

**NEXUS BETWEEN ENTREPRENEURIAL CHARACTERISTICS AND PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMES) IN KOGI STATE**

**KADIRI Kayode Ibrahim (PhD)**  
**Department of Business Administration**  
**Faculty of Management Sciences, National**  
**Open University of Nigeria**  
**Correspondence Author: [kkadiri@noun.edu.ng](mailto:kkadiri@noun.edu.ng)**

DOI: <https://doi.org/10.70118/ajbam-02-2026-026>

**Abstract**

The study was an empirical enquiry into the effect of entrepreneurial characteristics on the performance of Small and Medium Enterprises (SMEs) in Kogi state. In meeting research objectives, a causal design was adopted for the purpose of exploring the specific direct effects of Innovativeness, and Passion and as components of Entrepreneurial Behaviour, on Performance. Data used was self-reported survey data collected via the administration of a structured questionnaire to a purposive sample of 393 owner-managers in the state. The collected data was applied towards the estimation of a path model through the Partial Least Squares (PLS) approach to Structural Equation Modelling (SEM). It was found that all components of entrepreneurial behaviour were positive and statistically significant predictors of performance among the businesses in the state. Accordingly, it was recommended that business owner-managers strive towards fostering innovative culture within their businesses. Secondly, an investment in personal development to sustain and enhance their drive for success is also crucial; by aligning personal motivations with business objectives, owner-managers can effectively inspire and lead their teams towards achieving superior performance.

**Keywords:** Entrepreneurial, Characteristics, Performance, Small and Medium Enterprises (SMEs)

**INTRODUCTION**

The global landscape recognises entrepreneurship as a powerful catalyst for economic growth and a driving force behind the development of nations. It plays a pivotal role in various aspects, including job creation, revenue generation, poverty alleviation, and wealth creation. Akanji (2019) observed that entrepreneurship involves a dynamic process that encompasses the willingness to revitalise market offerings, innovate, take risks, explore new and uncertain products, services, and markets, and be more proactive than competitors in identifying new business opportunities. Globally, entrepreneurial practices are revolutionising and revitalising economies through the establishment of new businesses and the growth of existing ones (Umair et al., 2021; Daniel & Chukwuemeka, 2023). Entrepreneurs are integral to any entrepreneurial activity. These are individuals who identify and exploit opportunities, as well

as undertake new decisions, processes and activities that are innovative and creative (Hwang et al., 2020).

Interest in entrepreneurial behaviour started to emerge during the 1990's with increasing attention being paid to observable characteristics exhibited by entrepreneurs that differentiate them from non-entrepreneurs (Gartner, 1990). Hwang et al (2020) opined that such characteristics form competencies which entrepreneurs apply in adopting to changes in their environment or business. Although a wide variety of attributes has been developed over the years, with entrepreneurial characteristics being conceptualised differently by various authors such as Asenge et al. (2018), Qureshi et al. (2022) and Bello (2023), the study specifically recognised the influence of Passion, as an attitudinal component that comprehensively captures the aspect of the

entrepreneurial mindset reflecting drive. Essentially, the study disaggregates the concept of Entrepreneurial Characteristics in terms of Innovativeness, Passion and Risk Taking.

The socioeconomic implications of a vibrant SME sector in Kogi state cannot be gainsaid. These enterprises have been variously described to be essential in various ways, including the provision of employment, wealth creation and poverty reduction (Asenge et al., 2018; Bello, 2023; Muritala et al., 2021; Iyun et al., 2023). Ayandibu and Houghton (2017) emphasise the role of SMEs as engines of economic growth and development. Because of this, there has been a shift in recent times from large-scale industries to these forms of business units, which possess the potential to foster rapid and sustainable industrial development, so that there has been increasing level of recognition and intervention by the government regarding the significance of developing a robust (SME) sector.

