respondents' characteristics, categorized according to their parents' respective occupations.

Table 7. Respondent Characteristics Based on Parents' Occupation

Parents' Job	Amount	Percentage
Entrepreneur	329	86.12%
Non-Entrepreneur	53	13.88%

Source: Processed data (2023)

As indicated by the findings presented in Table 7, it is evident that a significant proportion of the study's participants, specifically 329 individuals, or 86.12%, were offspring of entrepreneurs. Subsequently, the survey was administered to respondents whose parents did not engage in entrepreneurial activities, with a total of 53 individuals participating (representing 13.88% of the sample).

Validity and Reliability Test

Ghozali and Latan (2015) posit that the initial validity assessment is the loading factor. They recommend establishing a minimum value of 0.70 for each indicator in the pertinent variable. In this preliminary trial, multiple indicators were ruled out:

1. For the entrepreneurship education variable, the value of each indicator exceeds 0.70, indicating that no indicators meet the criteria for elimination.
2. The entrepreneurial orientation variable comprises nine indicators. However, three indicators were eliminated due to their low value of 0.70, leaving six indicators in total. EO3, EO4, EO9

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3. The entrepreneurial marketing variable comprises 42 indicators. A number of indicators have been found to have values below 0.70. The specific indicators in question are EM6, EM7, EM9, EM15, EM20, EM23, EM28, and EM42. This finding leaves a total of 34 indicators.
4. The business performance variable is comprised of 15 indicators. A number of indicators have been found to have values below 0.70, including BP1, BP2, BP3, BP8, and BP15. This indicates that 10 indicators remain.
5. The environmental competitiveness variable is composed of four indicators, all of which have values greater than 0.70, thus ensuring the retention of all indicators.

The "bird in hand" variable is comprised of seven indicators. A comprehensive evaluation of the data reveals that several indicators (BIH1, BIH3, and BIH4) have values below 0.70, resulting in a total of four indicators.

Furthermore, Ghozali and Latan (2015) posit that a second evaluative procedure entails the examination of the AVE validity test, the Cronbach alpha reliability test, and the composite reliability test. Table 8 presents the results of the three tests administered in this study.

Table 8. AVE Validity Test, Cronbach Alpha Reliability Test and Composite Reliability

	AVE	Cronbach Alpha	Composite Reliability
Entrepreneurship Education	0.663	0.915	0.932
Entrepreneurial Orientation	0.526	0.886	0.908
Entrepreneurial Marketing	0.552	0.959	0.962
Business Performance	0.513	0.904	0.920
Environmental Competitiveness	0.753	0.889	0.924
Bird in Hand	0.545	0.792	0.856
Mod Effect – Env Competitiveness	1,000	1,000	1,000
Mod Effect – Bird In Hand	1,000	1,000	1,000

Source: Processed data (2023)

As demonstrated in Table 8, all variables exhibit values greater than 0.50, thereby satisfying the AVE validity test. The composite reliability and Cronbach's alpha reliability tests have both demonstrated values greater than 0.70, thereby satisfying all established reliability criteria.

For the cross-loading validity test, the recommended value is for each indicator to have a value above 0.70, and the indicator on the relevant variable must have the largest value compared to the indicator on the unrelated variable. It has been determined that, with the exception of EM6, EM7, EM9, EM15, EM20, EM23, EM28, EM42, BP1, BP2, BP3, BP8, BP15, BIH1, BIH3, and BIH4, all indicators have values greater than 0.70 and have the largest values on the relevant variables.

Hypothesis Testing

Ghozali and Latan (2015) posit that hypothesis testing serves two primary functions: first, it is employed to ascertain the validity of a hypothesis; and second, it is utilized to assess the influence of two or more variables. The recommended values for passing a hypothesis test are a t-statistic value above 1.96 and a p-value below 0.05. The results of the hypothesis test in this study are shown in Table 9.

