INFLUENCE OF ENTREPRENEURIAL COMPETENCIES ON SUSTAINABLE GROWTH OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMES): EVIDENCE FROM SELECTED MSMES IN UNIVERSITY OF NIGERIA, NSUKKA

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Abstract

This study examined the influence of entrepreneurial competencies on MSMEs sustainability. Specifically, the study investigated the influence of opportunity recognition competency, risk-taking competency, and strategic competency on MSMEs sustainability. A descriptive survey research design was adopted for the study. The population comprised MSME operators, while a sample size of 50 respondents was used. Data were collected using a structured questionnaire designed on a four-point Likert scale. The instrument was validated by experts, while reliability was established through appropriate reliability testing procedures. Data collected were analyzed using simple linear regression analysis with the aid of SPSS. The findings revealed that opportunity recognition competency had a significant positive influence on MSMEs sustainability, while strategic competency and risk-taking competency had no significant influence on MSMEs sustainability. The study concluded that opportunity recognition competency is a critical determinant of MSMEs sustainability. The study recommended that MSMEs owners and entrepreneurship support agencies should strengthen opportunity recognition skills through training, innovation, and market awareness programmes to enhance sustainable business growth.

Keywords: Entrepreneurial competencies, MSMEs, Sustainable growth.

Introduction

Micro, Small and Medium Enterprises (MSMEs) remain central to economic development, particularly in emerging economies where they drive employment creation, innovation, and income generation. There is no universally accepted definition of MSMEs because countries adopt different criteria based on their economic conditions and policy objectives (Gautam & Tiwary, 2020). Common criteria used in defining MSMEs include employee size, annual turnover, total assets and capital investment (Raczyńska, 2019). According to the Organisation for Economic Co-operation and Development-OECD, MSMEs are independent enterprises employing fewer than a specified number of workers. Similarly, the European Union defines MSMEs using employee headcount, annual turnover and balance sheet value. Under the EU classification, micro enterprises employ fewer than 10 persons, small enterprises fewer than 50 persons, while medium enterprises employ fewer than 250 persons (Raczyńska, 2019; Gautam & Tiwary, 2020). Micro, Small and Medium Enterprises (MSMEs) are enterprises classified according to the number of employees and asset base excluding land and buildings. Micro enterprises employ fewer than 10 persons with assets below ₦5 million; small enterprises employ 10–49 persons with assets between ₦5 million and less than ₦50 million; while medium enterprises employ 50–199 persons with assets between ₦50 million and less than ₦500 million (CBN, 2023; SMEDAN, 2025). The World Bank Group defines MSMEs as enterprises with not more than 300 employees and annual revenue and assets not exceeding $15 million (Gautam & Tiwary, 2020). Globally, employee count remains the most widely used criterion for MSME classification, while turnover and assets are often used as supporting indicators (Adhikary & Ghosh, 2025). Micro, Small and Medium Enterprises (MSMEs) are widely regarded as important drivers of economic growth, employment generation, innovation and poverty reduction across developed and developing economies. They contribute significantly to industrial development, resource mobilization and income generation, particularly in emerging economies where they constitute a large proportion of business activities (Adhikary & Ghosh, 2025). In general, MSMEs are described as small-scale enterprises with limited workforce, modest capital base and relatively low turnover compared with large firms. Their flexibility and adaptability make them essential for sustainable economic and entrepreneurial development.

The concept of sustainable growth focuses not just on short-term financial performance but to the long-term viability and resilience of firms. Sustainable growth refers to the ability of a business to maintain consistent expansion in sales, profitability, and market presence while adapting to environmental changes and preserving operational stability (Neneh, 2022). In the MSMEs context, sustainable growth is often assessed through indicators such as revenue growth, customer retention, innovation capacity, and business continuity over time (OECD, 2023). Despite the recognized importance of MSMEs, a high failure rate persists in Nigeria, with many enterprises unable to sustain operations beyond the early stages due to weak managerial and entrepreneurial capabilities (SMESDAN, 2022). Recent studies increasingly attribute MSMEs sustainability not only to external environmental factors but also to internal capabilities, particularly entrepreneurial competencies.

