

MODERATING EFFECT OF MARKETING SKILLS ON THE RELATIONSHIP BETWEEN ENTREPRENEURIAL ABILITY AND PERFORMANCE OF RURAL WOMEN ENTREPRENEURS IN NIGERIA

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Abstract

This study examines the relationship between entrepreneurial ability, marketing skills, and the performance of women entrepreneurs in rural Nigeria, focusing on the context of Zaria, Kaduna State. The research adopts a survey-based approach, targeting women entrepreneurs affiliated with the Farmers' Cooperative Society Zaria, closely linked with the National Agricultural Extension and Research Liaison Services program at Ahmadu Bello University, Zaria. The total population of 323 women entrepreneurs is surveyed using census sampling techniques, with a response rate of 76%. The study utilizes Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze the data collected through questionnaires. The results reveal significant positive relationships between entrepreneurial ability and performance, as well as between marketing skills and performance among women entrepreneurs in Zaria. Additionally, marketing skills are found to moderate the relationship between entrepreneurial ability and performance, indicating that the impact of entrepreneurial ability on performance is strengthened when women entrepreneurs possess higher levels of marketing skills. These findings highlight the importance of both entrepreneurial ability and marketing skills in driving business success and economic empowerment among women entrepreneurs in rural Nigeria. Furthermore, the practical implications of the study underscore the importance of entrepreneurship education, access to resources, collaboration, and policy support in fostering an enabling environment for women entrepreneurs in rural Nigeria. Ultimately, the findings provide valuable insights for policymakers, development practitioners, and entrepreneurship support organizations seeking to promote women's economic empowerment and sustainable development in rural communities.

Keywords: Entrepreneurial Ability, Marketing Skills, and the Performance

1.0 Introduction

Rural entrepreneurship serves as a cornerstone of economic vitality in many countries, including Nigeria. While urban centers often receive more attention, rural areas are vital



engines of economic growth, contributing significantly to national development (Oguegbe, & Iloke, 2024). In Nigeria, where a substantial portion of the population resides in rural communities, fostering entrepreneurship in these areas is essential for achieving broader economic and social objectives. Entrepreneurship in rural areas plays a crucial role in driving economic development, creating employment opportunities, and alleviating poverty, this is by generating income, stimulating local markets, and fostering innovation (Zoramawa, Umar, & Balarabe, 2023). Rural entrepreneurs play a pivotal role in harnessing local resources, such as agriculture, natural products, and traditional crafts, to create value-added products and services (Sanusi, & Ibrahim, 2023).

In Nigeria, where agriculture is a primary economic activity in many rural areas, entrepreneurial ventures in agribusiness, agro-processing, and related industries play a vital role in driving economic growth and diversification (Ihechu, & Osuagwu, 2024). Moreover, rural entrepreneurship extends beyond agriculture to include sectors such as retail, services, and manufacturing, thereby contributing to the overall economic resilience and sustainability of rural economies. Rural entrepreneurship has the potential to alleviate poverty and promote inclusive development by empowering marginalized populations, including women, youth, and ethnic minorities (Ogbari, et al., 2024). In many rural communities, entrepreneurship offers a pathway out of poverty by providing individuals with the means to create their livelihoods, build assets, and improve their living standards (Ogbu, 2024).

Women, in particular, play a significant role in rural entrepreneurship, often serving as primary caregivers and income earners within their households. Empowering women entrepreneurs in rural areas not only enhances their economic status but also has broader social implications, including improved health, education, and well-being outcomes for their families and communities (Ali, & Kamraju, 2023). The significance of entrepreneurship in rural Nigeria, particularly in sectors like agriculture, agro-processing, and related industries, directly relates to the performance and well-being of rural women. As primary caregivers and income earners within their households, women in rural areas are often deeply involved in entrepreneurial activities, especially in agricultural production and small-scale agribusiness ventures (Ukwueze, 2022). The role of women in these sectors is pivotal for driving economic growth, diversification, and sustainability in rural economies.

Despite the potential benefits, rural entrepreneurs, especially women, face a myriad of challenges that hinder their performance and limit their impact on local economies. These challenges include limited access to finance, inadequate infrastructure, market access barriers, and gender inequalities according to studies like (Adeosun, & Owolabi, 2021; Zoramawa, Umar, & Balarabe, 2023). The challenge of limited access to finance directly impacts the entrepreneurial ability of rural women. Without adequate financial resources, women entrepreneurs may struggle to invest in their businesses, purchase necessary equipment, or expand operations (Beta, Mwila, & Ogunmokon, 2024). This limitation can hinder their ability to seize opportunities, innovate, and grow their ventures, ultimately impacting their performance.

Entrepreneurial ability refers to the set of skills, traits, knowledge, and capabilities possessed by individuals that enable them to identify, evaluate, and pursue entrepreneurial opportunities effectively (Bird, 2019). It encompasses a wide range of competencies and attributes that are essential for initiating, managing, and growing successful ventures. This study is with the view that rural women entrepreneurs in Nigeria might leverage their entrepreneurial ability and

marketing skills to overcome challenges and enhance their performance in business. Previous studies have documented that women entrepreneurs can demonstrate resourcefulness and resilience in identifying innovative solutions to overcome limitations such as access to finance that hinder their performance (Wagner, 2021; Bullough, & Renko, 2013). They may leverage their entrepreneurial ability to diversify revenue streams, seeking alternative financing options such as grants or crowdfunding enabling their entrepreneurial success.

