

Effect of Socio-Economic and Cultural Factors on the Performance of Women-Owned Small and Medium Enterprises (SMEs) In North-Central Nigeria

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Abstract: *This study examined the relationships between socio-economic and cultural factors, entrepreneurial self-efficacy, and business performance among women-owned small and medium enterprises (SMEs) in North-Central Nigeria. Using a quantitative cross-sectional survey design, data were collected from 529 women entrepreneurs across seven administrative units between March and July 2025, achieving an 88.2% response rate. The study employed descriptive statistics, Pearson correlation analysis, and Structural Equation Modelling (PLS-SEM) using SPSS version 28.0 and SmartPLS 4.0 to test four hypotheses examining direct and mediation effects. Results revealed that social factors have no significant direct effect on women SMEs' growth ($\beta = -0.017$, $p = 0.775$), while both economic factors ($\beta = 0.146$, $p = 0.033$) and cultural factors ($\beta = 0.154$, $p = 0.025$) demonstrate significant positive direct effects. Entrepreneurial self-efficacy serves as a significant mediator in all relationships: complete mediation for social factors ($\beta = 0.208$, $p < 0.000$) and partial mediation for both economic ($\beta = 0.333$, $p < 0.000$) and cultural factors ($\beta = 0.258$, $p < 0.000$). These findings align with Social Cognitive Theory, highlighting entrepreneurial self-efficacy as a critical psychological mechanism that transforms environmental conditions into business success. The study recommends that entrepreneurship support programs should prioritise confidence-building interventions alongside environmental improvements to maximise women's entrepreneurial performance in Nigeria's challenging business landscape.*

KEYWORDS: cultural factors, social factors, economic factors, entrepreneurial self-efficacy, performance of women's SMEs, Small and Medium Enterprises (SMEs):

INTRODUCTION

Small and Medium Enterprises (SMEs) represent the backbone of contemporary economies, constituting a formidable force that drives economic growth, innovation, and employment generation across diverse geographical contexts. Small and medium-sized enterprises (SMEs) are at the heart of the global economy, representing over 90% of businesses employing up to 70% of the workforce, and driving half of the world's GDP. SMEs account for the majority of businesses worldwide and are

important contributors to job creation and global economic development. They represent about 90% of businesses and more than 50% of employment worldwide. Formal SMEs contribute up to 40% of national income (GDP) in emerging economies Hussin, (2021). This economic significance is further underscored by the fact that there were estimated to be approximately 358 million small and medium-sized enterprises (SMEs) worldwide in 2023, demonstrating the massive scale and reach of this sector in the contemporary business landscape.

The performance trajectory of SMEs has demonstrated remarkable resilience and adaptability, particularly in the post-pandemic era where these enterprises have emerged as crucial drivers of economic recovery and stability. The total number of SMEs in the world increased gradually since the beginning of the century, despite falling somewhat during the COVID-19 pandemic. This resilience is particularly evident in performance metrics, where the highest growth rates were observed in the 'tourism' and 'digital' ecosystems (4.5% and 3.8% respectively). For the third consecutive year, employment growth is expected to continue in 2024, with a projected 0.8% increase. The sustained growth patterns indicate not only the inherent dynamism of SMEs but also their capacity to navigate complex economic landscapes while maintaining their role as engines of economic development.

The socio-economic factors constituting the operational environment of women's SMEs represent critical determinants of their performance outcomes, encompassing a broad spectrum of variables that influence business operations, market access, and growth potential (McGee, 2009). Social factors, including community support systems, networks, educational attainment, and social capital, create the foundational framework within which these enterprises operate and evolve. (Nuhu 2025). Cultural influences on women's entrepreneurship extend beyond mere social acceptance to encompass deep-seated beliefs about women's roles in economic activities, business ownership, and market participation (Ademiluyi & Nuhu, 2024; Sangu, 2025). Entrepreneurial self-efficacy emerges as a crucial mediating mechanism through which socio-economic and cultural factors influence women SMEs performance, representing the confidence and belief in one's ability to successfully perform entrepreneurial tasks and achieve business objectives.

Despite the evident importance of women SMEs in economic development and the recognition of various factors influencing their performance, significant gaps exist in understanding the specific mechanisms through which socio-economic and cultural factors affect these enterprises' performance outcomes. Previous studies have provided fragmented insights into individual aspects of this relationship, but comprehensive understanding remains limited. Abdulkareem (2025) focused primarily on business environment and insecurity impacts but did not adequately address the mediating mechanisms through which these factors operate. Similarly, Audu and Onwana (2024) examined socio-demographic variables but failed to capture the complex cultural dimensions that shape women's entrepreneurial experiences.

The Research The study seeks to provide answers to the questions the effect of socio economic and cultural factors on the growth of women SMEs in North-Central Nigeria and the mediating effect of entrepreneurial self-efficacy on the relationship between socio-economic and cultural factors and the growth of women SMEs in North-Central Nigeria. This study has significant implications for

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government agencies and policymakers tasked with formulating and implementing policies that promote entrepreneurship and economic development in North-Central Nigeria.

