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THE IMPACT OF ENTREPRENEURIAL ORIENTATION ON SMEs' PERFORMANCE IN NIGERIA: THE MODERATING ROLE PLAYED BY ENTREPRENEURIAL ECOSYSTEMS

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ABSTRACT

Scholars often agree with the fact that SMEs have a significant effect on nations' overall Gross Domestic Product (GDP). However, the process to establish SME performance had been widely debated. Hence, scholars had devoted much effort to identifying the distinctive ability of individual entrepreneurs, understanding the market, and responding strategically to the unprecedented market forces. Given this, entrepreneurial orientation (EO) has become an essential means of strategic decision making among firms, especially small and medium enterprises (SMEs'). Theoretical evidence from previous studies showed a lack of consensus among researchers on the influence of EO on SMEs' performance. Therefore, this study investigates the influence of EO on the performance of SMEs in Nigeria through the moderating role of the entrepreneurial ecosystem (EE). The study employed a mixed research method to collect primary data from the selected SMEs in Nigeria. A structured questionnaire was used in the quantitative research phase to collect data from 531 SMEs using a cross-sectional study design and stratified random sampling technique. Partial Least Square – Structural Equation Modelling (PLS-SEM) approach was applied to test the hypotheses. Findings from the quantitative analysis revealed that four of the EO dimensions significantly influence SMEs' performance among the surveyed SMEs. In contrast, a significant relationship between competitive aggressiveness and SMEs' performance could not be established in the study context. Also, ecosystem and entrepreneurial attributes were introduced as moderators and mediators. Furthermore, the researcher further employs a qualitative research method to confirm the empirical findings. In this regard, the result reveals several competing results on the relationship between EO dimensions and SMEs' performance. The implications and contributions of the observed results were fully discussed.

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To my dearest husband and children (Francis, Anita, Isabel, and Sophia) I truly lack words to convey my deepest appreciation of your constant love, support, understanding and patience in the years this project has taken. I love you all and am indebted to your love. God bless you all.

Finally, I like to express my deepest appreciation to God who gave me this rare privilege, Psalm 8: 4-8, what is man that you are mindful of him, the son of man that you care for him? You made him a little lower than the heavenly beings and crowned him with glory and honor. the birds of the air, and the fish of the sea, all that swim the paths of the seas. O LORD, our Lord, how majestic is your name in all the earth!

DEDICATION

I dedicate this project to Almighty God, the beginning, and the ending, who in His unfailing love saw me through this project.

To my husband, my children (Francis, Anita, Isabel, Sophia) and my family at large who gave me their love, care, and support. No words can express my gratitude for them.

DECLARATION

I declare that no outputs submitted for this degree have been submitted for a research degree of any other institution. I also confirm that this work fully acknowledges opinions, ideas, and contributions from the work of others.

Any ethical clearance for the research presented in this commentary has been approved. Approval has been sought and granted by the Faculty Ethics on 10/03/2019.

 I declare that the Word Count of this thesis is 62381

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Signature:

Date: 17/05/2021

CHAPTER ONE

1.1   Background to the Study

Small and medium enterprises (SMEs) are the keystone of the business environment in every economy (Hossain & Al Sheq, 2019). They constitute a significant force or driving economic development and progress (Qamruzzaman & Jianguo, 2018). SMEs have changed the dynamics in most business organisations, both in developed and emerging economies, due to their contribution to national income, new job creation, and the generation of additional financial capital for businesses (Gilmore et al.; Wang, 2016; Hossain & Al Sheq, 2019).

Generally, studies reveal that SMEs have had a significant contribution to developed and developing economies. Figures provided by Keskin et al., (2010) reveal that SMEs contribute over 55% and 95% gross domestic product (GDP), 65% and 70% employment high-and-middle income economies.

SMEs have recently been shown to represent about 90% of businesses and contribute to more than 50% of employment globally (World Bank, UD). In developing economies, formal SMEs contribute about 40% of the gross national product (GNP; World Bank, 2020); however, this number is significantly higher if the informal SMEs are included. Informal SMEs are SMEs that operate without any formal procedure or laid down rules governing them in any given location (Fairman & Yapp, 2005)

Like SMEs in other countries, the ones in Nigeria have contributed significantly to the country's economy and overall employment. Having 17.4 million businesses, SMEs represent 96% of total businesses in Nigeria, accounting for about 48% of the national

GDP and 84% employment (Oyinyechukwu, 2020). Besides, SMEs' account for about 50% of white-collar jobs and nearly 90% of the manufacturing sector by several enterprises. According to the World Bank (UD), 'more than 600 million jobs will be required by 2030 to absorb the workforce created by SMEs'. Hence, global attention is on SME development as they produce jobs and eradicate unemployment (Oyinyechukwu, 2020).

