

EFFECT OF SELF-EFFICACY ON ENTREPRENEURIAL SUCCESS OF REGISTERED SMES IN KADUNA STATE

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Abstract

This study investigates the effect of self-efficacy on the entrepreneurial success of registered Small and Medium Enterprises (SMEs) in Kaduna State, Nigeria. Specifically, it examines the influence of three core dimensions of self-efficacy mastery experience, vicarious experience, and social persuasion on business success indicators such as innovation, growth, and sustainability. The research adopts a quantitative survey design, using a structured questionnaire administered to a sample of 384 registered SME owners. Data were analyzed using descriptive statistics, correlation analysis, and multiple regression techniques. Findings revealed that all three dimensions of self-efficacy significantly and positively influenced entrepreneurial success, with mastery experience having the strongest impact. The results also validated the relevance of Bandura's Social Cognitive Theory and Ajzen's Theory of Planned Behavior within the Nigerian SME context. The study concludes that psychological capital, particularly self-efficacy, plays a critical role in entrepreneurial performance. It recommends targeted policies and training programs that strengthen experiential learning, mentoring, and encouragement mechanisms among entrepreneurs in Kaduna State. These findings provide valuable insights for entrepreneurship development policies in emerging economies.

Keywords: Self-efficacy, entrepreneurial success, SMEs, Kaduna State, mastery experience, vicarious learning, social persuasion, psychological capital.

1.1 Introduction

Self-efficacy, defined by Bandura (1997) as an individual's belief in their ability to execute actions required for specific performance outcomes, plays a pivotal role in entrepreneurial behavior and success (Bandura, 2010). Numerous and recent Nigerian studies highlight its significance: for example, Eniola and Dada (2020) established a link between entrepreneurial self-efficacy, institutional environment, and SME orientation in Nigeria. In Southwest Nigeria, Akeem et al. (2023) found that vicarious experiences and social persuasion meaningfully enhanced entrepreneurial intentions among graduates. In Plateau State, self-efficacy was shown to positively impact SME growth through entrepreneurial passion (Ibanga & Ogidi, 2023).

Specifically in Kaduna and North-West Nigeria, research by Abubakar (2022) demonstrated that dimensions of entrepreneurial self-efficacy namely risk-taking, financial control, and management significantly influenced SME performance, whereas marketing and innovation

dimensions had less effect. Meanwhile, Andow et al. (2025) examined entrepreneurial spirit in Kaduna and found self-efficacy to be a key correlate of job creation.

Despite these findings, gaps remain. While self-efficacy is widely acknowledged at a national level, its specific mechanisms mastery experience, vicarious experience, and social persuasion within the context of registered SMEs in Kaduna State are underexplored. Moreover, limited attention has been paid to how self-efficacy directly affects entrepreneurial success, defined through profitability, market share, growth, and innovation, in this locale (Oyeku et al., 2020; Eniola & Dada, 2020).

Given Kaduna State's strategic economic importance and growing SME sector, this study aims to examine the effect of self-efficacy on SME entrepreneurial success through a Bandura-informed lens: focusing on mastery experiences (direct successful entrepreneurial tasks), vicarious experiences (seeing similar others succeed), and social persuasion (encouragement from stakeholders). The anticipated outcomes will contribute empirically and practically to Nigerian entrepreneurship literature.

Statement of the Problem

While entrepreneurial self-efficacy has been shown to be a determinant of SME performance nationally (Abubakar, 2022; Andow et al., 2025), there is a lack of empirical research focusing on its specific effect on registered SMEs in Kaduna State. Abubakar's (2022) study, for example, identified which ESE dimensions matter but did not explore how individual self-efficacy sources mastery, vicarious experience, and social persuasion influence success outcomes. This is an empirical gap: the absence of localized, granular quantitative data linking self-efficacy sources to success metrics like profitability, growth, and innovation.

SMEs in Kaduna still struggle with entrepreneurial mindset and ecosystem limitations. Although Andow et al. (2025) found a positive association between self-efficacy and job creation, scant guidance currently exists on designing interventions that leverage specific self-efficacy pathways. This leaves practitioners unsure of where to direct training, mentorship, or policy resources. While Bandura's Social Cognitive Theory (1997) posits four self-efficacy sources (mastery, vicarious, social persuasion, physiological states), Nigerian SME studies have mostly treated self-efficacy as a unitary construct (Oyeku et al., 2020; Ibanga & Ogidi, 2023). This ignores nuanced dynamics: for example, does mastery-based efficacy outperform social persuasion? Do vicarious experiences from local role models matter more? Theoretical frameworks in SME literature fail to integrate these sources distinctly, creating a theoretical gap.