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Table 9. Hypothesis Testing

		Original Sample	T-Statistic	P-Value
Entrepreneurship Performance	Education→Business	0.015	1,239	0.063
Entrepreneurship Orientation	Education→Entrepreneurial	0.521	11,710	0,000
Entrepreneurial Marketing	Orientation→Entrepreneurial	0.811	42,270	0,000
Entrepreneurial Marketing→Business Performance		0.722	20,051	0,000
Environmental Competitiveness X Entrepreneurial Marketing Mod→Business Performance		0.030	0.894	0.371
Mod Bird in Hand X Entrepreneurial Marketing→Business Performance		-0.021	0.665	0.506

Source: Processed data (2023)

As illustrated in Table 9,

1. The t-statistic value of 1.239 and the p-value of 0.063 reveal that the t-statistic value is less than 1.96, which indicates that the t-statistic value is below the critical value at the 5% level. This finding suggests that entrepreneurship education does not have a significant impact on business performance.
2. The t-statistic value of 11.710 and the p-value of 0.000 indicate a statistically significant relationship between entrepreneurship education and entrepreneurial orientation, as evidenced by the t-statistic value exceeding 1.96 and the p-value falling below 0.05.
3. The t-statistic value of 42.270 and the p-value of 0.000 indicate a statistically significant relationship between entrepreneurial orientation and entrepreneurial marketing, as evidenced by the t-statistic value exceeding 1.96 and the p-value falling below 0.05.
4. The t-statistic value above 1.96, namely 20.051, and the p-value below 0.05, namely 0.000, indicate that entrepreneurial marketing exerts a significant influence on business performance.
5. The findings of this study demonstrate that environmental competitiveness does not moderate the relationship between entrepreneurial marketing and business performance. This conclusion is supported by the t-statistic value of 0.894, which is below the critical value of 1.96, and the p-value of 0.371, which is above the critical value of 0.05.
6. The present study sought to determine whether Bird in Hand moderates the relationship between entrepreneurial marketing and business performance. The t-statistic value of 0.665 ($p > 0.05$) indicates that the relationship is not statistically significant. Similarly, the p-value of 0.506 indicates that the relationship is not statistically significant.

Discussions

Entrepreneurship Education on Business Performance

The findings of this study demonstrate that entrepreneurship education exerts no influence on business performance. The t-statistic is below 1.239, and the p-value is above 0.05, at 0.063. This finding aligns with the research by Yeh et al. (2021), which posits that entrepreneurship education exerts no influence on business performance.

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The impact of entrepreneurship education on business performance is negligible due to the rapid evolution of business trends. This discrepancy has resulted in a significant integration gap between the learning materials, theoretical frameworks, and practical activities provided by educational institutions and the real-world applications they are designed to prepare students for. Another factor that may contribute to the ineffectiveness of entrepreneurship education on business performance is a lack of understanding of external factors that can influence business, such as macroeconomics, government policies, legal issues, and so on.

Entrepreneurship education towards entrepreneurial orientation

The present study demonstrates that entrepreneurship education exerts a significant influence on entrepreneurial orientation. This is evident from the t-statistic value above 1.96 (10.534), and the p-value below 0.05 (0.000). This finding aligns with the research conducted by Hassan et al. (2021), which also indicates that education in entrepreneurship influences entrepreneurial orientation. Entrepreneurship education plays an essential role in shaping entrepreneurial character and orientation, including innovation, risk-taking, proactivity, autonomy, and an understanding of competitive aggression. The cultivation of this orientation can be facilitated through a variety of methods, including the integration of conceptual frameworks, practical applications, skill development, practitioner engagement, and experiential learning activities that promote all orientations.

Entrepreneurial orientation towards entrepreneurial marketing

The present study demonstrates that entrepreneurial orientation exerts a significant influence on entrepreneurial marketing. This is evident from the t-statistic value above 1.96 (22.350) and the p-value below 0.05 (0.000). This finding aligns with the research conducted by Alqahtani et al. (2022), which posits that entrepreneurial orientation significantly influences entrepreneurial marketing strategies. A thorough examination of the data indicates a strong correlation between these two variables. The construct of entrepreneurial orientation addresses mindset and attitude, while the concept of entrepreneurial marketing addresses action. The possession of an entrepreneurial mindset, characterized by innovativeness, risk-taking, proactivity, competitiveness, aggressiveness, and autonomy, has been demonstrated to influence marketing actions that prioritize innovative methods, exhibit a propensity to take risks, prioritize customer needs, focus on value, and consistently seek out opportunities in the market.