Over the years, government and non-governmental agencies have made various financial efforts by providing loans and supportive agencies to enhance SMEs' performance. For example, in 2017, the Nigerian Federal Government established the Development Bank of Nigeria (DBN) with the principal objective to scale up small businesses (DBN, 2017). Examples of other microcredit institutions are the Nigerian Bank for Commerce and Industry (NBCI), the National Economic Reconstruction Fund (NERFUND), the People's Bank of Nigeria (PBN), the Community Banks (CB), the Nigerian Export and Import Bank (NEXIM). The mandates of these institutions are to liberate the banking sector from SMEs' burden of providing access to finance and enhance their performance (Oyedokun & Micah, 2019).

Despite these efforts, SMEs operating in developing economies such as Nigeria are plagued with high failure rates, poor performance, and underdevelopment (Eniola & Entebang, 2015; Adegbuyi et al., 2018). In such a context Entrepreneurial orientation (EO hereafter) was identified as one of the inner capabilities that enhance SMEs' success in a challenging business environment (Laukkanen et al., 2013; Obumneke & Nimfa, 2018; Hossain & Al Sheq, 2019).

EO is defined as the set of processes, practices, and decision-making styles that a business organisation exploits to enter a new market (Lumpkin & Dess, 1996). EO constitutes the phenomenon that reflects the managerial competence of firms to embark on proactive and aggressive initiatives to change the competitive scene to their advantage (Arshad et al., 2013). It has also been interpreted as a company's willingness in the business context (Fauzul et al., 2010). Furthermore, Lumpkin (2001) describes EO as firms' orientation and attitudes towards ongoing entrepreneurship processes and culture. Given this, firms without an appropriate EO face difficulty in enhancing their performance and competitiveness within dynamic and volatile business environments (Rauch et al., 2009).

Entrepreneurship and management literature considered EO an essential concept in SMEs' strategic decision-making (Adegbuyi et al., 2018). Meanwhile, the increased globalisation has influenced the way SMEs operate. Hence, EO has become a critical driving force for achieving SMEs performance (Obumeke & Nimfa, 2016; Rezaei & Ortt, 2017; Adegbuyi et al., 2018; Bature et al., 2018).

Contrary to the assertion made by authors including Arshad et al. (2013), Lumpkin and Dess (1996), and Fauzul et al. (2010), recent debates addressed the scientific domain of EO due to a lack of consensus on what constitutes EO and its relationship with SMEs' performance (Amin, 2015; Kraus et al., 2012; Obumeke & Nimfa, 2016). Given this, several types of research have emerged to explain the complex phenomenon of entrepreneurship transcending the basic traditional concept of new business creation. Gartner (1985) argued favouring a multi-dimensional entrepreneurship framework based on four components: individual, process, organisation, and environment. Most

research in literature has focused on the theoretical issues affecting entrepreneurship, but the focus has recently shifted to the concept of EO (Amin, 2015; Arshad et al., 2013; Covin et al., 2006; Kraus et., 2012).

Researchers argued EO to be a strategic means of enhancing SMEs' performance (Morgan et al., 2006; Bakar and Ahmad, 2010). Nevertheless, there are different opinions about the contribution of EO to SMEs performance. Examples of these studies are not limited to Beck (2015), Dixon (2012) believed EO has a positive effect on the operational efficiency of SMEs, especially when consideration is given to factors such as proactiveness, innovativeness, and risk-taking. Despite this, the reality facing SMEs in Nigeria includes a high failure rate (Abiodun & Ibidunni, 2014). The limited capacity of managers to be innovative has been identified as one reason for this declining performance of SMEs. Consequently, it becomes important to assess the role of EO in the performance of SMEs in developing economies, such as Nigeria. Ibeh and Young (2001), Duru et al., 2018) and (Isichei et al., 2020).

1.2   Statement of the Research Problem

The performance of SMEs depends on the strategies employed by the owner/managers, internal resources, and external factors (Eikelenboom & de Jong, 2019; Sitharam & Hoque, 2016). Nevertheless, entrepreneurial literature identified EO as a critical element that enhances the performance of SMEs (Adegbuyi et al., 2018; Bature et al., 2018; Obumeke & Nimfa, 2016; Rezaei & Ortt, 2017) that aids the formulation and implementation of several strategies and policies to their advantage over other competitors in their primary and, or extended market (Ferreira et al., 2020; Lumpkin & Dess, 2001; Genc et al., 2019). However, results from empirical studies over the years

present inconsistent findings on the relationship between EO and SMEs' performance; as such, there is a lack of consensus among researchers on the influence of EO on SMEs' performance (Pratono & Mahmood, 2015; Obumeke & Nimfa, 2016).