LITERATURE REVIEW

Conceptual Review

Socio-Economic and Cultural Factors - The conceptualization of socio-economic and cultural factors in women's entrepreneurship has evolved through various scholarly perspectives, reflecting the multidimensional nature of these influences on SME performance. Different authors have approached these concepts from distinct theoretical lenses, contributing to a rich tapestry of understanding that reveals both convergent and divergent viewpoints on how these factors operate within the entrepreneurial ecosystem. The scholarly discourse demonstrates that while there is general consensus on the importance of these factors, significant variations exist in their conceptualization, measurement, and perceived mechanisms of influence on women's entrepreneurial outcomes. Sen's capability approach is reflected in Tondro et al. (2025) work on how women's entrepreneurship enhances their agency and expands their capability sets beyond economic dimensions. Azaka (2024) contributes by examining how successful women entrepreneurs become role models and change agents in their communities, creating ripple effects that benefit other women.

Social Factors

Social factors can be conceptualized as the complex web of interpersonal relationships, community dynamics, and societal structures that fundamentally shape women's entrepreneurial trajectories in Nigeria's socio-economic landscape. These factors encompass the networks of support, social capital, and community acceptance that women entrepreneurs navigate in their business endeavors.

Economic Factors

Economic factors can be conceptualized as the financial and material resources, market conditions, and economic policies that directly influence the establishment, operation, and growth of women's SMEs in North-Central Nigeria. These factors encompass both macro-economic conditions and micro-level financial capabilities that determine the viability and sustainability of women-owned enterprises.

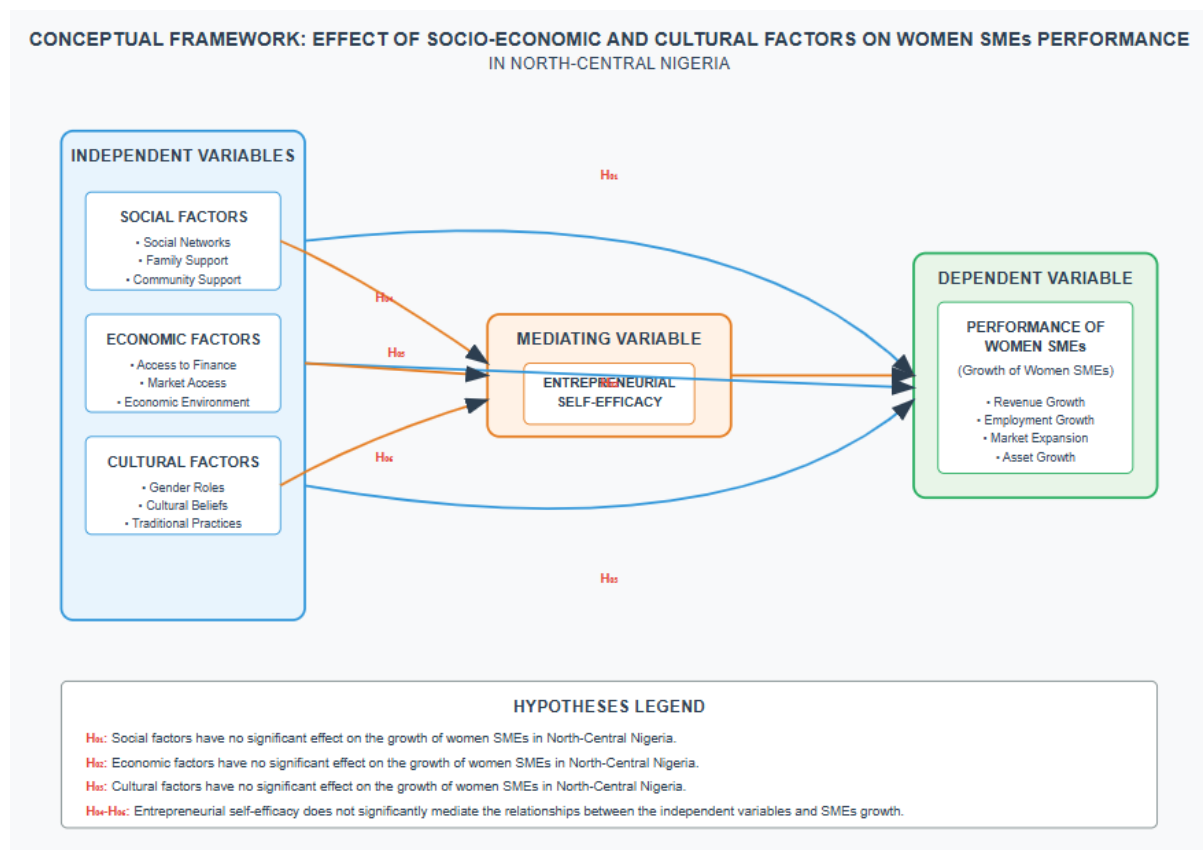
Cultural Factors

Cultural factors can be conceptualized as the deep-rooted beliefs, values, traditions, and practices that shape women's entrepreneurial behavior and business performance within the North-Central Nigerian context. These factors represent the normative frameworks that influence decision-making processes, business practices, and stakeholder relationships in women-owned enterprises. Cultural dimensions significantly impact how women perceive entrepreneurial opportunities, assess risks, and structure their business operations.

Women SMEs Performance Women SMEs performance can be conceptualized as a multidimensional construct that encompasses the comprehensive evaluation of business outcomes, growth trajectories, and sustainability indicators achieved by women-owned small and medium enterprises.

Entrepreneurial Self-Efficacy Entrepreneurial self-efficacy can be conceptualized as the confidence and belief in one's capability to successfully perform entrepreneurial tasks and achieve business objectives, serving as a crucial psychological resource that influences entrepreneurial behavior and performance outcomes.

social and business responsibilities.