Entrepreneurial competencies are described as multidimensional capabilities that include strategic thinking, leadership ability, opportunity recognition, relationship management, innovation capacity and managerial skills necessary for business growth and competitiveness in dynamic environments (Mai & Thai, 2025; Pulikkalakath et al., 2024; Tittel & Terzidis, 2020). Tittel and Terzidis (2020) viewed entrepreneurial competencies as entrepreneurial abilities and attitudes that enable entrepreneurs to perform entrepreneurial tasks successfully and adapt to changing business conditions, while Kruger and Steyn (2021) emphasized their role in helping entrepreneurs utilize emerging technologies and achieve business sustainability. Similarly, Mai and Thai (2025) explained entrepreneurial competencies as behavioural, psychological and managerial characteristics that support venture creation, survival and superior firm performance, whereas Pulikkalakath et al (2024) described them as integrated entrepreneurial and managerial capabilities required for long-term business success. Overall, entrepreneurial competencies are increasingly recognized as learnable capabilities that enhance entrepreneurial intention, innovation and enterprise sustainability. Entrepreneurial competencies are defined as a combination of knowledge, skills, attitudes, and behavioral attributes that enable entrepreneurs to effectively manage business operations and respond to dynamic market conditions (Mitchelmore & Rowley, 2021). These competencies are considered critical intangible assets that enhance decision-making, innovation, and competitive advantage in MSMEs (Tehseen et al., 2022). In this study, entrepreneurial competencies refer to the knowledge, skills, abilities, attitudes and behavioural characteristics that enable entrepreneurs to identify opportunities, mobilize resources, innovate, manage ventures effectively and achieve sustainable business performance.

Among the core dimensions of entrepreneurial competencies, strategic competency plays a vital role in ensuring sustainable growth. Strategic competency involves the ability of entrepreneurs to set long-term goals, analyze competitive environments, and implement effective business strategies. MSMEs led by strategically competent entrepreneurs are more likely to achieve sustained growth due to their ability to align business operations with environmental opportunities and threats (Agyapong & Acquaah, 2023). Strategic competencies refer to the knowledge, skills, abilities and behavioural capabilities that enable entrepreneurs and managers to formulate, implement and evaluate strategies that enhance organizational competitiveness, growth and sustainability. Strategic competencies involve the ability to set long-term goals, recognize opportunities, anticipate environmental changes, allocate resources effectively and develop competitive advantages in dynamic business environments. According to Mai and Thai (2025), strategic competencies are entrepreneurial capabilities associated with creating, assessing and executing strategic actions that support both short-term and long-term organizational objectives. The authors explained that these competencies enable entrepreneurs to build and sustain competitive advantage through proactive decision-making and strategic positioning. Similarly, Pennetta et al. (2024) described strategic competencies as dynamic managerial and entrepreneurial abilities that support organizational adaptation, innovation and effective response to uncertain market conditions. Costa et al (2023) further noted that strategic competencies are essential elements of strategic entrepreneurship because they combine entrepreneurial opportunity-seeking behaviour with strategic advantage-seeking actions that improve organizational performance and sustainability. Strategic competencies are being linked with planning ability, strategic thinking, opportunity exploitation, innovation management and competitive resource utilization necessary for enterprise survival and growth in highly competitive environments (Nag et al., 2024). Strategic competencies are increasingly viewed as multidimensional capabilities that enable entrepreneurs and organizations to make effective strategic decisions, adapt to environmental changes and sustain long-term business success.