Thus, this study seeks to fill these gaps empirically (specific data on self-efficacy sources), practically (guiding targeted interventions), and theoretically (applying Bandura's multi-source construct to SMEs in Kaduna).

Research Questions

- i. To what extent does mastery experience-based self-efficacy influence entrepreneurial success among registered SMEs in Kaduna State?
- ii. What is the effect of vicarious experience-based self-efficacy on entrepreneurial success among these SMEs?
- iii. How does social persuasion-based self-efficacy relate to entrepreneurial success among registered SMEs in Kaduna State?

Objectives of the Study

The main objective of the study is to investigate the effect of self-efficacy on entrepreneurial success among registered SMEs in Kaduna State.

The specific objectives are:

- i. To assess the influence of mastery experience-based self-efficacy on SME entrepreneurial success.
- ii. To determine the effect of vicarious experience-based self-efficacy on SME entrepreneurial success.
- iii. To examine the impact of social persuasion-based self-efficacy on SME entrepreneurial success.

Research Hypotheses

H₀₁: Mastery experience-based self-efficacy has no significant effect on entrepreneurial success of registered SMEs in Kaduna State.

H₀₂: Vicarious experience-based self-efficacy has no significant effect on entrepreneurial success of registered SMEs in Kaduna State.

H₀₃: Social persuasion-based self-efficacy has no significant effect on entrepreneurial success of registered SMEs in Kaduna State.

2.1 Literature Review and Conceptual Framework

This section presents scholarly definitions and perspectives on entrepreneurial success and self-efficacy from both Nigerian and international researchers and theorists.

Entrepreneurial Success

Entrepreneurial success refers to the attainment of goals and outcomes set by entrepreneurs, often measured in terms of profitability, growth, innovation, and sustainability. Scholars have defined the term using a range of performance indicators. According to Urban and Kujinga (2020), entrepreneurial success involves the ability of business owners to grow their firms through effective decision-making, innovation, and customer satisfaction. They argue that financial indicators like profit margins and turnover are essential but should be assessed alongside strategic and psychological achievements.

In the Nigerian context, Oyeku et al. (2020) described entrepreneurial success as a combination of enterprise profitability, market expansion, and the entrepreneur's self-fulfillment in achieving business vision. Their study on SMEs in Nigeria found that many owners associated success with resilience, customer loyalty, and employee retention in addition to profit. Neneh (2022), in a South African study, emphasized that entrepreneurial success is subjective and can be either opportunity-driven (seizing market gaps) or necessity-driven (economic survival). They stress that success includes personal satisfaction, autonomy, and contribution to community development.

Similarly, Adebayo and Akeem (2023) suggested that in developing countries, entrepreneurial success is often measured by the ability to remain in business beyond the first three years, access funding, and survive unstable policy environments. In their Kaduna-based research, they found that factors like family support, self-efficacy, and learning orientation were more significant predictors of success than capital alone.

In a study across Southeast Asia, Nguyen and Duong (2021) added that customer-centric innovation and brand differentiation are core markers of entrepreneurial success. They argue that digital transformation also plays a growing role in entrepreneurial success in modern business ecosystems. Furthermore, Ismail and Othman (2019) noted that entrepreneurial success includes both tangible (income growth, expansion) and intangible (reputation, satisfaction) dimensions, and that social recognition is increasingly important in modern economies. Across literature, entrepreneurial success is thus seen as a multidimensional construct involving financial results, innovation, business longevity, personal development, and societal contribution. For this study, entrepreneurial success is operationalized through indicators like firm growth, market share, profitability, and sustainability of registered SMEs in Kaduna State.

Self-Efficacy

Self-efficacy refers to an individual's belief in their capability to execute behaviors necessary to produce specific outcomes (Bandura, 1997). It is foundational to human agency and motivation. Bandura (2010) further explains that self-efficacy influences how people think, feel, and act in challenging circumstances. In Nigeria, Abubakar (2022) defined entrepreneurial self-efficacy (ESE) as an entrepreneur's belief in their competence to perform tasks required to start and manage a business. His study on SMEs in North-West Nigeria found that self-efficacy was a major determinant of SME performance, influencing strategic decision-making and innovation.

Dada and Eniola (2020) described self-efficacy as a psychological capital resource that enhances risk-taking, creativity, and resilience in uncertain environments. Their study revealed that SMEs with high self-efficacy among owners were more adaptive during policy and economic changes in Nigeria. Luthans et al. (2021), in an international perspective, argued that self-efficacy is part of core psychological capital, which also includes hope, optimism, and resilience. They noted that individuals with high self-efficacy are more likely to persist in adversity, take initiative, and explore innovative solutions.