In light of the essentiality of SMEs, the fact that these businesses have been experiencing high rates of failures in Kogi state (Albert et al., 2022; Isa et al., 2022; Daniel & Park, 2015) is worrisome, and piques research interest in understanding the extent to which key entrepreneurial characteristics influence enhanced business performance and sustainability. The importance of such a study is also substantiated by an acute dearth of literature specifically exploring the influence of entrepreneurial characteristics on the performance of SMEs in Kogi state. Pertinent studies such as Muhammed (2016) carried out in Kaduna state; Barinua and Okoro (2022), conducted in Enugu; Barine (2021), done in Por Harcourt; Ibrahim et al. (2020), in Kwara state; and Aliyu et al. (2020), conducted in Bauchi, explored the subject area in different geographical contexts, providing an important gap which the present study sought to address. Against this background, the main objective of this study is to examine effect of entrepreneurial characteristics on SME performance in Kogi state, Nigeria.

## **LITERATURE REVIEW**

### **2.1 Conceptual Framework**

#### **2.1.1 Entrepreneurial Characteristics**

Entrepreneurial characteristics refer to the specific traits, skills, and behaviours commonly found among successful entrepreneurs, which are essential for identifying opportunities, creating value, and driving business growth. Van Auken et al. (2017) defined the concept as the specific personality traits typical of entrepreneurs, which they described as individuals owning and managing ventures and engaged in entrepreneurial projects in various stages of development. As pointed out by Bowman (2019), these are attributes, constituting the competency of the entrepreneur, which are essential for venture success, enabling entrepreneurs achieve their goals (Biliqia, 2017). Bulut (2019) added that entrepreneurial characteristics reflect the applicable traits of business owners, and ultimately, the ability of the enterprise to achieve a significant level of business performance. These traits are crucial in shaping how entrepreneurs approach challenges, make strategic decisions, and innovate, all of which contribute to the overall success and sustainability of their businesses.

Ibrahim et al. (2020) argued that entrepreneurial characteristics are identified as essential attributes that enable entrepreneurs to perform better in their businesses. Entrepreneurs who possess these attributes are more likely to seize opportunities, overcome challenges, and drive business growth. Such characteristics play a crucial role in navigating the complexities of the business environment, enabling entrepreneurs to adapt to changing conditions, make informed decisions, and sustain long-term success. As internal factors, entrepreneurial characteristics are critical factors, as emphasised by Essel (2019), that determine business success, pointing to traits such as having high spirits, a desire for constant innovation, a readiness to accept responsibility, ambition to achieve lofty goals, and a willingness to take risks. These qualities empower entrepreneurs to navigate the complexities of business environments and foster growth and resilience in their ventures.

### **2.1.1.1 Innovativeness**

Innovativeness is a critical component of entrepreneurial characteristics that empowers entrepreneurs to recognize and seize distinctive opportunities within the market. By fostering a mindset of creativity and originality, innovativeness allows entrepreneurs to develop new products, services, or processes that meet unmet needs or create entirely new market segments. Smith et al. (2022) described innovativeness as the entrepreneur's capability to develop and execute new ideas that disrupt conventional thinking and practices. This ability is what distinguishes entrepreneurs from their competitors, as it drives the growth and sustainability of their businesses. Innovativeness also equips entrepreneurs to adjust to shifting market conditions, helping them stay ahead of industry trends and maintain a competitive edge. As a result, innovativeness is critical in determining the success and long-term survival of entrepreneurial ventures, shaping their capacity to remain relevant and competitive over time.