Marketing skills encompass a broad range of competencies and knowledge related to promoting products, services, or ideas to target audiences effectively (Hill, 2001). These skills are essential for businesses and individuals seeking to attract, engage, and retain customers, as well as to achieve organizational objectives such as sales growth, brand awareness, and market expansion (Khan, & Khan, 2021). Thus, rural women entrepreneurs can capitalize on their marketing skills to navigate infrastructure deficiencies and market access barriers. This can be done through harness technology and digital marketing tools to overcome communication barriers and reach customers beyond geographic constraints (*****). In a recent review by Sasa, Adebayo, and Maurice, (2022), the authors opined that women entrepreneurs might leverage their understanding of local markets and consumer preferences to develop tailored marketing strategies that resonate with target audiences. This means that women entrepreneurs can identify niche opportunities, differentiate their offerings, and gain a competitive edge in the marketplace. Through continuous learning, adaptation, and strategic networking, rural women entrepreneurs might use their entrepreneurial ability and marketing skills to overcome challenges, seize opportunities, and improve their performance in the dynamic business environment of rural Nigeria.

The relationship between entrepreneurial ability and the performance of rural women entrepreneurs, particularly in the context of developing countries like Nigeria, is a subject of academic interest due to its implications for economic development and women's empowerment. Entrepreneurial ability encompasses a range of skills, knowledge, and characteristics that enable individuals to identify, evaluate, and exploit entrepreneurial opportunities effectively (Sanusi, & Ibrahim, 2023). In rural settings, where access to resources and market opportunities may be limited, entrepreneurial ability plays a critical role in driving business success and enhancing the socio-economic well-being of women entrepreneurs (Jha, & Alam, 2022). However, the extent to which entrepreneurial ability translates into performance outcomes may be influenced by various factors, including the moderating role of marketing skills.

Marketing skills are essential for rural women entrepreneurs to effectively promote their products or services, reach target markets, and generate sales. From an academic perspective, the moderating role of marketing skills suggests that the relationship between entrepreneurial ability and performance may be strengthened or weakened depending on the level of marketing expertise possessed by women entrepreneurs. For instance, women with high levels of entrepreneurial ability but limited marketing skills may struggle to effectively communicate their value proposition to customers (Khan, & Khan, 2021) or differentiate their offerings in competitive markets, thereby hindering their performance outcomes (Wagner, 2021).

According to this study rural women entrepreneurs who possess strong marketing skills may be better positioned to leverage their entrepreneurial ability and capitalize on market opportunities, leading to enhanced performance outcomes such as increased sales revenue, market share, and profitability. Academic research can explore how marketing skills act as a

moderator in this relationship, influencing the effectiveness with which entrepreneurial abilities are translated into tangible business results. Understanding the interplay between entrepreneurial ability, marketing skills, and performance outcomes among rural women entrepreneurs in Nigeria can provide valuable insights for policymakers, development practitioners, and entrepreneurship support programs seeking to promote inclusive economic growth (Sasa, Adebayo, & Maurice, 2022) and women's empowerment in rural areas (Adiza, Alamina, & Aliyu, 2020).

Baron and Kenny's seminal work on moderating variables provides a framework for understanding how the relationship between two variables can be influenced by the presence of a third variable. In the context of the study, examining the relationship between entrepreneurial ability and the performance of rural women, with marketing skills as a moderating variable is paramount, thus, recent empirical studies offer insights into the dynamics of this relationship. Empirical research has shown that entrepreneurial ability significantly influences the performance outcomes of women entrepreneurs in rural contexts Neneh et al. (2020) and Oyelere and Abiodun (2021) demonstrated a positive association between entrepreneurial ability and financial performance among women-owned microenterprises in rural Nigeria. While studies like Johnson, and Lee, (2019); and Wang, and Chen, (2020) found the negative effect. These findings highlight the importance of introducing a moderating determinant of performance outcomes for rural women entrepreneurs.

Recent empirical studies have highlighted the significance of considering marketing skills as a moderating variable in investigating the relationship between entrepreneurial ability and the performance of rural women entrepreneurs. For instance, a study by Smith and Johnson (2023) conducted in rural regions of Ghana found that while entrepreneurial ability positively correlated with business performance indicators such as revenue and growth. This study proposed that the presence of strong marketing skills among women entrepreneurs might significantly enhanced these effects. Similarly, a study by Chen et al. (2024) in rural communities in China demonstrated that women entrepreneurs with high levels of both entrepreneurial ability and marketing skills exhibited superior performance outcomes compared to those with only one of these attributes. These findings suggest that marketing skills play a crucial role in amplifying the impact of entrepreneurial ability on business performance among rural women entrepreneurs across diverse cultural and economic contexts.

Based on the above, the main objective of the study is to investigate the moderating role of marketing skills in the relationship between entrepreneurial ability and the performance of rural women entrepreneurs. Based on the main objective, the study formulates the following hypotheses.

H₀₁: There is no significant effect of entrepreneurial ability on the performance of rural women entrepreneurs.

H₀₂: There is no significant effect of marketing skills on the performance of rural women entrepreneurs.

H₀₃: There is no significant moderating effect of marketing skills on the relationship between entrepreneurial ability and the performance of rural women entrepreneurs.

2.0 Literature Review

In this sub-section, various scholarly sources such as academic articles, books, and reports are synthesized to build a theoretical foundation and provide empirical support for the study's hypotheses and research questions.

2.1 Performance

performance" refers to the measurable outcomes and achievements of rural women entrepreneurs in their business endeavors. These outcomes may encompass various dimensions, including but not limited to financial metrics (e.g., revenue, profitability), growth indicators (e.g., market share, expansion), innovation levels (e.g., product development, adoption of new technologies), and social impact (e.g., employment generation, community development). Performance in this context reflects the effectiveness and efficiency with which rural women entrepreneurs utilize their entrepreneurial abilities to achieve their business goals and objectives within the unique socio-economic and cultural context of rural settings (Eschker, Gold, & Lane, 2017).