Similarly, Urban and Naidoo (2020), in a South African context, highlighted that self-efficacy fosters proactive entrepreneurial behavior such as opportunity recognition and innovative product development. They emphasized that mastery experiences (past successes), vicarious experiences (seeing others succeed), and social persuasion (encouragement) are essential in building self-efficacy. Nguyen et al. (2022), in Vietnam, noted that entrepreneurial self-efficacy significantly predicts start-up intention and business performance, especially among youth. Their study emphasized that entrepreneurial education and mentorship enhance self-efficacy and, consequently, business outcomes.

Furthermore, Akeem et al. (2023) affirmed that self-efficacy contributes to an entrepreneur's capacity to overcome resource constraints and policy instability, especially in Nigeria's informal sector. Their findings stress the role of mentorship and peer influence (vicarious experiences) in developing self-efficacy. Across literature, self-efficacy is recognized as a predictor of behavior, success, and persistence. For the purpose of this study, self-efficacy is understood as the perceived capability of entrepreneurs in Kaduna State to successfully navigate entrepreneurial tasks and challenges rooted in mastery experiences, vicarious learning, and social persuasion.

Theoretical Framework

This section presents theories that provide conceptual and empirical support for understanding how self-efficacy influences entrepreneurial success in SMEs.

Social Cognitive Theory (Albert Bandura, 1986)

Social Cognitive Theory (SCT), developed by Albert Bandura in 1986, is a foundational framework for understanding self-efficacy and behavior. SCT emphasizes that human functioning results from the interplay of behavioral, cognitive, and environmental influences, with self-efficacy at the core of human agency (Bandura, 1997). Self-efficacy, within this theory, refers to people's judgments of their capabilities to execute actions required to achieve specific performances. The theory outlines four primary sources of self-efficacy: mastery experiences (previous successes), vicarious experiences (observing others), social persuasion (verbal encouragement), and physiological/emotional states. Bandura (2010) emphasized that self-efficacy beliefs influence the choices individuals make, the effort they invest, how long they persist, and how resilient they are in the face of failure.

Recent studies have widely applied SCT in entrepreneurship. For example, Abubakar (2022) applied SCT to investigate entrepreneurial outcomes in North-West Nigeria, finding that mastery and vicarious experiences significantly boosted SME owners' risk-taking behaviors and opportunity recognition. Similarly, Dada and Eniola (2020) used SCT to link self-efficacy with entrepreneurial intention and adaptability among Nigerian entrepreneurs during economic shocks. Akeem et al. (2023) demonstrated that SCT is effective in explaining how entrepreneurs in Ogun State developed success behaviors through mentoring (vicarious learning) and feedback (social persuasion). In international contexts, Nguyen and Duong (2021) confirmed that entrepreneurial self-efficacy grounded in Bandura's SCT predicts innovation and sustainability among Vietnamese SMEs.

The strength of SCT lies in its applicability to both individual behavior and wider business contexts. It has been particularly instrumental in developing entrepreneurship training and mentoring programs that focus on experiential learning and positive role models (Urban & Naidoo, 2020). In the Kaduna context, the theory helps explain how local entrepreneurs internalize past successes or failures, learn from peers, and gain encouragement from family, government programs, or professional networks to persevere in business. Social Cognitive Theory offers a strong explanatory foundation for how self-efficacy affects entrepreneurial success. Its principles align directly with this study's focus on mastery, vicarious experience, and social persuasion as drivers of SME performance in Kaduna State.

Theory of Planned Behavior (Ajzen, 1991)

The Theory of Planned Behavior (TPB), developed by Icek Ajzen in 1991, posits that individual behavior is guided by three major factors: attitude toward the behavior, subjective norms, and perceived behavioral control (PBC). Of these, PBC is conceptually close to self-efficacy and reflects the perceived ease or difficulty of performing a behavior (Ajzen, 2002). In entrepreneurial research, TPB has been widely used to explain why individuals engage in entrepreneurial activities. Ajzen (2011) argued that the stronger the intention and perceived control over a task, the more likely it is that an individual will successfully carry out that task making the model highly relevant to entrepreneurial success.

Scholars have adapted TPB to SME studies. For instance, Oyeku et al. (2020) linked perceived behavioral control (PBC) with business startup and growth among Nigerian SME owners. Their findings suggest that entrepreneurs with high self-efficacy and positive attitudes toward innovation are more likely to achieve success. Nguyen et al. (2022) expanded the TPB framework to include entrepreneurial training as a modifier of perceived control, showing that business education enhances entrepreneurs' confidence and capacity to act. In the South African context, Neneh (2021) used TPB to explore how perceived control and social support

influence start-up intentions among youth, finding that belief in one's capabilities (akin to self-efficacy) had a direct relationship with entrepreneurial action.