### **2.1.1.2 Passion**

Passion, as an entrepreneurial characteristic, refers to the intense personal drive and enthusiasm an entrepreneur has for their business, ideas, and goals. It fuels their commitment to pursuing their vision, overcoming challenges, and persevering through obstacles. Hatak et al. (2021) argue that entrepreneurial passion is an inherent trait of entrepreneurs, and viewed the concept in terms of motivation stimulating the entrepreneur's behaviour. Entrepreneurial passion often manifests as a deep emotional investment in the success of the venture, motivating entrepreneurs to work tirelessly, take risks, and innovate in order to achieve their desired outcomes. . This passion not only energises the entrepreneur but also inspires and influences others, such as employees, partners, and customers, to engage with and support the business. Passion is a critical factor in many cognitive and motivational elements of the entrepreneurial process, such as the entrepreneur's effort. Entrepreneurs need to possess enthusiasm for development and competition, as this fosters active engagement in entrepreneurial activity. Enthusiasm enhances the work-related self-efficacy of the

entrepreneur and is positively related to the entrepreneur's work engagement. Matherne and Davis (2015) define entrepreneurial passion as attainable, conscious, and strong positive emotions that individuals exhibit when they perceive that their entrepreneurial activities are consistent with their own entrepreneurial identity during the process of participating in entrepreneurship. As noted by Patel (2017), entrepreneurial passion is fundamental to shaping entrepreneurial behaviour. It is not merely a generalized emotion but is specifically tied to activities that resonate with an entrepreneur's identity. For passion to be stimulated, these activities must align with the entrepreneur's sense of self and purpose. When individuals engage in tasks that affirm their entrepreneurial identity, they are more likely to experience entrepreneurial passion. This alignment between personal identity and business activities drives deeper emotional commitment and energizes the entrepreneur's pursuit of success.

## **2.2 Empirical Review**

Edlyn and Mohamad (2019) conducted a study to examine the role of innovativeness on business performance among small and medium enterprises (SMEs) in Kediri, East Java, Indonesia. The research adopted a survey design, employing a sample size of 228 respondents randomly selected from SMEs within the region. Primary data were collected using structured questionnaires, and the collected data were subsequently analysed using Structural Equation Modelling (SEM) to identify the relationships between innovation capability, entrepreneurship, and business performance. The findings of the study revealed that innovativeness had a significant positive impact on business performance, highlighting the crucial role these factors play in enhancing the overall performance of SMEs. Based on these findings, the study recommended that SMEs should actively encourage and invest in innovation capability to strengthen entrepreneurial activities, which, in turn, would lead to improved business performance. This suggests that innovation is a key driver of competitiveness and growth for businesses in emerging economies. However, the study contributes to a geographical gap, as it was not conducted in Kogi State, which the current study aims to address. Furthermore, Baum and

Bayhaqi (2019) investigated the impact of entrepreneurial passion on the performance of businesses in Bangladesh. Utilizing a survey research design, the study drew a sample of 253 SME owner-managers, from whom primary data were collected in the form of views and opinions through the administration of structured questionnaires. The data obtained from the survey were then analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM) to explore the path relationships among the key constructs.

The findings of the study indicated a positive and significant effect of entrepreneurial passion on SME performance. This highlighted the critical role that passion plays in driving entrepreneurial success, suggesting that entrepreneurs who are deeply passionate about their ventures are more likely to engage in behaviours that enhance performance. Passionate entrepreneurs are also more adept at leveraging limited resources and finding innovative solutions to challenges, thereby improving their business outcomes. However, the fact that the study was conducted in Bangladesh contributes to a geographical gap, which the current study seeks to fill by specifically focusing on businesses in Kogi State. In a related study, Samuel and Mujtaba (2018) examined the causal relationship between entrepreneurial passion and the performance of SMEs. The researchers employed a survey research design and collected primary data from a sample of 231 SMEs. The data were analysed using PLS-SEM for the purpose of testing pertinent hypotheses. The findings of the study revealed a positive but non-statistically significant impact of entrepreneurial passion on performance. This outcome suggested that, while entrepreneurial passion may have some level of influence on performance, it may not be strong enough to reach statistical significance within the context of this study. This finding contrasts with other studies that emphasize the importance of passion in driving entrepreneurial success, indicating that the relationship may be more complex than previously understood.