Closely related is opportunity recognition competency, which refers to the entrepreneur's capacity to identify and exploit emerging market opportunities. Opportunity recognition is a fundamental driver of entrepreneurial success, as it enables firms to innovate and remain competitive in rapidly changing markets (Obschonka & Audretsch, 2022). Entrepreneurs who effectively recognize and act on opportunities are better positioned to achieve long-term business growth. Opportunity competencies refer to the knowledge, skills, abilities and behavioural capabilities that enable entrepreneurs to identify, evaluate and exploit profitable business opportunities in dynamic and uncertain environments. According to Mai and Thai (2025), opportunity competencies involve the entrepreneur's capacity to perceive emerging market opportunities, assess their potential value and transform them into viable business ventures through strategic action. Similarly, Tittel and Terzidis (2020) explained that opportunity competencies include the ability to recognize unmet market needs, generate innovative ideas and respond effectively to environmental changes and competitive conditions. In the same vein, opportunity competencies enhance entrepreneurs' capability to discover new market possibilities, create customer value and sustain competitive advantage in rapidly changing business environments (Nag et al., 2024). In addition, Pulikkalakath et al (2024) viewed opportunity competencies as multidimensional entrepreneurial capabilities that combine creativity, market sensitivity, innovation and strategic foresight necessary for enterprise survival and long-term success. This study view opportunity competencies as essential entrepreneurial capabilities that facilitate opportunity identification, innovation, venture creation and sustainable business performance. We shall now consider an important skill in making business actionable-risk.

Risk-taking competency is also essential in the entrepreneurial process, particularly in uncertain and volatile business environments such as Nigeria. It reflects the entrepreneur's ability to make informed decisions under uncertainty while balancing potential risks and rewards. Calculated risk-taking positively influences MSMEs growth by enabling entrepreneurs to pursue innovative ventures and strategic investments (Kuratko et al., 2022).

Risk-taking competencies refer to the knowledge, skills, attitudes and behavioural capabilities that enable entrepreneurs to make informed decisions under conditions of uncertainty and to pursue opportunities despite the possibility of failure or loss. According to Mai and Thai (2025), risk-taking competencies involve the entrepreneur's ability to assess and undertake calculated risks necessary for venture creation, competitiveness and long-term sustainability. Similarly, Tittel and Terzidis (2020) explained that risk-taking competencies encompass the capacity to make proactive decisions in uncertain business environments while balancing potential gains and losses. Risk-taking competencies support innovation, opportunity exploitation and strategic adaptability in rapidly changing markets (Nag et al., 2024). In addition, Pulikkalakath et al (2024) viewed risk-taking competencies as multidimensional entrepreneurial capabilities that include confidence, resilience, uncertainty management and the willingness to engage in challenging business activities to achieve organizational goals. Overall, risk-taking competencies are increasingly recognized as critical entrepreneurial capabilities that enhance innovation, competitive advantage and sustainable enterprise performance. Risk-taking competencies is an essential entrepreneurial capability associated with evaluating uncertain situations, tolerating ambiguity, managing potential threats and making strategic decisions that enhance business growth and innovation.

Although existing literature has established a strong link between entrepreneurial competencies and MSMEs performance, there remains a contextual gap in understanding how these competencies influence sustainable growth, particularly within localized business ecosystems such as university environments. Universities often serve as hubs of economic activity, attracting diverse entrepreneurial ventures that cater to students, staff, and surrounding communities. The business environment within University of Nigeria Nsukka is characterized by high competition, fluctuating demand patterns, and evolving consumer preferences, which require entrepreneurs to possess strong competencies to sustain growth.

Statement of the Problem

Despite the concentration of MSMEs within the University of Nigeria, Nsukka environment, many businesses struggle with sustainability challenges, including inconsistent revenue streams, poor strategic planning, and limited adaptability to market changes. This suggests that access to a vibrant market alone does not guarantee business success; rather, the competencies of the entrepreneurs play a critical role in determining long-term outcomes. The problem of this study, therefore, lies in the persistent difficulty faced by MSMEs within the University of Nigeria, Nsukka environment in achieving sustainable growth despite the presence of business opportunities. While prior research has largely focused on external constraints such as infrastructure and financing, insufficient attention has been given to the role of entrepreneurial competencies in driving sustainability within this specific context. This gap necessitates empirical investigation into how entrepreneurial competencies influence MSMEs sustainable growth. Accordingly, this study examines the influence of entrepreneurial competencies specifically strategic, opportunity recognition and risk-taking competencies on the sustainable growth of MSMEs, using evidence from selected businesses within the University of Nigeria, Nsukka. The study is premised on the assumption that entrepreneurs who possess strong competencies are better equipped to navigate environmental challenges, optimize resources, and achieve sustained business growth.