Similarly, Andow et al. (2025) employed TPB to assess the entrepreneurial motivation of registered SMEs in Kaduna State. Their results showed that subjective norms (peer influence and family expectations) and perceived control were significant predictors of entrepreneurial perseverance and business performance. In practical terms, TPB has been influential in shaping entrepreneurship development policies. It supports interventions that improve entrepreneurs' control over internal (skills, knowledge) and external (resources, support) factors. For Kaduna SMEs, TPB helps explain how perceived capability closely related to self-efficacy drives business outcomes. The Theory of Planned Behavior provides valuable insight into how intention and perceived behavioral control (a proxy for self-efficacy) translate into entrepreneurial action. Its inclusion in this study enriches the understanding of how psychological factors influence the success of registered SMEs in Kaduna State.

Empirical Review

This section presents empirical studies on self-efficacy and entrepreneurial success across six global regions to provide comparative analytical insights.

Abubakar (2022) conducted a quantitative study on the influence of entrepreneurial self-efficacy on SME performance in North-West Nigeria, focusing on Kaduna and Kano States. Using a structured questionnaire distributed to 386 registered SME owners, the study applied regression analysis to assess the relationship between self-efficacy components risk-taking, innovation, and resilience and business success indicators like growth and profitability. The findings revealed that mastery experience significantly influenced performance, while vicarious experiences and social persuasion had moderate effects. The study concluded that self-efficacy improves business decision-making, resource management, and strategic planning. It recommended that government agencies should provide mentorship programs that enhance entrepreneurial self-efficacy, particularly in resource-limited areas. One notable limitation was the exclusion of unregistered enterprises, which could have offered broader insights. Abubakar's work aligns with Bandura's Social Cognitive Theory and confirms its relevance in developing economies. The study offers a robust empirical foundation for understanding how psychological capital particularly self-efficacy drives entrepreneurial success within Nigeria's SME ecosystem, especially under unpredictable business environments in Kaduna State.

Agyeman and Amponsah (2021) examined the role of entrepreneurial self-efficacy on startup success among youth entrepreneurs in Accra, Ghana. The researchers adopted a cross-sectional survey design involving 250 participants across innovation hubs and incubator programs. Using structural equation modeling (SEM), they evaluated the mediating role of self-efficacy between entrepreneurial intention and performance. Findings indicated that mastery experiences and social persuasion positively predicted venture resilience and early-stage profitability. However, physiological states, such as stress and anxiety, negatively affected perceived success. The study concluded that youth entrepreneurs with high self-efficacy are more confident in overcoming resource and knowledge constraints. The authors emphasized the need for entrepreneurship education policies to integrate self-belief reinforcement strategies. This study aligns with Bandura's (1997) theoretical framework and underscores the importance of context-specific self-efficacy models in Sub-Saharan Africa. Agyeman and Amponsah's work contributes to Ghanaian literature by empirically validating that boosting self-efficacy through mentoring and practical exposure—can significantly enhance

entrepreneurial success, especially among early-stage entrepreneurs facing limited institutional support.

Castillo and Ramirez (2020) conducted a longitudinal study in Colombia to examine the impact of entrepreneurial self-efficacy on the growth trajectory of small-scale enterprises. Over 18 months, 120 entrepreneurs from Bogotá and Medellín were tracked using biannual surveys and in-depth interviews. The study revealed that entrepreneurs with higher self-efficacy levels particularly those with strong mastery experiences reported consistent revenue increases, better staff retention, and strategic adaptation to market shifts. Vicarious experiences, such as learning from peer successes, also improved innovation and diversification efforts. Their findings supported the notion that self-efficacy directly correlates with long-term sustainability and reduced failure rates. The researchers emphasized that business support systems must integrate psychosocial components to improve entrepreneurs' confidence and resilience. They concluded that entrepreneurial programs in Latin America should not only focus on funding but also on psychological capital. This study significantly adds to the South American literature by linking psychological readiness to business performance and validates the universal applicability of Bandura's Social Cognitive Theory in developing economies.

Müller and Weiss (2021) conducted a multi-country study across Germany, Austria, and Switzerland to assess how entrepreneurial self-efficacy influences SMEs' digital innovation success. Using a dataset of 412 SME owners across the DACH region, the study employed multivariate regression and latent growth modeling to determine how self-efficacy components affect digital adoption and market competitiveness. Results showed that entrepreneurs with high mastery experiences were significantly more likely to implement successful digital solutions, especially in marketing and customer relationship management. Vicarious learning from international role models also enhanced strategic planning capabilities. The study concluded that self-efficacy is a crucial psychological resource in Europe's increasingly digitized entrepreneurial environment. It recommended policy-driven support programs that offer success stories and peer networking opportunities to boost entrepreneurial confidence. Müller and Weiss's research contributes to the European literature by linking self-efficacy to innovation performance and digital adaptability. Their work affirms the relevance of psychological models in entrepreneurial ecosystems, particularly in times of rapid technological change and global competition.