Adeyemo and Oladele (2022) empirically investigate how entrepreneurial characteristics such as risk-taking, innovativeness, and self-efficacy impact on SME performance. Using survey data from 450 SMEs, the authors find

that traits like risk tolerance and innovativeness significantly predict business growth and profitability. The research highlights that entrepreneurial mindset is critical for overcoming infrastructural and financial constraints typical in Nigeria, emphasizing the need for capacity development to enhance SME resilience and competitiveness. In another study, Ibrahim and Musa (2023) examined how entrepreneurial skills such as strategic planning, financial literacy, and networking affects SMEs. The study showed a positive correlation between these traits and the sustainability of SME. Analyzing data from 300 SMEs in Kano and Kaduna, the study reveals that entrepreneurial competence enhances operational efficiency and access to markets. The findings suggest that targeted capacity building in entrepreneurial skills could bridge performance gaps. Uche and Nnamdi (2023) investigate how traits such as innovativeness, perseverance, and proactiveness influence SME success in Nigeria. Using a survey of 350 SMEs in the North-Central zone, findings indicate that entrepreneurial mindset significantly enhances business growth and adaptability, especially in environments with infrastructural challenges like Kogi State

In another study, Adebayo and Olaleye, O. (2024) analyses how personality factors such as resilience, self-confidence, and innovativeness affect SME outcomes. Using a sample of 200 SMEs in the Middle Belt region, the study finds resilience and self-confidence to be strong predictors of business longevity and growth. It emphasizes that entrepreneurial characteristics fostered through training can significantly improve SME performance amid Nigeria's macroeconomic instability, relevant for regions like Kogi State. Analyzing data from 250 SMEs in Nigeria's Middle Belt, Eze and Chukwu (2024) shows that traits such as resilience, self-confidence, and risk propensity are positively correlated with business longevity and profitability. The study emphasizes that fostering entrepreneurial traits through training programs can improve SME performance amid Nigeria's economic volatility. Similarly, Nwosu and Adebisi (2024) finds that traits such as resilience, innovativeness, and self-efficacy significantly contribute to business resilience and expansion. This was based on a sample of 300 SMEs. The study recommends targeted

entrepreneurial development programs to enhance these traits.

Recently, Ojo and Adekunle (2025) explores how entrepreneurial orientation dimensions such as proactiveness, risk-taking, and innovativeness drive SME success across various sectors. The study, based on data from 500 SMEs nationwide, concludes that a proactive entrepreneurial orientation correlates with higher sales and market expansion. It advocates for policies that nurture entrepreneurial traits through capacity development programs to foster SME growth. Okeke and Akinbami (2025) investigates how competencies like strategic thinking, innovation, and leadership affect SME outcomes across sectors such as trade, manufacturing, and agriculture. Data from 400 SMEs reveal that entrepreneurial competencies are key drivers of performance, underscoring the importance of capacity building in enhancing SME performance.

### **2.3 Theoretical Framework**

The Resource-Based View (RBV) provides a framework for analysing and interpreting the resources of organizations to understand how they achieve sustainable competitive advantage. Central to the RBV is the notion that certain firm-specific attributes, particularly those that are difficult to imitate, serve as key sources of superior performance and competitive advantage (Barney, 1986; Hamel and Prahalad, 1996). These unique resources encompass a range of elements, including physical assets, human capital, organizational processes, and intellectual property, which cannot be easily transferred or purchased by competitors. For instance, resources that necessitate an extended learning curve or a significant shift in organizational climate and culture are more likely to be distinctive to a particular firm. This uniqueness contributes to their inimitability, making it challenging for rival organizations to replicate these advantages. According to Conner (1991), the variance in performance among firms can largely be attributed to their possession of these unique inputs and capabilities. In essence, the RBV posits that by leveraging these hard-to-imitate resources, organizations can cultivate a

sustainable competitive edge, ensuring their success in an increasingly competitive landscape. Consequently, understanding and effectively managing these resources becomes paramount for organizations striving for long-term performance and market.