Purpose of the Study

The study is aimed at ascertaining the influence of entrepreneurial competencies on sustainable growth of MSMEs in University of Nigeria, Nsukka. With the specific objective to:

1. Determine the influence of strategic competency on MSMEs sustainability.
2. Evaluate the influence of opportunity recognition competency on MSMEs sustainability.
3. Investigate the influence risk-taking competency on MSMEs sustainability.

Research Questions

The following research questions guided the study

1. What is the influence of strategic competency on MSMEs sustainability?
2. What is the influence of opportunity recognition competency on MSMEs sustainability?
3. What is the influence of risk-taking competency on MSMEs sustainability?

Research Hypotheses

The following null hypotheses was tested at 0.05 level of significance:

$H0_1$: There is no significant influence of strategic competency on MSMEs sustainability.

$H0_2$: There is no significant influence of opportunity recognition competency on MSMEs sustainability.

$H0_3$: There is no significant influence of risk-taking competency on MSMEs sustainability.

Literature Review

Strategic competency is a critical entrepreneurial competency that enables entrepreneurs to formulate, implement and evaluate business strategies that enhance the long-term growth and sustainability of micro, small and medium enterprises (MSMEs) (Akintayo et al., 2024; Soomro et al., 2025). It encompasses the ability to establish clear business goals, identify competitive opportunities, allocate resources effectively, anticipate environmental changes and develop proactive responses to market challenges (Man et al., 2002; Mitchelmore & Rowley, 2010). Strategic competency allows entrepreneurs to align organizational resources with changing market conditions, thereby enhancing business performance, competitiveness and resilience (Esubalew & Raghurama, 2024; Sesale & Seeletse, 2025). Entrepreneurs possessing strong strategic competencies are more likely to achieve superior business performance, innovation and sustainable competitive advantage through effective resource deployment and strategic decision-making (Soomro et al., 2024; Van, 2025). Strategic competency also facilitates the development of organizational creativity, entrepreneurial orientation and innovation capabilities, which are essential for maintaining growth and resilience in rapidly changing markets (Tuan, 2025).

Furthermore, strategic thinking has been identified as one of the core entrepreneurial competencies that enhances business success by improving entrepreneurs' ability to recognize opportunities, solve problems, manage relationships and formulate effective growth strategies (Esubalew, 2024). Empirical evidence from SMEs further suggests that entrepreneurial competencies, including strategic and managerial competencies, significantly influence enterprise performance, sustainability and long-term survival (Sesale, 2025; Hannatu & Timothy, 2025). In the contemporary business environment characterized by technological disruption, globalization and intense competition, strategic competency enables MSME owners to anticipate future challenges, leverage innovation, embrace digital transformation and create value for stakeholders, thereby promoting sustainable growth and organizational longevity (Gonzalez-Varona et al., 2024; OECD, 2025). While strategic competency equips entrepreneurs with the capacity to formulate and implement long-term business strategies that enhance organizational competitiveness and sustainability, the effectiveness of such strategies largely depends on the entrepreneur's ability to identify and capitalize on emerging opportunities within the business environment. Consequently, opportunity recognition competency has emerged as another critical entrepreneurial capability that enables MSME owners to discover, evaluate and exploit profitable opportunities necessary for innovation, growth and sustainability of MSMEs.