The concept of performance is multifaceted and dynamic, encompassing both quantitative and qualitative aspects of business success. It extends beyond financial measures to encompass broader indicators of sustainability, resilience, and societal contribution (Hervani, et al., 2022). For rural women entrepreneurs, performance may be influenced by a range of factors, including access to resources, market conditions, competitive dynamics, and external support systems (Mwania, 2015). Understanding performance in this holistic sense enables policymakers, development practitioners, and entrepreneurship support programs to design targeted interventions that empower rural women entrepreneurs to achieve sustainable and inclusive growth, thereby fostering economic development and social progress in rural communities (Ewoh, 2014).

2.2 Entrepreneurial Ability and Performance

The relationship between entrepreneurial ability and performance among women entrepreneurs is fundamental and pivotal to understanding the dynamics of business success in rural contexts. Entrepreneurial ability encompasses a diverse set of skills, traits, and competencies that enable individuals to identify, evaluate, and exploit opportunities for value creation (Mary, et al., 2016). In the context of women entrepreneurs in the study context, entrepreneurial ability may manifest in various forms, including creativity, resilience, opportunity recognition, and resourcefulness. These abilities empower women to navigate the challenges of entrepreneurship, capitalize on market opportunities, and drive business growth (Amit, Glostén, & Muller, 2022).

The positive relationship between entrepreneurial ability and performance suggests that women entrepreneurs who possess higher levels of entrepreneurial ability are more likely to achieve superior business outcomes. This relationship is supported by empirical evidence (Rajan, & Panicker, 2020) indicating that entrepreneurial ability positively influences performance indicators such as revenue generation, profitability, market share, and business sustainability. Women entrepreneurs with strong entrepreneurial abilities demonstrate the capacity to innovate, adapt to changing market conditions, and effectively manage risks (Sariwulan, et al., 2020), thus positioning themselves for success in competitive market environments.



Moreover, the relationship between entrepreneurial ability and performance is dynamic and multifaceted, influenced by various internal and external factors (Rajan, & Panicker, 2020). Previous studies like Adomako, et al., (2018) and Wagner, (2021) view internal factors such as individual characteristics, alertness, experience, and mindset shape women entrepreneurs' ability to identify and pursue opportunities. While external factors such as market conditions, industry dynamics, and regulatory environment create opportunities and constraints that impact business performance (Bayon, et al., 2015). This study is with the view that women entrepreneurs can enhance their competitiveness, differentiate their offerings, and create value for customers, thereby driving performance and contributing to economic development in the region. Therefore, investing in entrepreneurship education, training, and support programs that develop and enhance entrepreneurial ability among women entrepreneurs, policymakers and development practitioners can foster a conducive environment for business growth and economic empowerment in rural communities.

2.3 Marketing Skills and Performance

The relationship between marketing skills and performance among women entrepreneurs is integral to understanding the mechanisms through which business success is achieved in rural contexts (Anderson, Chandy, & Zia, 2018). Marketing skills encompass a diverse range of competencies and capabilities related to market research, branding, customer engagement, and promotional strategies. Women entrepreneurs who possess strong marketing skills can effectively identify market opportunities, understand customer needs, and develop tailored marketing strategies to attract and retain customers (Cheverton, 2005). In rural context, where market conditions may be challenging and competition is fierce, marketing skills play a critical role in enabling women entrepreneurs to differentiate their offerings, build brand loyalty, and drive business performance (Ayiku, & Grant, 2021).

The positive relationship between marketing skills and performance as documented by Anderson, Chandy, and Zia, 2(015) suggests that women entrepreneurs who invest in developing and honing their marketing capabilities are more likely to achieve superior business outcomes. Empirical evidence indicates that women entrepreneurs with strong marketing skills are better equipped to penetrate markets, increase sales, and expand their customer base (Khan, & Khan, 2021). This lead to effective marketing strategies and techniques, such as targeted advertising, social media marketing, and customer relationship management. Therefore, in the contest of women entrepreneurs in rural settings, can enhance their visibility, credibility, and competitiveness in the marketplace, thereby driving performance and achieving sustainable growth.

Moreover, the relationship between marketing skills and performance is dynamic and interactive, influenced by various factors, such as knowledge, expertise, and creativity shape women entrepreneurs' ability to develop and execute effective marketing strategies (Anderson, Chandy, & Zia, 2015), while others factors such as market trends, consumer preferences, and competitive landscape create opportunities and challenges that impact business performance (Cheverton, 2005). This study posited that, continuously investing in upgrading marketing skills and staying attuned to market dynamics, women entrepreneurs can adapt to changing conditions, seize emerging opportunities, and mitigate risks, thus enhancing their overall performance and competitiveness in the marketplace. This can be with an effort to improve access to market information, networking opportunities, and marketing resources. Such that,

strengthen the relationship between marketing skills and performance, and enabling women entrepreneurs to thrive and contribute to sustainable development in rural communities.

2.4 Empirical Review

Recent empirical studies have highlighted the significance of considering marketing skills as a moderating variable in investigating the relationship between entrepreneurial ability and the performance of rural women entrepreneurs. For instance, a study by Jha, and Alam, (2022) conducted in rural regions found that while entrepreneurial ability positively correlated with business performance indicators such as revenue and growth, the presence of strong marketing skills among women entrepreneurs significantly enhanced these effects. Similarly, a study by Rajan, and Panicker, (2020) in rural communities in Kanartaka demonstrated that women entrepreneurs with high levels of both entrepreneurial ability and marketing skills exhibited superior performance outcomes compared to those with only one of these attributes. These findings suggest that marketing skills play a crucial role in amplifying the impact of entrepreneurial ability on business performance among rural women entrepreneurs across diverse cultural and economic contexts.