Thompson and Rivera (2023) explored the role of entrepreneurial self-efficacy in predicting business resilience and success among Hispanic-owned SMEs in Texas and California, USA. Using a mixed-methods design, they surveyed 280 entrepreneurs and conducted 20 interviews. The findings revealed that mastery experiences and social persuasion from community mentors were significant predictors of operational continuity during COVID-19 disruptions. Self-efficacy was found to influence decision-making speed, innovation, and employee motivation. Entrepreneurs with higher self-efficacy were more likely to pivot their business models and access relief funding. The researchers concluded that self-efficacy was not only a predictor of success but also a buffer against crisis impacts. Their study contributes to North American SME literature by integrating cultural perspectives into the analysis of entrepreneurial psychology. They recommended culturally tailored training programs to foster confidence among minority business owners. This research aligns with the Theory of Planned Behavior and underscores that perceived behavioral control rooted in self-efficacy can shape sustainable business outcomes even in volatile socioeconomic conditions.

Chen and Liao (2019) conducted a study in Taiwan to evaluate how entrepreneurial self-efficacy influences innovation and success among tech-based SMEs. Using a sample of 310

entrepreneurs from Taipei's innovation clusters, the researchers adopted a quantitative design involving self-report questionnaires and confirmatory factor analysis. Results indicated that mastery experiences significantly influenced R&D investment and product innovation. Vicarious experiences, especially learning from industry leaders and competitors, had a strong impact on market adaptability. Social persuasion, through government-sponsored incubators and peer networks, also contributed to higher confidence and risk-taking behavior. The authors concluded that entrepreneurial self-efficacy is central to innovation-led success in Asia's dynamic tech ecosystem. They recommended that entrepreneurial policies include not only technical support but also psychological development strategies. Chen and Liao's study contributes to Asian literature by emphasizing the critical role of confidence-building mechanisms in SME success, especially in high-risk, innovation-driven sectors. Their work validates the cross-cultural relevance of Bandura's self-efficacy model in promoting entrepreneurship and performance outcomes in Asian economies.

3.1 Methodology

This study adopted a quantitative survey research design, which is appropriate for gathering measurable data on variables such as self-efficacy and entrepreneurial success. The design enables the researcher to assess the relationship between constructs using statistical techniques. According to Creswell (2014), survey research is suitable for studies involving a large population and examining attitudes, behaviors, or opinions. This design was chosen to collect responses from registered SME owners in Kaduna State regarding their self-efficacy experiences and business performance indicators. It allows generalization and statistical inference across a broader population.

Population of the Study

The population of this study comprises all registered Small and Medium Enterprises (SMEs) operating in Kaduna State, as listed in the database of the Corporate Affairs Commission (CAC) and the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) as of 2024. Based on recent reports by SMEDAN and NBS (2023), Kaduna State has approximately 9,800 registered SMEs across various sectors, including manufacturing, trade, services, and agriculture. These businesses are concentrated in urban and semi-urban centers like Kaduna North, Kaduna South, Zaria, and Kafanchan. The study focuses exclusively on formally registered SMEs, ensuring accessibility to documented performance data and legal compliance. SME owners or top-level managers who are responsible for strategic decisions formed the units of analysis. This defined population enhances the accuracy and relevance of findings within a regulatory context.

Sample Size

The sample size for this study was determined using Yamane's formula (1967) for known population sizes:

$$n = \frac{N}{1 + N(e)^2}$$

Where:

n = sample size

N = population size = 9,800

e = margin of error = 0.05

$$n = \frac{9800}{1 + 9800(0.05)^2}$$

$$n=9800/1+9800(0.0025)$$

$$n=9800/1+24.5$$

$$n=9800/+25.5$$

$$n=384.31$$

$$n=384.$$

Thus, a sample size of 384 respondents was selected from the total population of 9,800 registered SMEs.

Method of Data Collection

Data for this study were collected through the administration of a structured questionnaire designed based on validated scales from previous empirical studies on self-efficacy and entrepreneurial success (Bandura, 2010; Oyeku et al., 2020). The questionnaire was divided into three sections: demographic information, self-efficacy constructs (mastery experience, vicarious experience, and social persuasion), and entrepreneurial success indicators. A 5-point Likert scale ranging from “Strongly Disagree” to “Strongly Agree” was used for attitudinal items. Respondents were contacted through physical distribution and email, depending on accessibility. Data collection was conducted over a period of four weeks, ensuring adequate follow-up for response completeness. Ethical procedures, including informed consent and voluntary participation, were strictly observed. Field assistants aided in reaching SME clusters in semi-urban areas.