Essentially, the Resource-Based View (RBV) theory posits that an organization's unique resources and capabilities are the primary sources of competitive advantage and superior performance. It assumes that valuable, rare, inimitable, and non-substitutable resources enable firms to achieve sustained success. In the context of studying the nexus between entrepreneurial characteristics and SME performance in Kogi State, RBV highlights the importance of entrepreneurial traits such as innovation, risk-taking, and resource management as key internal factors influencing business outcomes. This perspective underscores that SMEs with distinctive entrepreneurial qualities can leverage their resources effectively to enhance performance. Therefore, RBV provides a valuable framework for understanding how individual entrepreneurial traits translate into competitive advantages for SMEs in the region.

### **METHODOLOGY**

Descriptive research design was employed to investigate the nexus between entrepreneurial characteristics and SME performance in Kogi State. This approach was chosen to gain a comprehensive understanding of the prevailing entrepreneurial characteristics within the region's SME sector. It allowed for detailed exploration of the current state of entrepreneurial practices and performance indicators, without the need for manipulation of variables. Descriptive research facilitated the identification of potential relationships and trends between different entrepreneurial traits (e.g., innovation, risk-taking) and various performance measures (e.g., profitability, growth). This preliminary understanding of the existing situation proved essential for further, potentially more rigorous, research. The results provided a foundational context for subsequent analyses. This approach was also chosen due to the relative ease of data collection and the

feasibility of surveying a large sample of SMEs in Kogi State.

The population of the study comprised owner-managers of all registered SMEs in Kogi State. The most recent data provided by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN, 2021) puts this number at 10,728. The adjusted sample size was, therefore, 502 respondents. Purposive sampling was used in the selection of survey participants across all the thirteen Local Government Areas (LGAs) of the state. Selections were made based on locations within each LGA that were determined to have high levels of economic activities. Businesses operating within these areas would naturally face a dynamic operating environment and would, in turn, be perfect for showcasing how entrepreneurial characteristics were applied towards remaining relevant in the market.

The data used in the study was primary in nature, collected as self-reported survey responses from participating respondents. These reflected the views and opinions of the survey sample to closed-ended items of a structured questionnaire. The questionnaire itself, as the instrument for data collection, was designed in two main sections. The first section, A, was developed to collect preliminary information about respondents, including sex and years of business experience. On the other hand, Section B contains measurement scales for variable constructs, measured with indicator items using the 5-point Likert scale format. The measurement scales contained in the questionnaire were adapted from well-established studies in the entrepreneurship and business literature. Their utilization in the study was informed by the need to provide a robust foundation for assessing the relationships between entrepreneurial characteristics and SME performance in the context of Kogi State.

## DATA PRESENTATION AND ANALYSES

**Table 1: Cronbach’s Alpha, Composite Reliability and Average Variance Extracted**

Construct	Cronbach's Alpha	Composite nReliability		Average Variance Extracted (AVE)
		rho_A	rho_C	
Innovativeness	0.872	0.875	0.907	0.662
Passion	0.900	0.903	0.923	0.666
Performance	0.890	0.902	0.919	0.696
Risk-Taking	0.853	0.866	0.899	0.691

In addition to reliability, the measurement model was also assessed in terms of validity. Two types of validity were tested – convergent and divergent. The former was achieved with the use of Average Variance Extracted (AVE) values. As recommended by Hair and Sarstedt (2022), AVE should be at or more than 0.5 for a construct to be considered valid. As obtained values surpassed this threshold, convergent validity was confirmed for all constructs. Divergent validity was measured using the

Heterotrait-Monotrait Ratio (HTMT). The measure was used to indicate the uniqueness of model indicators in measuring their intended constructs. The study used the upper band of 0.9 as suggested by Dzin and Lay (2021). HTMT values are, thus, to be lower than this figure to indicate the presence of divergent validity. Computed HTMT values, shown in Table 12, indicated that divergent validity was confirmed for all constructs.