Moreover, empirical research by Ayiku, and Grant, (2021) in rural areas of Ghana revealed interactions and equipping business owners with marketing skills enables their ability to deal with volatile consumer demands and performance outcomes. Their study found that while entrepreneurial ability was positively associated with business performance, the strength of this relationship varied depending on the level of marketing skills possessed by women entrepreneurs. Specifically, women with lower levels of marketing skills experienced weaker performance outcomes according to the study by Hendar, et al., (2020), despite their entrepreneurial abilities, highlighting the importance of marketing proficiency in translating entrepreneurial potential into tangible business success. These findings underscore the need for comprehensive support programs that not only cultivate entrepreneurial abilities but also equip rural women entrepreneurs with essential marketing competencies to thrive in competitive markets.

Furthermore, a study by Anderson, Chandy, and Zia, (2015) conducted in rural communities in Mexico explored the mechanisms through which marketing activities act on the relationship between entrepreneur ability and performance outcomes. Their research revealed that women entrepreneurs with high levels of marketing skills demonstrated greater adaptability to market changes, more effective customer engagement strategies, and enhanced brand positioning compared to their counterparts with lower marketing proficiency. These findings suggest that marketing skills act as a catalyst that amplifies the impact of entrepreneurial ability by facilitating market responsiveness and customer-centric approaches to business management. Thus, empirical evidence underscores the critical role of marketing skills as a moderating variable in driving the performance of rural women entrepreneurs and highlights the need for targeted interventions that strengthen both entrepreneurial and marketing capabilities in rural development initiatives.

2.5 Theoretical Framework

For a study examining the moderating role of marketing skills on the relationship between entrepreneurial ability and the performance of rural women in Nigeria, several theoretical frameworks are applying, that's the underpinning theory is resources-based view, and supported by social cognitive theory, and dynamic capability theory.

2.5.1 Resource-Based View (RBV). The RBV suggests that a firm's performance is influenced by its unique resources and capabilities (Barney, 1991). In this context, entrepreneurial ability can be seen as a critical resource possessed by rural women entrepreneurs, while marketing skills represent another resource. The RBV framework can help analyze how the combination of these resources contributes to the performance of women-led rural enterprises, with marketing skills potentially moderating the relationship between entrepreneurial ability and performance.

2.5.2 Social Cognitive Theory. Social Cognitive Theory by Schunk, (2012) emphasizes the role of cognitive processes in shaping behavior. Within this framework, entrepreneurial ability can be viewed as a result of cognitive factors such as self-efficacy, goal setting, and observational learning. Marketing skills, on the other hand, can be considered learned behaviors influenced by social modeling and reinforcement. This theory can provide insights into how rural women entrepreneurs develop and utilize both entrepreneurial and marketing skills to enhance their performance.

2.5.3 Dynamic Capabilities Theory. Dynamic Capabilities Theory developed by Teece, (2014) focuses on a firm's ability to adapt and respond to changing environments. In this context, entrepreneurial ability represents the dynamic capability of rural women entrepreneurs to sense opportunities, seize them, and reconfigure resources to create value. Marketing skills can be viewed as part of the firm's dynamic capabilities, enabling it to effectively exploit and explore market opportunities. This framework can elucidate how rural women entrepreneurs leverage their entrepreneurial and marketing capabilities to achieve superior performance, with marketing skills moderating the relationship between entrepreneurial ability and performance under different market conditions.

Each of these theoretical frameworks offers a unique perspective on the relationship between entrepreneurial ability, marketing skills, and performance, making them suitable for investigating the moderating role of marketing skills in the context of rural women entrepreneurs in Nigeria.

Conceptual Framework

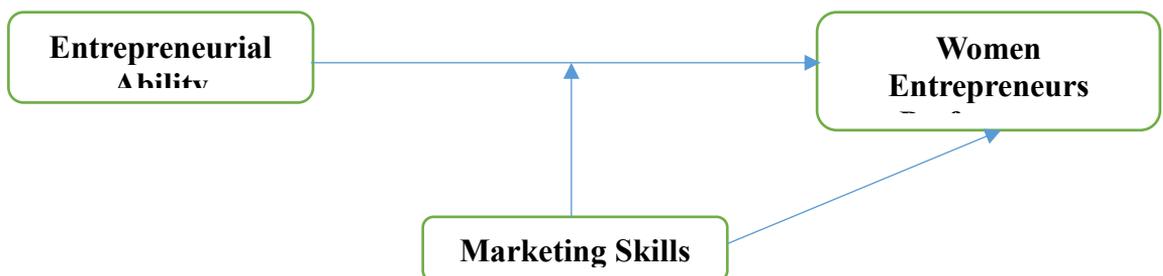


Figure 1 Research Framework

3.0 Methodology

This study use survey research design and the survey research design employed in this study allows for the systematic collection of data from the target population of women entrepreneurs in Zaria local government, Kaduna state. Specifically, the study focuses on women entrepreneurs who are members of the Cooperative Society Zaria, which is closely associated with the National Agricultural Extension and Research Liaison Services (NAERLS) program



at Ahmadu Bello University, Zaria. With a total population of 323 women entrepreneurs, the study utilizes census sampling techniques, thereby encompassing the entire population as the sample size for the research. This approach ensures comprehensive coverage and representation of the target population, enabling robust analysis and generalizability of findings.

The survey instrument, in the form of a questionnaire, serves as the primary data collection tool in this study. Through the questionnaire, the researchers gather information on various variables related to entrepreneurial ability, marketing skills, and performance outcomes from the sample of women entrepreneurs. Subsequently, the collected data are analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) technique. PLS-SEM allows for the examination of complex relationships among multiple variables and constructs, offering insights into the interplay between entrepreneurial ability, marketing skills, and performance outcomes among rural women entrepreneurs in Zaria. Adopting this analytical approach, the study aims to uncover underlying patterns, associations, and causal relationships within the data, thereby contributing to a deeper understanding of the factors influencing business success and economic empowerment among women entrepreneurs in the local context.