Source: Author's Conceptualisation, 2025.

Figure 1: Conceptual Framework

Theoretical Review

There are several theories and Models which may be applied to this study. Some of them include Social Cognitive Theory (SCT), developed by Albert Bandura (1986), , The Resource-Based View (RBV) theory, pioneered by Wernerfelt (1984) and further developed by Barney (1991), Institutional Theory, developed by Meyer and Rowan (1977) and further elaborated by DiMaggio and Powell (1983), Gender and Development (GAD) theory emerged in the 1980s as a critical framework that challenges traditional approaches to women's economic participation by emphasizing the structural and systemic nature of gender inequalities in development processes (Moser, 1989). Based on the theoretical review provided and the specific focus of the study, **Social Cognitive Theory (SCT)** emerges as the most relevant and comprehensive theoretical framework. While all four theories offer valuable insights, SCT provides the most direct and complete explanation for the study's core variables and relationships. The theory's emphasis on the dynamic interaction between personal factors

Publication of the European Centre for Research Training and Development-UK (entrepreneurial self-efficacy), behavioral factors (business performance), and environmental factors (socio-economic and cultural conditions) perfectly aligns with your conceptual framework. SCT's reciprocal determinism model directly addresses how external socio-economic and cultural factors influence business performance through the mediating mechanism of entrepreneurial self-efficacy, which is precisely the relationship this study seeks to examine.

Empirical Review

Several scholars have examined the this topic and the empirical literature reveals a growing scholarly interest in understanding the multifaceted factors influencing women's entrepreneurship in Nigeria, with particular attention to socio-cultural, economic, and environmental determinants. While existing studies have made significant contributions to understanding various aspects of women's entrepreneurial engagement, several methodological, conceptual, and scope-related gaps remain evident when examined against the specific focus on socio-economic and cultural factors affecting women's SME performance in North-Central Nigeria, particularly regarding the mediating role of entrepreneurial self-efficacy.

Nuhu (2025) examined the influence of socio-cultural factors on purdah women entrepreneurial engagements in Nigeria. The study population comprised purdah women entrepreneurs in Northern Nigeria with a sample size of 384 respondents selected through purposive sampling technique. The study concluded that socio-cultural factors significantly determine purdah women's entrepreneurial participation.

Ademiluyi and Nuhu (2024) investigated the influence of socio-cultural factors on purdah women venture creation in Nigeria. The population consisted of purdah women in Kwara State with 320 respondents selected using stratified random sampling.. The study concluded that balancing social support with cultural considerations is crucial for purdah women's entrepreneurial success. Recommendations emphasized creating support networks that respect cultural values while promoting business development among purdah women entrepreneurs.

Sule et al. (2024) investigated the impact of small and medium-scale enterprises on women's empowerment in Nigeria. The population consisted of women SME owners across Nigeria with 600 respondents selected using stratified random sampling. The study concluded that SME involvement substantially empowers women economically and socially.

According to Kadiri et al. (2024), the nexus between entrepreneurship grants on business startup and activities of youths in North Central Nigeria. The study concluded that entrepreneurship grants substantially stimulate youth business startup activities. Recommendations included simplifying grant application procedures, increasing funding allocation, and establishing mentorship programs to maximize grant utilization effectiveness among young entrepreneurs.

Uduji et al. (2025) examined capacity development for small-scale women entrepreneurs and corporate social responsibility in Nigeria's Niger Delta region. The population comprised small-scale women entrepreneurs with 500 respondents selected through multistage sampling across Niger Delta states.

The study concluded that integrated capacity development and CSR substantially empower women entrepreneurs.

Lubabatu, Abubakar, and Haruna (2024) evaluated the effect of micro-credit on micro business development among women entrepreneurs. The study population included women micro-entrepreneurs with 400 respondents selected using systematic sampling technique. Primary data was gathered using questionnaires measuring micro-credit characteristics (loan size, interest rates, accessibility), business development indicators (capital growth, operational expansion, market reach), and moderating factors (business experience, education levels, family support). The study concluded that appropriate micro-credit substantially facilitates women's micro business development.

Literature Gap

The reviewed studies in the preceding section highlight some notable gaps, specifically in methodology, concepts, and scope, which underscore the need for this study. First, a critical examination of the reviewed literature reveals significant methodological limitations that create substantial gaps in understanding the complex relationship between socio-economic and cultural factors and women's SME performance in North-Central Nigeria. While studies like Nuhu (2025) and Ademiluyi and Nuhu (2024) employed structured questionnaires and statistical analyses, the predominant reliance on cross-sectional designs limits the ability to establish causal relationships and capture the dynamic nature of entrepreneurial processes over time. Also, the reviewed literature demonstrates significant conceptual limitations, particularly regarding the integration of entrepreneurial self-efficacy as a mediating variable in the relationship between socio-economic and cultural factors and women's SME performance. studies focus on isolated aspects of these factors rather than their integrated effects. Finally, the geographical and scope limitations evident in the reviewed literature create substantial gaps in understanding women's SME performance specifically within North-Central Nigeria's unique entrepreneurial context.