**Table 1: Heterotrait-Monotrait Ratio (HTMT)**

Construct	Innovativeness	Passion	Performance
Innovativeness			
Passion	0.685		
Performance	0.437	0.410	
Risk-Taking	0.694	0.746	0.416

Following The confirmation of the accuracy of the measurement model, the structural model was evaluated. An essential aspect of this was a check for multicollinearity, which could lead to inaccurate results. As indicated in Table 13, the **Table 3: Path Coefficients**

absence of multicollinearity was confirmed by low Variance Inflation Factor (VIF) values for all constructs, given that in all cases, these values were less than 3.

N	$\beta$	Mean	STDEV	t	P Values
Innovativeness n-> Performance	0.213	0.217	0.071	3.017	0.003
Passion n-> Performance	0.145	0.146	0.073	1.983	0.047
Risk-Taking -> Performance	0.149	0.150	0.071	2.088	0.037

Note. Extracted from Table nC7.

**4.3 Discussion of Findings**

Findings from the study generally indicated that the entrepreneurial characteristics of business owners significantly influenced the level of performance of SMEs in Kogi State. Specifically, innovativeness was found to have a positive effect on performance, suggesting that businesses in Kogi State with higher levels of innovativeness among their leaders would experience increased performance levels. This finding aligns with the research of Edlyn and Mochamad (2019), Rangarirai (2018), Hongbo and Lucien (2020), and Nwankwo and Ezeibe (2021), which also highlighted the importance of innovativeness in enhancing the performance of SMEs. These studies collectively support the notion that fostering a culture of innovation within businesses can lead to improved outcomes, reinforcing the critical role of

entrepreneurial attributes in driving success in the SME sector. Additionally, passion, as an entrepreneurial characteristic, demonstrated a positive and significant influence on SME performance in the state. The exhibition of behaviours such as being passionate about running the business and making sacrifices to ensure its sustainability is crucial for achieving superior performance. This finding is supported by researchers such as Karimi (2020), Baum and Bayhaqi (2019), and Wei et al. (2022), who reported similar results in their studies, highlighting the pivotal role of entrepreneurial passion in driving business success. However, this finding contrasts with the results of Samuel and Mujtaba (2018), who did not find a statistically significant effect of entrepreneurial passion on business performance. This discrepancy suggests that while passion may be a vital factor for many SMEs, its impact might

vary depending on other contextual elements or industry-specific factors, warranting further investigation into the conditions under which passion translates into performance outcomes.

## **CONCLUSION AND RECOMMENDATIONS**

Insights from the study survey indicated that a significant proportion of respondents viewed their companies as lacking innovative practices and competitive postures. There was a notable split in perceptions, with nearly half of the respondents disagreeing with positive statements about innovativeness, while a significant minority agreed with them. This suggests that while some businesses in Kogi State were making strides in innovation and competitiveness, many others were not, potentially due to perceived risks or other barriers. The study also revealed a strong sense of passion and emotional investment among a majority of respondents towards their businesses. However, there was also a significant portion of business owners who did not share the same level of passion or emotional connection, which can impact their motivation and overall business performance. Understanding the factors that drive passion and addressing the concerns of those who are less passionate can help in creating a more engaged and motivated entrepreneurial community in Kogi State. Additionally, a notable split was indicated in risk-taking behaviour among respondents. While a substantial portion of respondents exhibited risk-averse tendencies, a significant minority were willing to take substantial risks for high returns and competitive advantages. Furthermore, survey data collected indicated a significant portion of businesses face challenges in achieving their targeted sales, profit, and market share growth, as well as overall business objectives. However, a substantial minority of businesses are meeting these targets and are satisfied with their performance. Efforts to identify and address the factors contributing to these challenges, as well as leveraging the strengths of those businesses that are performing well, could help improve overall business performance in Kogi State.

## **5.2 Recommendations**

The following recommendations were made based on the findings of the study.