Method of Data Analysis

The data collected were analyzed using Statistical Package for Social Sciences (SPSS) version 25). Descriptive statistics such as frequencies, means, and percentages were used to summarize demographic data. To test the research hypotheses, multiple regression analysis was employed to assess the influence of self-efficacy dimensions mastery experiences, vicarious experiences, and social persuasion on entrepreneurial success. According to Pallant (2020), multiple regression is ideal for determining the strength and direction of relationships among multiple independent variables and a dependent variable. The level of significance was set at 0.05. Inferential results were presented using tables and interpreted in line with the theoretical framework.

4.1 Data Presentation and Analysis

This section presents the processed results of the data collected through questionnaires, using descriptive and inferential statistics to examine the formulated research hypotheses. The analysis uses SPSS version 26 to evaluate relationships between self-efficacy constructs and entrepreneurial success, using regression, correlation, and descriptive statistics.

Demographic Information

Table 4.1: Respondents' Demographic Information

Variable	Category
Gender	Male: 60%, Female: 40%
Age	20–30: 25%, 31–40: 45%, 41+: 30%
Education Level	Secondary: 15%, Tertiary: 70%, Others: 15%
Years in Business	1–3 years: 35%, 4–6 years: 40%, 7+ years: 25%

Source: Field Survey, 2025

Table 4.1 reveals key demographic characteristics of the 384 respondents. In terms of gender, 60% were male while 40% were female, indicating male dominance in SME ownership within Kaduna State. Regarding age distribution, the majority (45%) fell within the 31–40 years range, suggesting a concentration of economically active and experienced individuals. About 25% were aged 20–30, while 30% were over 40 years old, representing a balance across different age groups. On education, 70% had tertiary-level education, 15% completed secondary school, and another 15% had vocational or informal education. This shows a high literacy level among SME owners, aligning with previous research that education enhances business decision-making and innovation. Concerning business experience, 40% of respondents had 4–6 years in business, 35% had 1–3 years, and 25% had over 7 years. This indicates a broad representation across startup, growth, and maturity stages of SME lifecycle. These demographic insights are crucial as they provide context to how experience, education, and age might influence self-efficacy and entrepreneurial success across the surveyed SMEs.

Descriptive Statistics

Table 4.2: Descriptive Statistics of Variables

Variable	Min	Max	Mean	Std Dev	Skewness	Kurtosis
Mastery Experience	2.1	4.8	3.6	0.65	-0.32	0.51
Vicarious Experience	1.9	4.6	3.3	0.72	-0.25	0.38
Social Persuasion	2.5	4.9	3.8	0.58	0.12	0.22
Entrepreneurial Success	3.0	5.0	4.1	0.61	-0.40	0.63

Source: Field Survey, 2025

Table 4.2 presents the descriptive statistics of the main study variables. The mean score for Mastery Experience was 3.6, with a standard deviation of 0.65, indicating moderate to high perceived mastery among respondents. The minimum and maximum values range from 2.1 to 4.8, showing relatively wide variability. Its skewness of -0.32 and kurtosis of 0.51 suggest a slightly left-tailed but normal distribution. Vicarious Experience had a mean of 3.3 and a standard deviation of 0.72, the highest variability among the self-efficacy constructs. The skewness of -0.25 indicates a slightly negatively skewed distribution, while kurtosis of 0.38 shows the responses are moderately peaked. Social Persuasion showed a higher average of 3.8, indicating strong influence from external encouragement or validation (mentors, peers, etc.). The skewness (0.12) indicates a near-symmetric distribution and kurtosis (0.22) shows normality, confirming reliability in perception across respondents. Entrepreneurial Success recorded the highest mean of 4.1, with a standard deviation of 0.61. This implies that the respondents generally consider themselves successful across indicators such as growth, market share, and innovation. Skewness (-0.40) implies a modest left-skew, meaning more respondents rated high on success, while kurtosis (0.63) confirms a slightly peaked distribution. Therefore, all variables showed acceptable skewness (± 1) and kurtosis (< 1), implying near-normal distribution appropriate for regression analysis. These findings suggest that respondents generally have favorable levels of self-efficacy and perceive themselves as successful entrepreneurs, which supports the conceptual link between these two constructs.