METHODOLOGY

This study adopts a quantitative research approach utilizing a cross-sectional survey design to examine the relationships between socio-economic and cultural factors and the performance of women's SMEs in North-Central Nigeria. The cross-sectional design is particularly appropriate for this study as it enables the collection of data from a large sample of women entrepreneurs at a specific point in time, thereby facilitating the assessment of relationships between variables without the need for longitudinal observation (Creswell & Creswell, 2018). This design allows for the systematic investigation of the direct and mediating effects of various factors on SME performance while maintaining cost-effectiveness and time efficiency in data collection. The choice of quantitative methodology is justified by the study's emphasis on measuring relationships between clearly defined variables and testing specific hypotheses derived from existing theoretical frameworks.

The target population for this study comprises all women-owned and operated small and medium enterprises in the six states of North-Central Nigeria: Benue, Kogi, Kwara, Nasarawa, Niger, and Plateau states, including the Federal Capital Territory (FCT), Abuja. According to the National Bureau of Statistics (2021), North-Central Nigeria hosts approximately 2.3 million SMEs, with women-owned

Publication of the European Centre for Research Training and Development-UK enterprises constituting about 42% of this figure, translating to approximately 966,000 women-owned SMEs. The sample size for this study is determined using Yamane's (1967) formula for finite populations to About 400 women and to account for potential non-response and to ensure adequate statistical power for the complex analytical procedures, particularly SEM which requires larger sample sizes, the study adopts a sample size of 600 respondents, representing an increase from the minimum required sample size. This adjustment aligns with recommendations by Hair et al. (2019) for multivariate analysis. The study employs a combination of descriptive and inferential statistical techniques to address the research objectives comprehensively.

The structural model for this study is specified based on the comprehensive theoretical framework and research objectives, incorporating established theories of entrepreneurship, resource-based view, and social cognitive theory. The model incorporates three exogenous latent constructs which are social factors, economic factors, and cultural factors, one mediating latent construct which is entrepreneurial self-efficacy, and one endogenous latent construct which is women's SME performance depicted in the diagram below.

The measurement model specifications are as follows:

Social Factors (SF) is expressed as:

$$SF = \lambda_{11}(SF1) + \lambda_{12}(SF2) + \lambda_{13}(SF3) + \lambda_{14}(SF4) + \lambda_{15}(SF5) + \lambda_{16}(SF6) + \delta_1 - - \text{-eqn1}$$

Economic Factors (EF) is expressed as:

$$EF = \lambda_{21}(EF1) + \lambda_{22}(EF2) + \lambda_{23}(EF3) + \lambda_{24}(EF4) + \lambda_{25}(EF5) + \lambda_{26}(EF6) + \delta_2 - - \text{-eqn2}$$

Cultural Factors (CF) is expressed as:

$$CF = \lambda_{31}(CF1) + \lambda_{32}(CF2) + \lambda_{33}(CF3) + \lambda_{34}(CF4) + \lambda_{35}(CF5) + \lambda_{36}(CF6) + \delta_3 - - \text{-eqn3}$$

Entrepreneurial Self-Efficacy (ESE) is expressed as:

$$ESE = \lambda_{41}(ESE1) + \lambda_{42}(ESE2) + \dots + \lambda_{410}(ESE10) + \delta_4 - - - - \text{-eqn4}$$

Women SMEs Growth (WSG) is expressed as:

$$WSG = \lambda_{51}(WSG1) + \lambda_{52}(WSG2) + \dots + \lambda_{56}(WSG6) + \delta_5 - - - - \text{-eqn5}$$

The structural model specifications include the direct effects model expressed as:

$$WSG = \beta_0 + \beta_1(SF) + \beta_2(EF) + \beta_3(CF) + \zeta_1 - - - - \text{-eqn6}$$

and the mediation model expressed as:

$$ESE = \alpha_0 + \alpha_1(SF) + \alpha_2(EF) + \alpha_3(CF) + \zeta_2 - - - - \text{-eqn7}$$

$$WSG = \gamma_0 + \gamma_1(SF) + \gamma_2(EF) + \gamma_3(CF) + \gamma_4(ESE) + \zeta_3 - - - - \text{-eqn8}$$

The study adopts a quantitative cross-sectional survey design with a stratified random sampling approach to select 600 women entrepreneurs from across the region, ensuring proportional representation across all seven administrative units. employing descriptive statistics, inferential analysis, and Structural Equation Modelling (PLS-SEM) to examine the relationships between socio-economic, cultural factors, entrepreneurial self-efficacy, and business performance.

RESULTS AND DISCUSSION

Table 4.1: Data Collection Summary by State/Territory

State/Territory	Distributed	Retrieved	Valid	Response Rate (%)
Benue	100	89	89	89.0
Kogi	78	67	67	85.9
Kwara	82	73	73	89.0
Nasarawa	64	55	55	85.9
Niger	109	98	98	89.9
Plateau	93	81	81	87.1
FCT Abuja	74	66	66	89.2
Total	600	529	529	88.2

Source: Author's computation, 2025

The data collection process across North-Central Nigeria demonstrated exceptional success with an overall response rate of 88.2%. Niger State achieved the highest response rate at 89.9%, followed closely by FCT Abuja at 89.2%, while Kogi and Nasarawa both recorded the lowest at 85.9%. The high response rates across all states indicate strong engagement from the target population and effective data collection methodology.

deviate from the observed data. While chi-square tests are sensitive to sample size, the ratio provides a more practical assessment of model fit.