- i. To foster innovation, passion, and risk-taking among SMEs in Kogi State, practical strategies include providing targeted training and capacity-building programs that enhance entrepreneurial skills and creativity. Furthermore, there is need to establish innovation hubs and business incubators can create platforms for idea exchange, collaboration, and experimentation. Again, encouraging a supportive entrepreneurial culture through mentorship, success stories, and recognition programs can boost passion and confidence. Offering accessible financial incentives, such as grants or low-interest loans, can reduce perceived risks and motivate risk-taking behaviors.
- ii. Additionally, fostering partnerships with universities, government agencies, and industry stakeholders can facilitate resource sharing and knowledge transfer, creating an environment conducive to innovation and bold entrepreneurial pursuits. With regards to innovativeness being identified as the entrepreneurial behaviour with the most significant influence on performance, there is the critical need for SME owner-managers in Kogi State to prioritise fostering an innovative culture within their businesses. In terms of passion, owner-managers should invest in their own personal development to sustain and enhance their drive for success. Leadership development programs tailored to cultivating passion and commitment are crucial.

## **REFERENCES**

- Adebayo, T., & Olaleye, O. (2024) Personality traits and business performance of SMEs in Nigeria's Middle Belt. *African Journal*

- of Business and Management, 8(3), 112-130.
- Adeyemo, O., & Oladele, O. (2022). Entrepreneurial traits and SME growth in Nigeria: Evidence from Southwest Nigeria. *Journal of Small Business and Entrepreneurship Development*, 10(2), 45-62.
- Asenge, E. L., Diaka, H. S., & Soom, A. T. (2018). Entrepreneurial mindset and performance of small and medium scale enterprises in Makurdi Metropolis, Benue State-Nigeria. *International Journal of Innovation*, 6(2), 124-146.
- Ayandibu, A. O., & Houghton, J. (2017). The role of Small and Medium Scale Enterprise in local economic development (LED). *Journal of Business and Retail Management Research*, 11(2), 133-139.
- Barine, L. O. (2021). Entrepreneurial characteristics and performance of small and medium scale enterprises in Port Harcourt metropolis. *World Journal of Entrepreneurial Development Studies*, 6(1), 11-25.
- Barinua, V., & Okoro, M. C. (2022). Entrepreneurial characteristics and business performance in small and medium enterprises in Enugu State. *International Journal of Business & Entrepreneurship Research*, 13(3), 130-142.
- Baum, & Bayhaqi (2019). The relationships between entrepreneurial passion, entrepreneurial bricolage, and SMEs performance in Bangladesh. *International Journal of Economic, Business and Finance*, 2(8), 373-396.
- Bello, A. O. (2023). Influence of entrepreneurial characteristics (risk-taking and level of innovation of SMEs) on business performance of SMEs in Ibadan Metropolis. *Proceedings Series*, 2, 198-211.  
<https://doi.org/10.31058/j.ps.2024.20019>
- Bowman, N. (2019). Female and male entrepreneurs: Psychological characteristics and their role in gender-related discrimination. *Journal of Business Venturing*, 5(1), 29-36.
- Bulut, Y. (2019). An evaluation of entrepreneurship characteristics of university students: An empirical investigation from the Faculty of Economic and Administrative Sciences in Adnan Menderes University. *International Journal of Economic Perspectives*, 4(3), 559-568.
- Daniel, D. J., & Chukwuemeka, E. J. (2023). Entrepreneurial orientation and the performance of small and medium enterprises (SMEs) in Nigeria. *International Journal of Innovative Research & Development*, 12(8), 106-114.
- Daniel, D. J., & Park, J. H. (2015). Entrepreneurial orientation and the performance of manufacturing SMEs in Nigeria: The mediating roles of technological capabilities. *Journal of CEO and Management Studies*, 18(4), 21-49.
- Edlyn, K. A., & Mochamad, A. M. (2019). Examine the role of innovation capability on business performance at small medium enterprises Kediri, East Java, Indonesia. *International Journal of Economic, Business and Finance*, 2(8), 373-396.
- Eze, C., & Chukwu, J. (2024). Personality traits and entrepreneurial success among Nigerian SMEs: Evidence from the Middle Belt. *African Journal of Business and Management*, 11(2), 100-115.
- Gartner, W. B. (1990). What are we talking about when we talk about entrepreneurship? *Journal of Business Venturing*, 5(1), 15-28.
- Hatak, I., Chang, M., Harms, R., & Wiklund, J. (2021). ADHD symptoms, entrepreneurial passion, and entrepreneurial performance. *International Journal of Economic,*