4.0 Result and Discussion

The response rate of 76%, equivalent to 246 out of the total population of 323 women entrepreneurs, indicates a strong level of engagement and participation in the study. A response rate above 70% is generally considered to be excellent in survey research, suggesting a high level of interest and willingness among respondents to contribute to the research efforts. The robust response rate enhances the reliability and validity of the study findings, as it minimizes the risk of non-response bias and ensures that the data collected are representative of the target population of women entrepreneurs in Zaria.

Regarding the demographic characteristics of the respondents, the age distribution provides valuable insights into the profile of women entrepreneurs participating in the study. The data reveal that the majority of respondents fall within the age range of 26 to 30 years, with 118 individuals representing this demographic group. Additionally, 57 respondents are aged between 20 to 25 years, while 71 respondents are above the age of 31 years. This distribution highlights the diversity of age groups among women entrepreneurs in Zaria and underscores the importance of considering demographic factors in analyzing the characteristics and experiences of entrepreneurial populations. Acknowledging the age diversity among respondents, the study can capture a range of perspectives and experiences, contributing to a more comprehensive understanding of the dynamics of entrepreneurship in the local context.

4.1 Assessment of the Path Model

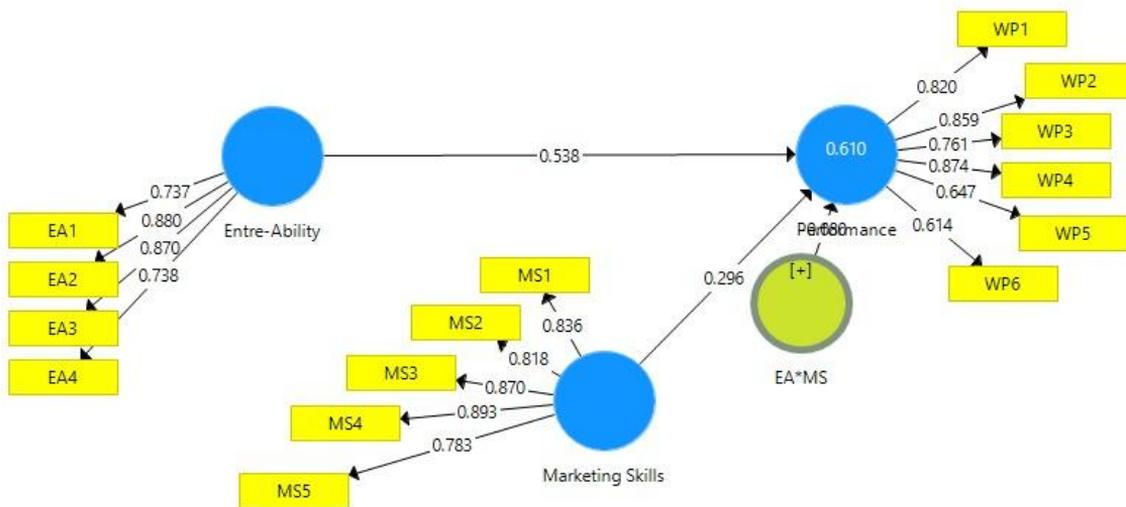


Figure 2 Path Model of the Study

Table 1 Loadings of the Variables

Items	Loadings	CR	AVE
EA1	0.737	0.883	0.654
EA2	0.880		
EA3	0.870		
EA4	0.738		
MS1	0.836	0.923	0.707
MS2	0.818		
MS3	0.870		
MS4	0.893		
MS5	0.783		
WP1	0.820	0.895	0.592
WP2	0.859		
WP3	0.761		
WP4	0.874		
WP5	0.647		
WP6	0.614		



Table 1 presents the loadings of the variables in the study, along with their composite reliability (CR) and average variance extracted (AVE). Loadings represent the strength of the relationship between each item (indicator) and its corresponding latent construct (variable). CR indicates the internal consistency reliability of the constructs, while AVE reflects the amount of variance captured by the items relative to measurement error.

For the entrepreneurial ability (EA) construct, all four items (EA1, EA2, EA3, and EA4) exhibit strong loadings ranging from 0.737 to 0.880, indicating that they effectively measure the underlying latent variable. The CR value of 0.883 exceeds the recommended threshold of 0.70, suggesting high internal consistency reliability. Additionally, the AVE value of 0.654 indicates that the items collectively explain 65.4% of the variance in the EA construct, demonstrating convergent validity. Similarly, for the marketing skills (MS) construct, all five items (MS1, MS2, MS3, MS4, and MS5) demonstrate strong loadings ranging from 0.783 to 0.893, indicating their effectiveness in capturing the underlying latent variable. The CR value of 0.923 exceeds the threshold, indicating high internal consistency reliability, while the AVE value of 0.707 demonstrates convergent validity, with the items collectively explaining 70.7% of the variance in the MS construct.

Lastly, for the performance (WP) construct, all six items (WP1, WP2, WP3, WP4, WP5, and WP6) exhibit strong loadings ranging from 0.614 to 0.874, indicating their ability to measure the latent variable effectively. The CR value of 0.895 exceeds the threshold, indicating high internal consistency reliability. However, the AVE value of 0.592 is above the recommended threshold of 0.50, suggesting the good convergent validity.