Opportunity recognition competency is widely regarded as a fundamental entrepreneurial skill that enables entrepreneurs to identify, evaluate and exploit viable business opportunities capable of generating economic value and sustaining business growth. It represents the ability to perceive unmet market needs, recognize emerging trends, discover innovative solutions and transform ideas into profitable ventures. Scholars have consistently identified opportunity recognition as a core entrepreneurial competency because it initiates the entrepreneurial process and serves as a basis for innovation, competitiveness and organizational sustainability. Opportunity recognition is influenced by several cognitive, behavioral and environmental factors, including prior knowledge, entrepreneurial alertness, social networks, personal characteristics and environmental conditions (Bui et al., 2023). Entrepreneurs with extensive knowledge and experience are more capable of interpreting market signals and identifying opportunities that others may overlook. Similarly, entrepreneurial alertness enhances the ability to scan, connect and evaluate information from diverse sources, thereby facilitating opportunity discovery. Recent studies have further emphasized the importance of dynamic capabilities, networking capability, self-efficacy and global mindset in enhancing opportunity recognition, particularly within small and micro enterprises operating in increasingly globalized markets (Heredia-Portillo & Armas-Arévalos, 2023). Entrepreneurial passion has also been found to play a significant role by stimulating alertness and increasing entrepreneurs' capacity to identify and evaluate business opportunities, especially in dynamic environments characterized by uncertainty and rapid change (Zhu et al., 2025). Furthermore, opportunity recognition is strengthened through continuous learning, experimentation and the integration of diverse knowledge domains, enabling entrepreneurs to compensate for knowledge deficiencies and adapt to complex business contexts (Ohlert et al., 2025). Empirical evidence also suggests that entrepreneurial wellbeing, absorptive capacity and entrepreneurial knowledge positively influence opportunity recognition ability by enhancing information processing, creativity and decision-making capabilities (Bui et al., 2023).

In addition, learning ability, networking ability, integration ability, entrepreneurial drive and environmental intelligence have been identified as critical dimensions of opportunity recognition competency (Wang & Xue, 2024). For MSMEs, opportunity recognition competency is particularly essential because it enables entrepreneurs to proactively identify market opportunities, develop innovative products and services, respond effectively to changing customer needs and establish sustainable competitive advantages. Although opportunity recognition competency enables entrepreneurs to identify and evaluate potentially profitable opportunities within the business environment, the successful exploitation of such opportunities often requires a willingness to commit resources and make decisions under conditions of uncertainty. Consequently, risk-taking competency becomes an essential complementary entrepreneurial capability that empowers MSME owners to pursue identified opportunities, embrace innovation and navigate the uncertainties associated with business growth and sustainability.

Risk-taking competency is a vital entrepreneurial competency that enables entrepreneurs to make informed and calculated decisions under conditions of uncertainty in pursuit of business growth and long-term sustainability. It involves the willingness and ability to commit resources to opportunities with uncertain outcomes, evaluate potential gains and losses, and manage risks strategically rather than avoid them entirely (Caputo et al., 2025; Duangjan et al., 2025; Ngo et al., 2025; Soomro et al., 2025). In the context of MSMEs, risk-taking competency facilitates the exploration of new markets, adoption of innovative technologies, investment in new products and services, and proactive responses to changing business environments, all of which are essential for sustainable growth (Duangjan et al., 2025; Ngo et al., 2025). Recent studies suggest that entrepreneurs with higher levels of risk-taking competency are more likely to identify and exploit emerging opportunities, improve organizational adaptability, and achieve superior business performance than those who exhibit excessive risk aversion (Caputo et al., 2025; Soomro et al., 2025). Furthermore, risk-taking has been identified as a key dimension of entrepreneurial orientation that positively influences market sustainability, competitiveness, customer retention, and business expansion among MSMEs (Abubakar et al., 2024; Akintayo et al., 2024). Empirical evidence also indicates that risk-taking competency enhances entrepreneurial resilience and strategic decision-making by enabling entrepreneurs to navigate environmental turbulence and respond effectively to technological and market disruptions (Ngo et al., 2025; Sesale & Seeletse, 2025). From a resource-based perspective, risk-taking competency constitutes an important intangible capability that supports innovation, opportunity exploitation, and competitive advantage, thereby strengthening the capacity of MSMEs to achieve sustainable growth and long-term survival in increasingly dynamic and competitive markets (Maravilla & Flores, 2025; Duangjan et al., 2025). Consequently, risk-taking competency remains an indispensable entrepreneurial capability for MSMEs seeking sustained performance, resilience, and growth. Given the significant role of risk-taking competency in enhancing innovation, competitiveness, resilience and long-term business performance, it becomes imperative to assess the extent to which such entrepreneurial capabilities contribute to the sustainable growth of MSMEs. Consequently, understanding sustainable growth requires the identification of appropriate performance indices through which the long-term economic, social and environmental outcomes of MSMEs can be evaluated.