Entrepreneurial marketing on business performance

The present study demonstrates that entrepreneurial marketing exerts a substantial influence on business performance. This is substantiated by the t-statistic value, which exceeds 1.96 (16.086), and the p-value, which is less than 0.05 (0.000). This finding aligns with the research conducted by Alqahtani et al. (2022), which posits that entrepreneurial marketing exerts a substantial influence on business performance. The implementation of entrepreneurial marketing (EM) has been demonstrated to exert a positive influence on business performance. This phenomenon can be attributed to the adoption of an entrepreneurial approach within the marketing function. The implementation of entrepreneurial practices, such as a focus on customer needs, by a company has been shown to result in increased customer

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growth, as well as increased turnover and profit (from a financial perspective). Furthermore, companies that regularly assess internal and customer needs can indirectly enhance learning and growth perspectives, as well as internal perspectives, through increased experience and knowledge.

Environmental competitiveness moderates the relationship between entrepreneurial marketing with business performance

The empirical results demonstrate that environmental competitiveness does not moderate the relationship between entrepreneurial marketing and business performance ($t = 0.644 < 1.96$; $p = 0.182 > 0.05$). This finding challenges the traditional contingency theory, which typically suggests that higher environmental competitiveness strengthens the impact of strategic marketing on performance. In this specific context, the non-moderation may be explained through the lens of Effectuation Theory, particularly the "Bird-in-Hand" principle.

While prior studies emphasize external market evaluation, startups in this study appear to operate under a logic of control rather than prediction. Under effectuation, entrepreneurs focus on leveraging existing resources and immediate networks to co-create markets, rendering the external "competitiveness" of the environment less influential on their strategic success. Furthermore, the "Bird-in-Hand" concept which prioritizes means-driven action may clash with the "elevated risk-taking posture" inherent in entrepreneurial marketing. If a startup is intensely focused on internal resource optimization and immediate means, the external pressures of environmental competitiveness fail to act as a catalyst or a deterrent, as the firm's performance is dictated more by internal creative contingencies than by external macro-level shifts. Consequently, in highly dynamic or emerging markets, the firm's ability to navigate environmental competition may not serve as a reliable predictor of performance when the entrepreneur's strategic focus is decoupled from traditional market-driven predictions.

Bird in hand moderate the relationship between entrepreneurial marketing and business performance

The present study demonstrates that the bird-in-hand concept does not moderate the relationship between entrepreneurial marketing and business performance. The t-statistic value of 1.335 and the p-value of 0.520 support this hypothesis, as they are both greater than the critical value of 1.96 and 0.05, respectively. In this study, the bird-in-hand concept is said to not moderate due to several factors. In the context of a dynamic and ever-evolving business environment, organizations may find themselves compelled to strike a delicate balance between leveraging their extant resources and adopting a more proactive and innovative stance. In this context, the bird-in-hand concept may be considered inappropriate due to the utilization of existing resources. Moreover, the concept of "entrepreneurial marketing" may involve an elevated risk-taking posture and the pursuit of novel prospects. The correlation between these characteristics may be a contributing factor to the relationship between the two.

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CONCLUSION

The conclusion provides a clear summary of the "sequential mediation pathway". It successfully stresses the theoretical contribution of resolving inconsistencies in prior literature. The practical implications are well-defined, calling for educational institutions to shift from theoretical instruction to "collaborative mentorship programs with business practitioners". The primary findings confirm that entrepreneurship education does not exert a direct influence on performance; instead, it operates through a robust sequential mediation pathway: education strengthens entrepreneurial orientation, which in turn enhances entrepreneurial marketing, ultimately driving business performance. This discovery provides a significant theoretical contribution by resolving inconsistencies in prior literature and identifying the internal strategic mechanisms required to translate knowledge into tangible economic outcomes. Furthermore, the study establishes that traditional moderating factors—namely environmental competitiveness and the Bird-in-Hand principle—do not exhibit significant influence in this context. This indicates that for MSMEs in emerging markets, internal marketing agility and resource-based strategies are far more decisive than external environmental pressures or initial resource constraints.

In terms of practical implications, educational institutions must undertake a strategic repositioning from pure theoretical instruction toward an approach integrated with market realities. Entrepreneurship curricula need to be dynamically aligned with industrial changes at the micro, macro, and global levels to ensure students possess contemporary market literacy. Additionally, institutions should institutionalize collaborative mentorship programs with business practitioners to facilitate the transfer of tactical entrepreneurial knowledge. Future training should emphasize identifying market gaps to create strong value propositions, while prioritizing risk management and psychological resilience in the face of potential business failure. Finally, as modern business evaluation standards increasingly incorporate environmental and social impacts, educational institutions must integrate social responsibility values into the entrepreneurial framework to ensure the long-term sustainability of MSMEs.

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