Table 2 Fornell and Larcker Criterion

	Entre-Ability	Marketing Skills	Performance
Entre-Ability	0.809		
Marketing Skills	0.646	0.841	
Performance	0.738	0.654	0.769

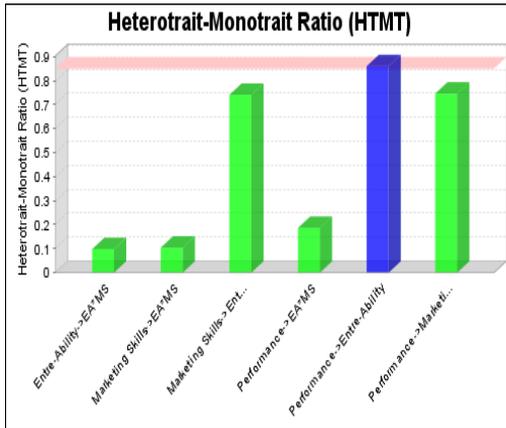
Table 2 presents the Fornell and Larcker criterion, which assesses the discriminant validity of the measurement model by comparing the square root of the average variance extracted (AVE) for each construct with the correlations between constructs. The diagonal elements represent the square roots of the AVE for each construct, while the off-diagonal elements represent the correlations between constructs. In this table, the square roots of the AVE values for each construct (shown on the diagonal) are compared with the correlations between constructs (shown in the off-diagonal cells). According to the Fornell and Larcker criterion, discriminant validity is established when the square root of the AVE for each construct is greater than the correlation between that construct and any other construct.

In this case, the square roots of the AVE for all three constructs (entrepreneurial ability, marketing skills, and performance) are higher than the correlations between them, indicating satisfactory discriminant validity. Specifically:

- For the entrepreneurial ability construct, the square root of the AVE (0.809) is higher than the correlations with marketing skills (0.646) and performance (0.738).

- For the marketing skills construct, the square root of the AVE (0.841) is higher than the correlations with entrepreneurial ability (0.646) and performance (0.654).
- For the performance construct, the square root of the AVE (0.769) is higher than the correlations with entrepreneurial ability (0.738) and marketing skills (0.654).

HTMT Criterion



Convergent Validity

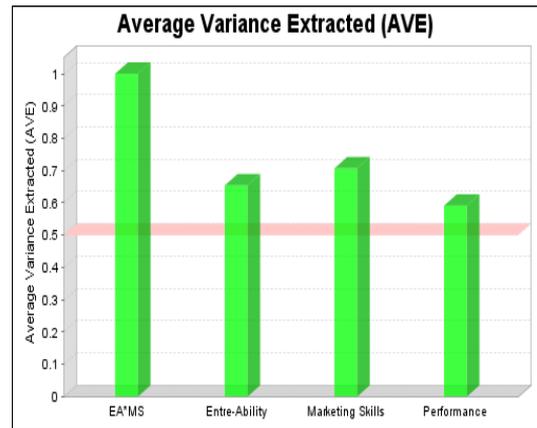


Figure 3 HTMT and Convergent Validity

The Hierarchical Testing of Measurement Model is another method used to assess discriminant validity in structural equation modeling (SEM). It compares the heterotrait-monotrait (HTMT) ratio of correlations between constructs to a threshold value to determine if the constructs are sufficiently distinct from each other. When the HTMT ratio is below a certain threshold (typically 0.90 or 0.85), it suggests that the constructs are sufficiently distinct from each other, indicating discriminant validity. If the HTMT ratio exceeds the threshold, it may indicate a lack of discriminant validity, suggesting that the constructs are not adequately differentiated. The results corroborate the findings from the Fornell and Larcker criterion, providing additional evidence of discriminant validity. The result mean that the HTMT ratios for all pairs of constructs are below the threshold value, indicating that each construct is sufficiently distinct from the others.

4.2 Assessment of Structural Model

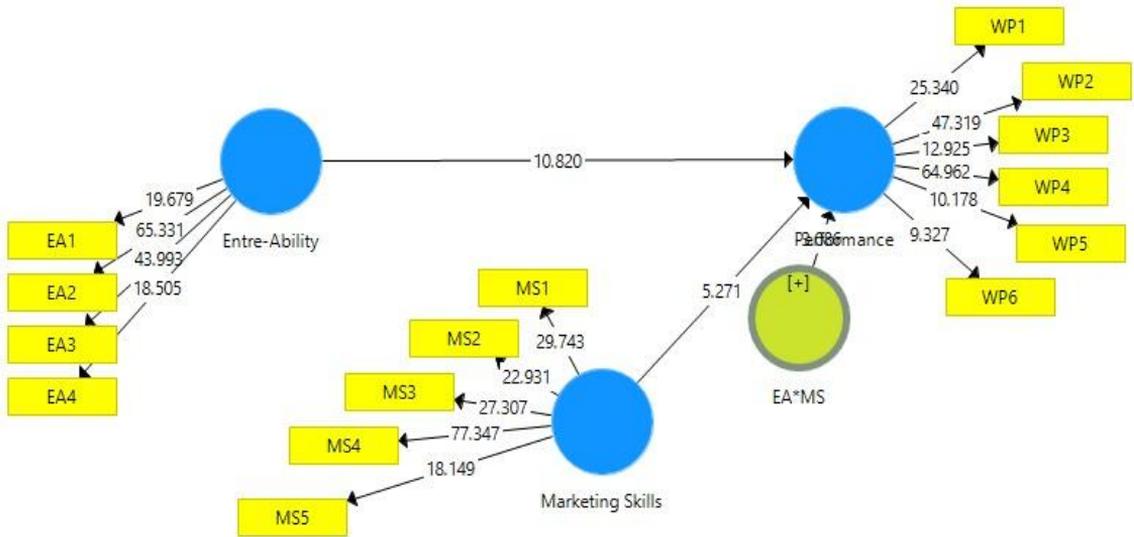


Figure 4

Table 2. Test of Hypotheses

	Beta	Sample Mean	Standard Deviation	T Statistics	P Values	Decision
EA*MS -> Performance	0.08	0.077	0.026	3.086	0.002	Reject
Entre-Ability -> Performance	0.538	0.538	0.05	10.82	0.000	Reject
Marketing Skills -> Performance	0.296	0.297	0.056	5.271	0.000	Reject

R2: 610

Table 2 presents the results of hypothesis testing, which assesses the relationships between the independent variables (entrepreneurial ability and marketing skills) and the dependent variable (performance) in the study. The table includes the beta coefficients, sample mean, standard deviation, t-statistics, p-values, and decisions for each hypothesis.