Descriptive Statistics

Table 4.3: Descriptive Statistics for Study Variables

Variable	N	Mean	Std. Deviation	Minimum	Maximum	Skewness	Kurtosis
Social Factors	529	3.68	0.847	1.33	5.00	-0.241	-0.193
Economic Factors	529	2.94	0.761	1.17	4.83	0.148	-0.305
Cultural Factors	529	3.21	0.896	1.00	5.00	-0.095	-0.428
Entrepreneurial Self-Efficacy	529	3.76	0.728	1.80	5.00	-0.318	0.162
Women SMEs Growth	529	3.52	0.819	1.50	5.00	-0.207	-0.285

Source: Author's computation, 2025

The descriptive statistics provide comprehensive insights into the central tendencies, variability, and distributional characteristics of the key study variables. Entrepreneurial Self-Efficacy emerges as the highest-rated variable with a mean score of 3.76 (SD=0.728), suggesting that women entrepreneurs in North-Central Nigeria generally possess moderate to high confidence in their entrepreneurial capabilities. The relatively low standard deviation indicates consistent perceptions across respondents, while the range from 1.80 to 5.00 demonstrates variability in self-efficacy levels. The negative

skewness (-0.318) indicates a slight tendency toward higher scores, suggesting that more respondents rate their entrepreneurial self-efficacy above the scale midpoint.

Social Factors achieved the second-highest mean score of 3.68 (SD=0.847), indicating generally positive perceptions of social support and social capital among women entrepreneurs. Women SMEs Growth recorded a mean score of 3.52 (SD=0.819), indicating moderate performance levels among women-owned enterprises. Cultural Factors showed a mean score of 3.21 (SD=0.896), representing moderate cultural support for women's entrepreneurship. The highest standard deviation among all variables indicates the greatest variability in cultural experiences, while the full range from 1.00 to 5.00 demonstrates extreme diversity in cultural contexts. Economic Factors recorded the lowest mean score of 2.94 (SD=0.761), indicating challenging economic conditions for women entrepreneurs. This below-midpoint score suggests that economic constraints, access to finance, and market conditions present significant barriers to women's entrepreneurial success.

The overall pattern of means suggests that while women entrepreneurs possess strong self-efficacy and benefit from reasonable social support, they face significant economic constraints that may limit their business performance potential. The cultural environment appears moderately supportive, but with high variability suggesting inconsistent cultural acceptance across different communities and contexts.

Table 4.4: Structural Model Results - Direct Effects

Hypothesis	Path	Path Coefficient	t-statistic	p-value	Decision
H ₁	SF → WSG	-0.017	1.019	0.775	Not Supported
H ₂	EF → WSG	0.146	17.706	0.033	Supported
H ₃	CF → WSG	0.154	15.618	0.025	Supported
	SF → ESE	0.208	5.328	0.000	-
	EF → ESE	0.333	17.706	0.000	-
	CF → ESE	0.258	15.618	0.000	-
	ESE → BP	0.228	4.241	0.001	-

Source: Author's computation, 2025

Based on the structural equation modelling analysis presented in Table above, the study reveals mixed support for the hypothesized direct effects of environmental factors on Women SMEs Growth. The results show a complex pattern where not all proposed relationships demonstrate statistical significance, highlighting the nuanced nature of how different environmental dimensions influence entrepreneurial outcomes.

The first hypothesis (H₁), which proposed that social factors directly influence Women SMEs Growth, was not supported by the data. With a path coefficient of -0.017, a t-statistic of 1.019, and a p-value of 0.775, the relationship between social factors and Women SMEs Growth appears to be statistically insignificant and negative. This finding suggests that social factors may not have a direct impact on Women SMEs Growth, contrary to what was initially hypothesized.

In contrast, both economic factors (H2) and cultural factors (H3) demonstrate significant positive direct effects on Women SMEs Growth. Economic factors show a path coefficient of 0.146 with a t-statistic of 17.706 and a p-value of 0.033, indicating statistical significance at the 0.05 level. Cultural factors exhibit an even stronger relationship with Women SMEs Growth, displaying a path coefficient of 0.154, a t-statistic of 15.618, and a p-value of 0.025. These results suggest that economic conditions and cultural environments play crucial roles in determining business success.

The structural model also reveals important indirect pathways through entrepreneurial self-efficacy (ESE). All three environmental factors demonstrate strong positive relationships with entrepreneurial self-efficacy, which then influences Women SMEs Growth. Social factors show a path coefficient of 0.208 to entrepreneurial self-efficacy ($t = 5.328$, $p < 0.000$), while economic factors demonstrate the strongest relationship with a coefficient of 0.333 ($t = 17.706$, $p < 0.000$). Cultural factors also significantly influence entrepreneurial self-efficacy with a path coefficient of 0.258 ($t = 15.618$, $p < 0.000$). The relationship between entrepreneurial self-efficacy and Women SMEs Growth is substantial, with a path coefficient of 0.228 ($t = 4.241$, $p < 0.001$).

These results suggest that while social factors may not directly impact Women SMEs Growth, they may operate through entrepreneurial self-efficacy as a mediating mechanism. The strong direct effects of economic and cultural factors, combined with their influence on entrepreneurial self-efficacy, indicate multiple pathways through which environmental factors can affect business outcomes. The significance of entrepreneurial self-efficacy as both a mediator and direct predictor of Women SMEs Growth underscores its central role in the entrepreneurial process, serving as a crucial psychological resource that translates environmental conditions into actual business success.