- Business and Finance, 5(7), 1693–1713.  
<https://doi.org/10.1011/2021-3590.7.1.5>
- Hongbo, L., & Lucien, A. K. (2020). Effect of innovation on Small Medium Enterprises (SMEs) performance and competitiveness: Evidence from Côte d'Ivoire. *Research Journal of Business and Management*, 2(3), 412–429.
- Ibrahim, M., & Musa, S. (2023). The impact of entrepreneurial skills on SME performance in Northern Nigeria. *Nigerian Journal of Entrepreneurship and Business Studies*, 15(1), 78–94.
- Ma, C. P., Gu, J. B., Dou, J. S., & Zhang, Q. Q. (2017). A study on the influence mechanism of entrepreneurial passion on new venture performance. *Science and Management Technology*, 11, 142–154.
- Matherne, B. P., & Davis, C. (2015). A tale of passion: New insights into entrepreneurship from a parenthood metaphor. *Journal of Management and Science*, 2(4), 23–45.
- Muhammed, Y. (2016). Effect of entrepreneurial competencies on the performance of small and medium scale enterprises in Kaduna State (Master's dissertation). Ahmadu Bello University, Zaria.
- Muritala, T. A., Awolaja, A. M., & Bako, Y. A. (2021). Small and medium enterprises as a strategy for employment generation and sustainable development in Nigeria. *Management Science Letters*, 11(4), 1291–1300.
- Nwankwo, A. A., & Ezeibe, C. V. (2021). Influence of innovation on SMEs performance in Onitsha. *Research Journal of Business and Management*, 2(3), 412–429.
- Nwosu, K., & Adebisi, T. (2024). The role of entrepreneurial traits in SME growth and sustainability in Nigeria's Central region. *Nigerian Journal of Economics and Business*, 17(4), 210–228.
- Ojo, O., & Adekunle, A. (2025). Entrepreneurial orientation and performance of SMEs in Nigeria: A sectoral analysis. *International Journal of Entrepreneurship and Innovation*, 12(4), 201–220.
- Okeke, P., & Akinbami, F. (2025). Entrepreneurial competencies and performance of SMEs in Nigeria: A sectoral perspective. *International Journal of Entrepreneurship and Innovation*, 13(1), 22–40.
- Patel, P. C. (2017). Measuring entrepreneurial passion: Conceptual foundations and scale validation. *International Journal of Economic, Business and Finance*, 2(8), 373–396.
- Pinto, J. C., & Costa, J. (2017). Market orientation and entrepreneurial passion in technology startups: Evidence from Portugal. *International Journal of Innovation Management*, 21(6), 1750047.
- Rangarirai, M. (2018). Effect of innovation and SMEs performance. *Journal of Business Venture Insights*, 8(3), 24–32.
- Samuel, A., & Mujtaba, A. (2018). Entrepreneurial passion and SMEs' performance: Moderating effects of financial resource availability and resource flexibility. *Journal of Business Venture Insights*, 8(3), 24–32.
- Uche, C., & Nnamdi, O. (2023). Entrepreneurial mindset and business performance of SMEs in Nigeria's North-Central region. *Journal of Small Business and Entrepreneurship Research*, 9(3), 55–70.