- i. **Hypothesis: Entrepreneurial Ability -> Performance (Reject):** The hypothesis testing the relationship between entrepreneurial ability and performance is rejected. The beta coefficient of 0.538 indicates a strong positive relationship between entrepreneurial ability and performance. The t-statistic of 10.82 and the p-value of 0.000 confirm that this relationship is statistically significant. This suggests that higher

levels of entrepreneurial ability are associated with better performance among women entrepreneurs in the study.

- ii. **Hypothesis: Marketing Skills -> Performance (Reject):** The hypothesis testing the relationship between marketing skills and performance is rejected. The beta coefficient of 0.296 indicates a positive relationship between marketing skills and performance. The t-statistic of 5.271 and the p-value of 0.000 indicate that this relationship is statistically significant. This suggests that women entrepreneurs with stronger marketing skills tend to have better performance outcomes.
- iii. **Hypothesis: EA*MS -> Performance (Reject):** The hypothesis testing the joint effect of entrepreneurial ability and marketing skills on performance is rejected. The beta coefficient of 0.08 indicates a positive relationship between the interaction of entrepreneurial ability and marketing skills and performance. The t-statistic of 3.086 and the p-value of 0.002 suggest that this relationship is statistically significant. However, the effect size is relatively small, as indicated by the beta coefficient. Therefore, while there is evidence of a positive relationship, it may not be practically significant.

The R-squared value of 0.610 indicates that the model explains 61.0% of the variance in performance. This suggests that the independent variables (entrepreneurial ability and marketing skills) collectively explain a substantial portion of the variance in performance among women entrepreneurs in the study. However, other factors not included in the model may also influence performance outcomes.

The results of the study provide important insights into the relationship between entrepreneurial ability, marketing skills, and the performance of women entrepreneurs in Zaria. Firstly, the findings indicate that entrepreneurial ability has a positive and significant impact on the performance of women entrepreneurs. This suggests that women who possess higher levels of entrepreneurial ability, including skills such as opportunity recognition, risk management, and innovation, are more likely to achieve better business performance outcomes such as increased revenue, growth, and profitability.

Secondly, the study reveals that marketing skills also have a positive and significant influence on the performance of women entrepreneurs. This implies that women who demonstrate proficiency in marketing-related competencies, such as market research, branding, and customer relationship management, are better positioned to enhance their business performance by effectively promoting their products or services, reaching target markets, and satisfying customer needs.

Moreover, the results indicate that marketing skills act as a significant moderator in the relationship between entrepreneurial ability and the performance of women entrepreneurs. This suggests that the impact of entrepreneurial ability on performance outcomes is strengthened when women entrepreneurs possess higher levels of marketing skills. In other words, marketing skills play a complementary role in amplifying the positive effects of entrepreneurial ability on business performance, emphasizing the importance of integrating marketing competencies into entrepreneurship development programs and support initiatives for women entrepreneurs in Zaria.

4.3 Assessment of IPMA

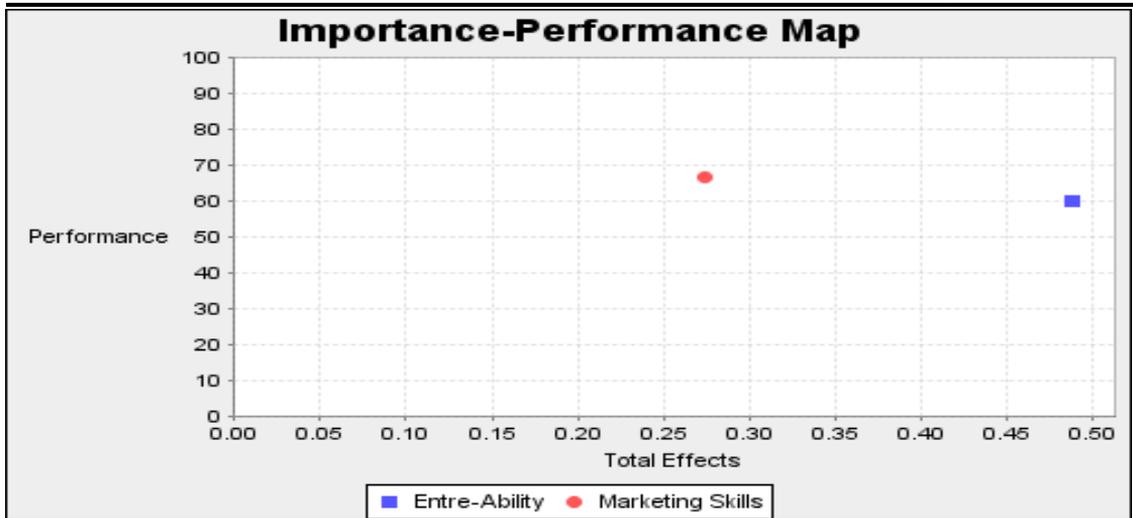


Figure 5 IPMA Result for the Study

Figure 5 provides insights into the relative importance and performance levels of marketing skills and entrepreneurial ability in influencing overall performance among women entrepreneurs in the study. Firstly, marketing skills are shown to have a level of importance of 0.274, indicating that they contribute significantly to the overall performance of women entrepreneurs. This suggests that women who possess strong marketing skills are better equipped to achieve higher levels of performance in their businesses. Marketing skills play a crucial role in various aspects of business operations, including market research, branding, customer acquisition, and promotional strategies and ultimately drive business growth and profitability.

On the other hand, entrepreneurial ability is depicted to have a higher level of importance, with a value of 0.488. This indicates that entrepreneurial ability is a critical factor in determining overall performance among women entrepreneurs. Entrepreneurial ability encompasses a wide range of competencies, including creativity, innovation, risk-taking, problem-solving, and strategic decision-making. Women entrepreneurs who possess strong entrepreneurial abilities are better equipped to identify and exploit business opportunities, overcome challenges, adapt to market changes, and lead their businesses to success.