Correlation Matrix

Table 4.3: Correlation Matrix

	Mastery	Vicarious	Social	Success
Mastery	1.00	0.52	0.46	0.59
Vicarious	0.52	1.00	0.39	0.47
Social Persuasion	0.46	0.39	1.00	0.53
Entrepreneurial Success	0.59	0.47	0.53	1.00

Source: Field Survey, 2025

Table 4.3 presents the Pearson correlation coefficients between the independent variables (self-efficacy constructs) and the dependent variable (entrepreneurial success). All variables are positively and significantly correlated at the 0.01 level, indicating strong linear relationships. Mastery Experience has the highest correlation with Entrepreneurial Success ($r = 0.59$), suggesting that past success in business activities strongly contributes to perceived business achievement. This aligns with Bandura's (1997) assertion that mastery experience is the most robust source of self-efficacy. Social Persuasion is the second most correlated variable with entrepreneurial success ($r = 0.53$), implying that support and encouragement from peers, mentors, or institutions enhance confidence and performance. This supports findings from Urban and Naidoo (2020), who linked peer validation to enhanced entrepreneurial innovation. Vicarious Experience has a moderate but significant relationship ($r = 0.47$) with success, indicating that observing peers and role models succeed also positively influences performance, though not as strongly as personal mastery.

Inter-variable correlations also show strong internal relationships. For example, Mastery Experience and Vicarious Experience are correlated at $r = 0.52$, implying that entrepreneurs who perform well often also learn from others. All correlation coefficients are below 0.80, indicating absence of multicollinearity satisfying a key assumption for multiple regression. These results confirm that each component of self-efficacy contributes independently to entrepreneurial success, and collectively, they form a robust psychological foundation for sustained SME growth in Kaduna State.

Model Summary

Table 4.4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.677	0.458	0.451	0.472

Source: Field Survey, 2025

Table 4.4 shows the model summary of the multiple regression analysis assessing the relationship between self-efficacy dimensions and entrepreneurial success. The R value (0.677) indicates a strong positive correlation between the predictor variables (mastery experience, vicarious experience, and social persuasion) and the outcome variable (entrepreneurial success). The R Square (0.458) reveals that approximately 45.8% of the variance in entrepreneurial success is explained by the combined effect of the three self-efficacy dimensions. The Adjusted R Square (0.451) provides a slightly adjusted value that accounts for the number of predictors, still showing a strong explanatory power. The standard error of estimate (0.472) indicates the average distance between the actual and predicted values of

entrepreneurial success. The model fit demonstrates a substantial degree of predictive relevance, validating the conceptual framework built on Social Cognitive Theory. These findings justify the inclusion of psychological components such as self-efficacy in explaining business outcomes among SMEs in Kaduna State.

Coefficient Analysis

Table 4.5: Coefficients of Regression

Model	B	Std. Error	Beta	t	Sig.
(Constant)	1.210	0.315	—	3.84	0.000
Mastery Experience	0.320	0.091	0.351	3.52	0.001
Vicarious Experience	0.265	0.082	0.284	3.23	0.002
Social Persuasion	0.289	0.088	0.300	3.28	0.001

Source: Field Survey, 2025

Table 4.5 presents the coefficient values from the multiple regression analysis. The constant (intercept) value of 1.210 is statistically significant ($p = 0.000$), representing the expected entrepreneurial success score when all independent variables are zero. Though this has no practical interpretive value, it ensures the regression model is complete.

For the predictors:

Mastery Experience has a B coefficient of 0.320 with a p-value of 0.001, indicating a statistically significant positive effect on entrepreneurial success. Its standardized beta value (0.351) shows it is the most influential predictor among the three. This suggests that entrepreneurs who have succeeded in past ventures are more likely to continue succeeding, as consistent with Bandura's (1997) theory.

Vicarious Experience shows a B coefficient of 0.265 with a p-value of 0.002, also indicating statistical significance. The beta of 0.284 reflects a moderate influence. This means that observing successful peers, mentors, or role models can enhance entrepreneurial behaviors and decision-making, consistent with findings by Nguyen and Duong (2021).

Social Persuasion has a B coefficient of 0.289 and a beta of 0.300, with a significance level of 0.001. This indicates a strong and significant influence on entrepreneurial success. Social persuasion encouragement and positive reinforcement—helps entrepreneurs build confidence in uncertain market conditions, aligning with the work of Urban & Naidoo (2020).

All variables in the model were significant at the 0.05 level, and the standardized coefficients (Beta values) show that mastery experience > social persuasion > vicarious experience in terms of their relative impact. These results suggest that interventions aiming to improve entrepreneurial outcomes should prioritize hands-on experience, followed by creating strong social and mentoring structures.

Test of Hypotheses

This section tests the three null hypotheses formulated in the study.

Hypothesis One

H₀₁: Mastery experience has no significant effect on entrepreneurial success.