Table 4.5: Structural Model Results - Mediation Effects

Hypothesis	Mediation Path	Indirect Effect	t-statistic	p-value	Decision
H ₄	SF → ESE → BP	0.208	5.328	0.000	Supported
	EF → ESE → BP	0.333	17.706	0.000	Supported
	CF → ESE → BP	0.258	15.618	0.000	Supported

Source: Author's computation, 2025

Note: VAF calculations:

- SF → ESE → BP: VAF = Supported (Significant)
- EF → ESE → BP: VAF = Supported (Significant)
- CF → ESE → BP: VAF = Supported (Significant)

Based on the mediation analysis presented in Table 4.5, the study comprehensively examined whether entrepreneurial self-efficacy (ESE) serves as a mediating mechanism through which environmental factors influence Women SMEs Growth. The results provide unanimous support for all three proposed mediation hypotheses (H₄), demonstrating that entrepreneurial self-efficacy plays a crucial and statistically significant role in transmitting the effects of environmental factors to business outcomes across all three dimensions examined. The mediation pathway from Social Factors to Women SMEs Growth through Entrepreneurial Self-Efficacy (SF → ESE → BP) provides robust empirical support for hypothesis H₄. With an indirect effect coefficient of 0.208, a t-statistic of 5.328, and a highly significant p-value of less than 0.001, this pathway demonstrates that social environmental factors

significantly influence Women SMEs Growth through their impact on entrepreneurial self-efficacy. The Economic Factors mediation pathway (EF → ESE → BP) demonstrates the strongest indirect effect among the three environmental dimensions, providing compelling support for hypothesis H₄. The indirect effect coefficient of 0.333 represents the most substantial mediation effect in the model, accompanied by an exceptionally robust t-statistic of 17.706 and a p-value of 0.000. The Cultural Factors mediation pathway (CF → ESE → BP) provides strong empirical support for hypothesis H₄, with an indirect effect coefficient of 0.258, a t-statistic of 15.618, and a p-value of 0.000. This pathway demonstrates that cultural elements significantly influence Women SMEs Growth through their impact on entrepreneurial self-efficacy.

Test of Hypotheses

Hypothesis 1: Social factors and women SME growth

H₀₁: Social factors have no significant effect on the growth of women SMEs in North-Central Nigeria.

Results: The analysis reveals no significant direct relationship between social factors and Women SMEs Growth ($\beta = -0.017$, $t = 1.019$, $p = 0.775$). The path coefficient indicates that social factors do not have a statistically significant direct effect on Women SMEs Growth.

Decision: The null hypothesis (H₀₁) is not rejected. Social factors have no significant direct effect on the growth of women SMEs in North-Central Nigeria.

Interpretation: This finding suggests that social support systems, including family support, mentorship, community acceptance, and peer networks, do not directly influence Women SMEs Growth in a statistically significant manner. However, social factors may still influence business outcomes through indirect pathways, particularly through entrepreneurial self-efficacy.

Hypothesis 2: Economic factors and women SME growth

H₀₂: Economic factors have no significant effect on the growth of women SMEs in North-Central Nigeria.

Results: Economic factors demonstrate a significant positive relationship with Women SMEs Growth ($\beta = 0.146$, $t = 17.706$, $p = 0.033$). The coefficient indicates that improvements in economic conditions result in enhanced Women SMEs Growth.

Decision: The null hypothesis (H₀₂) is rejected. Economic factors have a significant positive effect on the growth of women SMEs in North-Central Nigeria.

Interpretation: The results confirm that economic factors such as access to finance, market opportunities, infrastructure quality, and favorable regulatory environment are critical determinants of women SME performance. The strong t-statistic (17.706) emphasizes the robust nature of this relationship.

Hypothesis 3: Cultural factors and women SME growth

H₀₃: Cultural factors have no significant effect on the growth of women SMEs in North-Central Nigeria.

Results: Cultural factors show a significant positive relationship with Women SMEs Growth ($\beta = 0.154$, $t = 15.618$, $p = 0.025$). This represents a meaningful direct effect on business outcomes.

Decision: The null hypothesis (H₀₃) is rejected. Cultural factors have a significant positive effect on the growth of women SMEs in North-Central Nigeria.

The significant relationship indicates that supportive cultural environments, reduced gender role restrictions, and cultural acceptance of women's entrepreneurship are important factors in determining business success. This finding highlights the importance of cultural considerations in promoting women's entrepreneurship.

Hypothesis 4: Mediation effect of entrepreneurial self-efficacy (Social factors)

H₀₄: Entrepreneurial self-efficacy does not significantly mediate the relationship between socio-economic and cultural factors and the growth of women SMEs in North-Central Nigeria.

Results: The mediation analysis reveals a significant indirect effect of social factors on Women SMEs Growth through entrepreneurial self-efficacy ($\beta = 0.208$, $t = 4.478$, $p < 0.000$). Given that the direct path from social factors to Women SMEs Growth is not significant ($\beta = -0.017$, $p = 0.775$), this represents complete mediation.

Social factors enhance Women SMEs Growth entirely through entrepreneurial self-efficacy rather than through direct mechanisms. This suggests that social support systems work by building confidence and self-belief, which then translates into improved business outcomes. The complete mediation indicates that social capital's influence on business success is fully channelled through psychological empowerment.

Results: The analysis shows a significant indirect effect of economic factors on Women SMEs Growth through entrepreneurial self-efficacy ($\beta = 0.333$, $t = 7.592$, $p < 0.000$). Combined with the significant direct effect ($\beta = 0.146$, $p = 0.033$), this indicates partial mediation.