Indices for measuring MSMEs' sustainable growth refer to the quantitative and qualitative indicators used to assess the long-term performance, resilience and sustainability of micro, small and medium enterprises across economic, social and environmental dimensions (Antwi-Boateng et al., 2024; Oduro & Haylemariam, 2025; Adesua-Lincoln, 2025). Recent studies indicate that MSMEs' sustainable growth is commonly measured using financial indicators such as sales growth, profitability, revenue expansion, market share and cash flow stability, as well as non-financial indicators including innovation capability, customer satisfaction, digital adaptability, environmental sustainability, stakeholder engagement and business resilience (Dyah Arini et al., 2025; Asmar et al., 2025; Oduro & Haylemariam, 2025; Kalathingal & Ambrammal, 2025). According to Dyah et al. (2025), the most frequently used indices for evaluating MSME sustainable performance include sales growth, profitability, market competitiveness, technology adoption, internal process efficiency and sustainability outcomes. Similarly, Asmar et al. (2025) explained that MSME sustainable growth is increasingly measured through multidimensional indices that combine financial performance with innovation, entrepreneurial orientation, digitalization and sustainability criteria. Recent literature further emphasizes that environmental resilience, social sustainability, adaptability, long-term competitiveness and organizational capability are emerging indices for assessing sustainable MSME growth in dynamic business environments (Oduro & Haylemariam, 2025; Kalathingal & Ambrammal, 2025). Overall, indices for measuring MSMEs' sustainable growth are viewed as integrated performance indicators that evaluate the ability of enterprises to achieve continuous profitability, competitiveness, innovation and long-term sustainability in changing economic conditions.

Methodology

Descriptive survey design was adopted for the study. The study was carried out at University of Nigeria, Nsukka campus. Purposive sampling and stratification technique were used for the study. This was considered ideal for the study because there was no complete list of MSMEs and no well-defined population structure in the area of study. The study employed two stage approach to select the respondents for the study. Stage 1 looked into clear criteria such as registered or identifiable MSMEs within UNN environment, businesses where the manager is available, operated for at least 1year and engaged in measurable business activities. The stage 2 for purposive selection deliberately selected participants based on industry variety (to avoid sector bias), experience level and business size variation. The hybrid approach was considered ideal as it improved representativeness of the major sectors of MSMEs strata (retail, services and production).

Three experts checked the suitability and clarity of the instrument for data collection and the Cronbach alpha method was used to test the internal consistency of the instrument at 0.807. Data was collected using Entrepreneurial Competencies and Sustainable Growth of MSMEs Questionnaire (ECSGMSMEQ) developed by the researcher, with sections A, B, C and D. Appropriate demographics suitable and a structured 4-point scale for the study. 50 respondents were used for the study. Statistical Package for Social Science (SPSS) analysis tool was utilised with multiple linear regressions to analyse the data, answer the research questions and test hypothesis.

Model specification

Combined regression model:

$$SG = \beta 0 + \beta 1 ORC + \beta 2 RTC + \beta 3 SC + \varepsilon$$

SG = SME Sustainability
ORC = Opportunity Recognition Competency
RTC = Risk-Taking Competency
SC = Strategic Competency
β_0 = Constant (Intercept)
β_1 = Coefficient of Opportunity Recognition Competency
β_2 = Coefficient of Risk-Taking Competency
β_3 = Coefficient of Strategic Competency
ε = Error Term

Results

Research Question 1: What is the influence of opportunity recognition competency on SME sustainability?