The regression analysis in Table 4.5 shows a B coefficient of 0.320 and a p-value of 0.001, which is less than the significance level of 0.05. This result implies that the null hypothesis is rejected. Mastery experience has a significant and positive effect on entrepreneurial success among registered SMEs in Kaduna State. Entrepreneurs who successfully completed past business tasks showed higher performance levels in their current ventures. This finding is supported by Abubakar (2022), who found that personal accomplishments contribute to increased business confidence and success. Therefore, mastery experience plays a central role in building entrepreneurial capabilities and should be a focal point in entrepreneurship training.

Hypothesis Two

H₀₂: Vicarious experience has no significant effect on entrepreneurial success.

As indicated in the coefficients table, the B value for vicarious experience is 0.265 with a p-value of 0.002, which is statistically significant at the 0.05 level. Therefore, the null hypothesis is rejected. Vicarious experience learning through observation of peers or mentors has a statistically significant and positive influence on entrepreneurial success. Entrepreneurs who model behaviors and decisions of successful individuals tend to achieve greater business outcomes. This supports findings from Agyeman and Amponsah (2021), who identified vicarious learning as a predictor of entrepreneurial resilience. The result emphasizes the importance of mentorship and peer networks in promoting entrepreneurial growth.

Hypothesis Three

H₀₃: Social persuasion has no significant effect on entrepreneurial success.

From the regression output, social persuasion has a B coefficient of 0.289 and a p-value of 0.001, indicating significance at the 5% level. Thus, the null hypothesis is rejected. The result confirms that social persuasion significantly predicts entrepreneurial success. Entrepreneurs who receive positive verbal encouragement, recognition, and motivational feedback tend to have higher confidence and are more resilient in their business operations. These results are in line with the findings of Thompson and Rivera (2023), who noted that social encouragement from mentors and community leaders significantly enhanced SMEs' adaptation during crises in the U.S. Similarly, Urban and Kujinga (2020) found that social persuasion increased proactive entrepreneurial behavior in emerging markets. Therefore, institutional support structures such as mentorship, advisory programs, and motivational talks should be reinforced to enhance psychological empowerment and increase the chances of success for SMEs in Kaduna State.

Discussion of Findings

The findings of this study revealed that all three self-efficacy dimensions mastery experience, vicarious experience, and social persuasion significantly influence entrepreneurial success. Mastery experience was the strongest predictor, indicating that prior achievements reinforce future business competence. This aligns with Bandura's Social Cognitive Theory, which emphasizes experiential learning. Vicarious experience, though moderately influential, underscores the value of mentorship and observational learning. Entrepreneurs who emulate successful peers tend to adopt innovative and resilient behaviors. Social persuasion also had a strong effect, showing that confidence built through external affirmation contributes

meaningfully to entrepreneurial outcomes. These findings support previous studies by Nguyen et al. (2022), Agyeman and Amponsah (2021), and Urban and Naidoo (2020), and demonstrate the universal application of self-efficacy theory. The study offers practical insight for stakeholders aiming to promote SME success in developing economies like Nigeria, by focusing not only on capital or infrastructure but also on building psychological capital.

5.1 Conclusion and Recommendations

Based on the findings of this study, it is concluded that self-efficacy significantly influences entrepreneurial success among registered SMEs in Kaduna State. The three dimensions mastery experience, vicarious experience, and social persuasion showed positive and statistically significant effects on business performance indicators such as growth, innovation, and sustainability. Mastery experience emerged as the strongest predictor, suggesting that entrepreneurs who have succeeded in past business tasks are more likely to succeed in future ventures. Similarly, learning from others (vicarious experience) and receiving encouragement (social persuasion) also enhance entrepreneurial confidence and performance. These findings validate Bandura's Social Cognitive Theory and emphasize the role of psychological capital in driving entrepreneurial outcomes. Therefore, fostering self-efficacy is not only critical for individual business success but also for enhancing the overall competitiveness of SMEs in the region.

Based on the findings of the study, the following recommendations were formulated:

- i. Entrepreneurship development programs should prioritize experiential learning that enables SME owners to build confidence through hands-on business tasks. Government agencies and business incubators in Kaduna should support pilot projects, business simulations, and practical training opportunities that allow entrepreneurs to succeed in manageable, low-risk business challenges. These experiences will improve strategic judgment and business resilience.
- ii. Stakeholders should facilitate peer-to-peer learning, mentorship, and networking platforms that expose SME owners to successful role models. Business associations and chambers of commerce can organize success story forums where entrepreneurs can share growth experiences. These interactions will reinforce learning through observation and inspire confidence among new or struggling entrepreneurs.
- iii. Encouragement and psychological reinforcement should be institutionalized through advisory services, mentorship, and policy support. Government and non-governmental organizations should train business counselors to provide regular motivational feedback to SME owners. A support system that affirms entrepreneurial potential can significantly boost confidence, innovation, and long-term commitment to business growth.

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