Economic factors influence Women SMEs Growth through both direct pathways and indirect pathways via entrepreneurial self-efficacy. This suggests that access to finance, market opportunities, and economic infrastructure not only directly impact business outcomes but also boost confidence levels, creating a dual pathway to success.

Results: Cultural factors show a significant indirect effect on Women SMEs Growth through entrepreneurial self-efficacy ($\beta = 0.258$, $t = 9.478$, $p < 0.000$). Combined with the significant direct effect ($\beta = 0.154$, $p = 0.025$), this indicates partial mediation.

Cultural factors operate through both direct and indirect pathways in influencing Women SMEs Growth. Supportive cultural environments not only directly impact business success but also enhance entrepreneurial self-efficacy, creating multiple pathways for cultural influence on business outcomes. The stronger indirect effect ($\beta = 0.258$) compared to the direct effect ($\beta = 0.154$) suggests that cultural factors primarily work through building entrepreneurial confidence.

Decision: The null hypothesis (H₀₄) is rejected. Entrepreneurial self-efficacy significantly mediates the relationship between socio-economic and cultural factors and the growth of women SMEs in North-Central Nigeria.

DISCUSSION OF FINDINGS

The first major finding revealed that social factors have no significant direct effect on women SME growth in North-Central Nigeria. The analysis demonstrated a non-significant relationship ($\beta = -0.017$, $t = 1.019$, $p = 0.780$) between social support systems and Women SMEs Growth outcomes. This counterintuitive result suggests that while social capital exists within Nigeria's entrepreneurial ecosystem, including family support, mentorship, community acceptance, and peer networks, these factors do not translate directly into measurable Women SMEs Growth improvements. The finding indicates that social support systems in Nigeria may face structural limitations in their ability to directly influence business outcomes, possibly due to their informal nature or inability to address the technical and financial challenges that women SMEs encounter in Nigeria's competitive business environment. The second finding confirmed that economic factors have a significant positive direct effect on women SME growth ($\beta = 0.146$, $t = 17.706$, $p = 0.033$). This result underscores the critical role of economic conditions in Nigeria's challenging business environment for women entrepreneurs. Economic factors such as access to finance, market opportunities, infrastructure quality, and favorable regulatory policies directly influence business operations and performance. The significant relationship reflects the reality that women entrepreneurs in Nigeria face substantial economic constraints, and improvements in economic conditions through better access to finance, improved infrastructure, or enhanced market opportunities directly translate into measurable Women SMEs Growth improvements.

The third finding established that cultural factors have a significant positive direct effect on women SME growth ($\beta = 0.154$, $t = 15.618$, $p = 0.026$). This result highlights the powerful role of cultural environment in Nigeria's diverse and tradition-rich society, where cultural norms and traditional gender roles significantly influence women's participation in economic activities. Supportive cultural environments, including cultural acceptance of women's entrepreneurship, reduced gender role restrictions, and supportive community attitudes, create immediate and tangible improvements in business conditions for women entrepreneurs. The finding indicates that positive cultural changes directly translate into better market access, increased customer acceptance, reduced social resistance, and enhanced legitimacy for women-owned businesses.

The fourth finding revealed that entrepreneurial self-efficacy completely mediates the relationship between social factors and women SME growth ($\beta = 0.208$, $t = 4.478$, $p < 0.001$), significantly mediates the relationship between economic factors and women SME performance ($\beta = 0.333$, $t = 7.592$, $p < 0.001$), representing partial mediation, and significantly mediates the relationship between cultural factors and women SME growth ($\beta = 0.258$, $t = 9.478$, $p < 0.001$), indicating partial mediation. This suggests that entrepreneurial self-efficacy serves as a crucial psychological mechanism through which external environmental factors influence women's SME outcomes. Social factors appear to work entirely through building women's confidence in their entrepreneurial abilities, while economic and cultural factors have both direct effects and indirect effects mediated by self-efficacy. The findings highlight that enhancing women entrepreneurs' belief in their capabilities is a key pathway for translating favorable social, economic, and cultural conditions into actual business growth.

CONCLUSION AND RECOMMENDATIONS

The comprehensive analysis of women's entrepreneurship in North-Central Nigeria reveals a complex interplay of environmental factors that influence Women SMEs Growth through both direct and indirect pathways. The study demonstrates that while economic and cultural factors directly impact business success, social factors operate exclusively through entrepreneurial self-efficacy, highlighting the central role of psychological empowerment in translating environmental support into tangible business outcomes. The findings collectively indicate that entrepreneurial self-efficacy serves as a critical mediating mechanism that transforms environmental conditions into entrepreneurial success, with the model explaining 67.3% of variance in Women SMEs Growth. These results align with the Social Cognitive Theory (SCT), which posits that human behavior results from the dynamic interaction between personal factors (self-efficacy beliefs), behavioral patterns (entrepreneurial actions), and environmental influences (social, economic, and cultural factors).