Table 1: Simple Linear Regression Analysis of Opportunity Recognition Competency and SME Sustainability

Variable	R	R^2	Adjusted R^2	F	p-value
Opportunity Recognition Competency	0.291	0.085	0.066	4.444	0.040

Dependent Variable: SME Sustainability; N = 50

Table 1 shows that opportunity recognition competency has a positive relationship with SME sustainability (R = 0.291). The coefficient of determination ($R^2 = 0.085$) indicates that opportunity recognition competency explains 8.5% of the variation in SME sustainability. The F-value of 4.444 with a corresponding p-value of 0.040 is less than the 0.05 level of significance. This implies that opportunity recognition competency significantly influences SME sustainability. Therefore, the null hypothesis stating that opportunity recognition competency has no significant influence on SME sustainability is rejected.

Regression Coefficients

Variable	B	Std. Error	Beta	T	p-value
Constant	0.115	1.005	-	0.114	0.909
Opportunity Recognition Competency	0.620	0.294	0.291	2.108	0.040

The regression coefficient (B = 0.620) indicates that a one-unit increase in opportunity recognition competency leads to an estimated 0.620-unit increase in SME sustainability. The positive coefficient suggests that entrepreneurs who possess higher opportunity recognition competency are more likely to achieve sustainable business growth.

Research Question 2: What is the influence of risk-taking competency on SME sustainability?

Table 2: Simple Linear Regression Analysis of Risk-Taking Competency and SME Sustainability

Variable	R	R^2	Adjusted R^2	F	p-value
Risk-Taking Competency	0.069	0.005	-0.016	0.227	0.636

Dependent Variable: SME Sustainability; N = 50

Table 2 indicates a very weak positive relationship between risk-taking competency and SME sustainability (R = 0.069). The coefficient of determination ($R^2 = 0.005$) shows that risk-taking competency explains only 0.5% of the variation in SME sustainability. The F-value of 0.227 with a p-value of 0.636 exceeds the 0.05 significance level. Therefore, risk-taking competency does not significantly influence SME sustainability. Consequently, the null hypothesis is accepted.

The regression coefficient (B = 0.109) indicates a positive but statistically insignificant influence of risk-taking competency on SME sustainability. Since the p-value exceeds 0.05, the observed effect is not statistically meaningful.

Regression Coefficients

3Variable	B	Std. Error	Beta	T	p-value
Constant	1.893	0.696	-	2.718	0.009
Risk-Taking Competency	0.109	0.229	0.069	0.477	0.636

Research Question 3: What is the influence of strategic competency on SME sustainability?

Table 3: Simple Linear Regression Analysis of Strategic Competency and SME Sustainability

Variable	R	R^2	Adjusted R^2	F	p-value
Strategic Competency	0.183	0.033	0.013	1.656	0.204

Dependent Variable: SME Sustainability; N = 50

Table 3 reveals a weak positive relationship between strategic competency and SME sustainability (R = 0.183). The R^2 value of 0.033 indicates that strategic competency accounts for 3.3% of the variation in SME sustainability. The F-value of 1.656 with a p-value of 0.204 is greater than 0.05, indicating that strategic competency does not significantly influence SME sustainability. Therefore, the null hypothesis is accepted.

Regression Coefficients

Variable	B	Std. Error	Beta	T	p-value
Constant	0.698	1.188	-	0.588	0.559
Strategic Competency	0.434	0.338	0.183	1.287	0.204

The regression coefficient (B = 0.434) suggests that strategic competency has a positive influence on SME sustainability. However, the effect is not statistically significant because the p-value (0.204) exceeds the 0.05 significance level.