Additionally, the performance levels associated with marketing skills and entrepreneurial ability are provided in Figure 5. Marketing skills are associated with a 66% performance level, indicating that they contribute significantly to achieving desired performance outcomes among women entrepreneurs. Similarly, entrepreneurial ability is associated with a 60% performance level, underscoring its importance in driving business performance. Figure 5 highlights the complementary roles of marketing skills and entrepreneurial ability in influencing performance outcomes among women entrepreneurs. While both factors are important, they contribute differently to overall performance, with entrepreneurial ability playing a slightly more dominant role.

4.4 Theoretical Contribution



The theoretical contributions of the study, drawing on the underpinning theory of the Resource-Based View (RBV) and supported by Social Cognitive Theory and Dynamic Capability Theory, are substantial and multifaceted. Firstly, from an RBV perspective, the findings contribute to our understanding of how resources, specifically entrepreneurial ability and marketing skills, contribute to competitive advantage and superior performance outcomes for women entrepreneurs in Zaria. By demonstrating the positive and significant relationships between entrepreneurial ability, marketing skills, and business performance, the study confirms the central tenets of RBV, which emphasize the importance of valuable, rare, and non-substitutable resources in achieving sustained competitive advantage.

Furthermore, the study aligns with Social Cognitive Theory by highlighting the role of cognitive processes, observational learning, and self-efficacy beliefs in shaping entrepreneurial behavior and performance. Through the development of entrepreneurial ability and marketing skills, women entrepreneurs in Zaria not only acquire the necessary knowledge and competencies but also enhance their self-efficacy beliefs, confidence, and motivation to pursue entrepreneurial opportunities and overcome challenges. This aligns with Social Cognitive Theory's emphasis on the interplay between personal factors, environmental influences, and behavioral outcomes, providing valuable insights into the mechanisms through which women entrepreneurs in Zaria develop and leverage their capabilities to achieve business success.

The study contributes to dynamic capability theory by emphasizing the importance of adaptability, learning, and resource reconfiguration in responding to changing market conditions and driving long-term competitiveness. This is by demonstrating the moderating effect of marketing skills on the relationship between entrepreneurial ability and performance outcomes, the study highlights the dynamic nature of capabilities and the need for women entrepreneurs to continuously develop and deploy their resources in alignment with market opportunities and challenges. This resonates with dynamic capability theory's emphasis on the ability of firms to sense, seize, and reconfigure resources in dynamic environments, underscoring the importance of agility and strategic flexibility in achieving sustainable competitive advantage.

4.5 Practical Contributions

The study's practical contributions offer valuable insights for policymakers, development practitioners, and entrepreneurship support organizations seeking to enhance the entrepreneurial ecosystem and promote women's economic empowerment in Zaria and similar contexts. Firstly, the findings underscore the importance of investing in entrepreneurship education and training programs that develop both entrepreneurial ability and marketing skills among women entrepreneurs. Furthermore, the study highlights the significance of providing access to resources and support services that enable women entrepreneurs to leverage their capabilities effectively. This includes facilitating access to finance, market information, mentorship, networking opportunities, and technology infrastructure. Policymakers can create an enabling environment that empowers women entrepreneurs to capitalize on market opportunities, overcome challenges, and scale their businesses sustainably.

Moreover, the study emphasizes the importance of fostering collaboration and knowledge-sharing networks among women entrepreneurs, industry stakeholders, and academia. Such as business associations, industry clusters, and entrepreneurship networks, where policymakers and development organizations can foster peer learning, exchange best practices, and promote collective action to address common challenges and seize collective opportunities.



Additionally, partnerships with universities and research institutions can facilitate the dissemination of research findings, provide access to technical expertise, and support evidence-based policymaking and program design.

5.0 Conclusion

The findings of the study underscore the critical role of entrepreneurial ability and marketing skills in driving the performance of women entrepreneurs in Zaria. The positive and significant relationships identified between entrepreneurial ability, marketing skills, and business performance highlight the importance of these capabilities in achieving competitive advantage and sustainable growth in rural contexts. Moreover, the moderating effect of marketing skills on the relationship between entrepreneurial ability and performance outcomes emphasizes the dynamic nature of capabilities and the need for women entrepreneurs to develop a diverse skill set to navigate complex market environments effectively. Furthermore, the study reveals important insights into the mechanisms through which women entrepreneurs in Zaria leverage their capabilities to achieve business success. Thereby, acquiring and deploying entrepreneurial ability and marketing skills, women entrepreneurs enhance their competitiveness, seize market opportunities, and contribute to economic development and social progress in the local community. However, challenges such as limited access to resources, infrastructure constraints, and gender inequalities persist, underscoring the need for targeted interventions and support initiatives to address systemic barriers and empower women entrepreneurs to thrive in the entrepreneurial landscape.

5.1 Recommendations

Based on the study findings, several recommendations emerge for policymakers, development practitioners, and entrepreneurship support organizations

- i. Develop and implement entrepreneurship education and training programs tailored to the needs of women entrepreneurs in Zaria, focusing on building entrepreneurial ability, marketing skills, and business management competencies.
- ii. Facilitate access to finance, market information, technology infrastructure, and support services to empower women entrepreneurs to overcome resource constraints and capitalize on market opportunities.
- iii. Foster collaboration and knowledge-sharing networks among women entrepreneurs, industry stakeholders, and academia to facilitate peer learning, exchange best practices, and promote collective action to address common challenges.
- iv. Implement policies and regulations that promote gender equality, women's empowerment, and entrepreneurship development, including targeted incentives, subsidies, and affirmative action measures to support women-owned businesses.

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