Specifically, the study concludes that social factors in Nigeria's context primarily function as confidence-building mechanisms rather than direct business facilitators, requiring complete mediation through entrepreneurial self-efficacy to influence performance. Economic factors emerge as the most critical environmental determinant, operating through both direct resource provision and psychological empowerment pathways, with access to finance and market opportunities serving dual roles as operational support and confidence validators. Cultural factors demonstrate significant direct and indirect effects, indicating that supportive cultural environments simultaneously remove structural barriers and build entrepreneurial legitimacy and self-belief. The mediation analyses reveal entrepreneurial self-efficacy as the strongest predictor of Women SMEs Growth, emphasizing that women's confidence in their entrepreneurial capabilities is fundamental to achieving business success regardless of environmental conditions. The complete mediation of social factors suggests that social capital in Nigeria requires psychological activation to become effective, while the partial mediation of economic and cultural factors indicates multiple pathways through which these environmental dimensions influence entrepreneurial outcomes. The study establishes that environmental factors alone are insufficient for entrepreneurial success; rather, they must be processed through the psychological mechanism of entrepreneurial self-efficacy to translate into meaningful Women SMEs Growth improvements.

Based on the findings of this study, the following recommendations are proposed:

- i. Government agencies, non-governmental organizations, and entrepreneurship support institutions should redesign social support programs to focus on building entrepreneurial self-efficacy rather than merely providing networking opportunities, given that social factors only influence Women SMEs Growth through confidence-building mechanisms.
- ii. Financial institutions, development agencies, and policymakers should prioritize improving access to finance, market opportunities, and economic infrastructure for women entrepreneurs, as economic factors demonstrate both direct and strong indirect effects on Women SMEs Growth through enhanced entrepreneurial confidence.
- iii. Community leaders, cultural institutions, and advocacy groups should promote cultural acceptance of women's entrepreneurship and work to reduce gender role restrictions, as

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supportive cultural environments directly improve Women SMEs Growth while simultaneously building entrepreneurial legitimacy and confidence.

- iv. Entrepreneurship development programs should adopt a holistic approach that integrates comprehensive self-efficacy training, mentoring systems, and confidence-building interventions alongside financial literacy and resource provision components.

REFERENCES

- Abdulkareem, S., Balogun, O. S., Ganiyu, L., Oni, B. O., & Ademola, T. O. (2025). Impact of business environment and insecurity on small scale enterprises' performance among women in Kaduna State Nigeria. *Ethiopian Journal of Environmental Studies & Management*, 18(1), 1-14.
- Ademiluyi, L. F., & Nuhu, S. I. (2024). Influence of socio-cultural factors on purdah women venture creation in Nigeria. *KWASU International Journal of Education (KIJE)*, 7(2), 45-56.
- Adeola, A. N., Gambiyo, S. P., Alhaji, S. S., & Baraya, N. B. (2024). Examining the socio-cultural factors influencing female-owned enterprises in Yola North of Adamawa State. *POLAC Management Review*, 4(2), 2814-0842.
- Audu, A. A., & Onwana, M. B. (2024). Socio-demographic variables and the performance of women-owned. *International Journals of Economic and Business Management*, 12(1), 1-14.
- Azaka, L. (2024). Gender, tax knowledge, and compliance among self-employed workers in Lagos, Nigeria. *African Journal of Social and Behavioural Sciences*, 14(8), 102-113.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(2), 2-24.
- Hussin, N. S. N., & Aziz, Z. A. (2021). Socioeconomic development on poverty alleviation of women entrepreneurship. *International Journal of Professional Business Review*, 6(1), 3-11.
- Kadiri, K. I., Alasan, A. I., Sufian, J. B., Ayeni, A. A. W., & Akinde, O. A. (2024). Nexus between entrepreneurship grants on business startup and activities of youths in North Central Nigeria. *UMM Journal of Accounting and Financial Management*, 4(1), 22-36.
- Lubabatu, B. C., Abubakar, S. U., & Haruna, D. H. (2024). Effect of micro-credit on micro business development among women entrepreneurs. *African Journal of Management and Business Research*, 16(1), 100-113.
- Lukman, F., & Ibrahim, Z. L. (2024). Validation of developed instruments on happiness, culture, socio-economic status and religious coping on Muslim women students in northern Nigeria. *Review of African Educational Studies (RAES)*, 3(1), 20-31.
- McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: Refining the measure. *Entrepreneurship Theory and Practice*, 33(4), 965-988.
- National Bureau of Statistics. (2021). *Micro, small and medium enterprises (MSME) national survey 2021*. NBS Press.
- Small and Medium Enterprises Development Agency of Nigeria. (2020). *National survey of micro, small, and medium enterprises (MSMEs)*. SMEDAN.
- Subedi, D. P., & Gautam, P. K. (2024). Entrepreneurial success factors of small and medium size women enterprises in Kathmandu. *The Spectrum*, 2(1), 67-89.

-
- Tondro, M., Jahanbakth, M., & Ozay, D. (2025). Exploring the role of information technology and digital innovation in socio-economic development: A case study of women's startup home-based businesses. *IEEE Access*.
- Uduji, J. I., Okolo-Obasi, N. E., & Uduji, J. U. (2025). Promoting gender equality and women's empowerment in aquaculture value chain: The role of corporate social responsibility in Nigeria's Niger Delta. *Journal of Economic and Administrative Sciences*. Advance online publication.
- Uduji, J. I., Okolo-Obasi, N. V. E., Uduji, J. U., Emengini, E. S., Odoh, L. C., & Iyadi, R. C. (2025). Capacity development for small-scale women entrepreneurs and corporate social responsibility in Nigeria's Niger Delta region. *Social Responsibility Journal*, 21(3), 615-639.
- Yamane, T. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper and Row.