Summary of Hypotheses Testing

Hypothesis	p-value	Decision
H_{01}: Opportunity recognition competency has no significant influence on SME sustainability	0.040	Rejected
H_{02}: Risk-taking competency has no significant influence on SME sustainability	0.636	Accepted
H_{03}: Strategic competency has no significant influence on SME sustainability	0.204	Accepted

Discussion of Findings

The study found that opportunity recognition competency had a significant positive influence on MSMEs sustainability ($\beta = 0.291$, $p = 0.040$), indicating that entrepreneurs who possess the ability to identify, evaluate and exploit emerging business opportunities are more likely to achieve sustainable business growth. This finding supports the argument that opportunity recognition is a fundamental entrepreneurial capability that enables entrepreneurs to discover unmet customer needs, respond to environmental changes and create innovative solutions that enhance business competitiveness and continuity. The result is consistent with the Human Capital Theory, which posits that entrepreneurial knowledge and competencies contribute significantly to enterprise performance and sustainability. The finding corroborates recent studies by Bui et al. (2023), who reported that entrepreneurs with stronger opportunity recognition abilities demonstrate superior business performance through enhanced information processing and opportunity exploitation. Similarly, Heredia-Portillo and Armas-Arévalos (2023) found that opportunity recognition capability, supported by dynamic capabilities and networking competence, significantly enhances entrepreneurial success and firm growth. The result also aligns with the findings of Zhu et al. (2025), who established that entrepreneurial alertness and opportunity recognition positively influence venture performance and sustainability in dynamic business environments. The implication is that MSMEs operating within highly competitive environments such as the University of Nigeria, Nsukka require strong opportunity recognition skills to identify emerging market trends, innovate continuously and sustain their operations over time.

Contrary to expectations, the study revealed that risk-taking competency did not significantly influence MSMEs sustainability ($\beta = 0.069$, $p = 0.636$). Although risk-taking competency is widely recognized in entrepreneurship literature as an important determinant of innovation and growth, the present finding suggests that its influence on sustainability may be context-dependent. This result contrasts with the studies of Caputo et al. (2025), Ngo et al. (2025), and Duangjan et al. (2025), which reported positive associations between calculated risk-taking and entrepreneurial success. However, the finding is consistent with the contingency perspective of entrepreneurship, which argues that the effectiveness of entrepreneurial competencies depends on contextual factors such as market uncertainty, access to resources, institutional support and business environment conditions. Within the study area, entrepreneurs may operate under financial constraints and market uncertainties that limit their willingness or ability to translate risk-taking behaviour into sustainable business outcomes. The result also suggests that excessive caution or limited access to capital may reduce the practical benefits of risk-taking among MSMEs. Therefore, while risk-taking remains an important entrepreneurial attribute, it may not independently guarantee sustainability without complementary resources and supportive business conditions.

The study further found that strategic competency did not significantly influence MSMEs sustainability ($\beta = 0.183$, $p = 0.204$), despite exhibiting a positive relationship with sustainability. This finding is somewhat surprising because strategic competency is frequently identified as a key driver of enterprise growth, competitiveness and long-term survival. The result differs from the findings of Esubalew and Raghurama (2024), Akintayo et al. (2024), and Soomro et al. (2025), who reported that strategic planning, strategic thinking and managerial capabilities significantly enhance SME performance and growth. Nevertheless, the finding supports the argument that the effectiveness of strategic competency may be constrained by the scale and operational characteristics of micro and small enterprises. Many MSMEs tend to focus on short-term operational issues rather than formal strategic planning processes, thereby limiting the observable impact of strategic competencies on sustainability outcomes. Furthermore, environmental volatility, resource limitations and informal business structures may weaken the direct influence of strategic competency on business sustainability. The finding therefore suggests that strategic competency alone may be insufficient to guarantee sustainable growth unless supported by opportunity exploitation capabilities, innovation, financial resources and favourable market conditions. Overall, the study highlights opportunity recognition competency as the most influential entrepreneurial competency for sustaining MSMEs within the University of Nigeria, Nsukka business environment.

Conclusion

The study concludes that opportunity recognition competency is a critical determinant of MSME sustainability. The ability of entrepreneurs to identify market opportunities, anticipate customer needs, and respond to environmental changes contributes substantially to the continuity and growth of MSMEs. Consequently, MSME owners and entrepreneurship support institutions should prioritize the development of opportunity recognition skills to enhance sustainable business performance.

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