For example, scholars such as Al-Swidi & Hossain (2012), Kosa et al., (2018), Leonida et al., (2011), Linton (2016), Sidek (2016), and Zhai et al. (2018) conclude a significant and positive influence of EO on SMEs' performance. In contrast, Wang and Fang (2012) found that EO negatively influences SMEs' performance. Whereas, considering the dimensions of EO, Wales et al., (2011) argue the relationship between EO and SMEs' performance as a complex relationship transcending the direct positive results argued by Kosa et al. (2018), Leonidas et al. (2011), Linton (2016) and Sidek (2016). Given the observed inconsistencies and complexities in the empirical findings on the relationship between EO and SMEs' performance, Magill (2011) suggest introducing a moderator that identifies state requirement for casual relationship occurrence.

A fact from the studies of Eikelenboom and de Jong (2019) and Sitharam and Hoque (2016) is that SME performance is the outcome of several strategies employed by owners/managers. While previous studies have examined the influence of EO on SME performance, little attention has been paid to the role of moderators in this relationship (Disannayaka & Semasingha, 2016). Meanwhile, scholars such as Mu and Di Benedetto (2011), Rauch et al. (2009), and Saeed et al. (2014) had echoed the need for introducing a suitable moderator capable of enhancing the relationship between EO and SMEs' performance.

Hence, introducing moderating variables between EO and SMEs' performance will enhance precise interpretations of the results (Real et al., 2014). Several moderators have been suggested on EO and SME performance (Kosa et al., 2018).

Besides, the tenets of resource-based view theory (RBV) posit that a firm's superior performance is contingent on both the tangible and intangible resources of the firms, which are unique, rare, inimitable, and valuable (Barney, 1991; Penrose, 1959). According to RBV, entrepreneurs' demographic characteristics are valuable, unique, and rare resources contributing to their competitiveness and performance. However, researchers have identified a different impact of demographic characteristics on EO because entrepreneurs may not have the essential characteristics that yield better performance (Sajilan et al., 2015).

In light of these considerations, this study examines the effect of multiple dimensions of EO on SMEs' performance in Nigeria by investigating the moderating role of an entrepreneurial ecosystem within which SMEs operate on their performance.

Globally, previous studies have conceptualised the elements of an entrepreneurial ecosystem (Ejo-Orusa, 2019), such as national culture (Disannayaka & Semasingha, 2016), access to finance (Khan et al., 2020), and environmental turbulence (Pratono & Mahmood, 2015). However, studies from developing economy such as Nigeria, to date remains at their infancy stage. This is because fewer scholars gave the needed attention to empirically investigate studies on entrepreneurial performance within the Nigerian SME business context.

Additional insights into the existing literature reveal the significant contribution of entrepreneurial demographics to SMEs performance. For example, Atef & Al-Balushi, 2015; Remeikiene et al., 2013) posited a significant influence of entrepreneurial demography on SMEs' performance. Likewise, earlier investigations by Cressy and Storey (1995) and Kautonen (2008) conclude that older entrepreneurs are best in sustaining the growths of SMEs. Contrarily, the assertion by these scholars was deemed subjective (Genty et al., 2015). Therefore, the findings on the influence of entrepreneurial demography cannot be ascertained, given the mixed evidence observed.

Some of the popular demographic attributes investigated by earlier scholars include age, gender, education level, entrepreneurial experience, and family background (Cowling & Taylor, 2001; Kozubikova et al., 2015; Sajilan et al., 2015). From these numerous factors or attributes, age, gender, education level, and entrepreneurial experience are selected in this research. The rationale guiding these selections lies in the fact that the selected variables are prominent among cooperate entrepreneurship investigations within the research scope (Cowling & Taylor, 2001; Kozubikova et al., 2015; Sajilan et al., 2015).

Further insights on why there are conflicting reports among scholars pointed to the researchers' philosophical stand. The researcher observed that some scholars adopt the positivist research approach by employing a quantitative research method to examine the said relationship (Hoque, 2018; Kraus et al., 2012; Shehu & Mahmood, 2014). In contrast, others not limited to (Fairoz et al., 2010; Rodríguez-Gutiérrez et al., 2015) employs the qualitative research approach, research view, where interview, focus group or case studies were employed to collect and analyse their research data. These two

research methodologies oppose each other; nevertheless, these views present significant and impactful findings. Nonetheless, these findings are plagued with inconsistencies. Therefore, presenting an ongoing methodological issue that requires urgent attention.

The positivist philosophical school of thoughts are said to be based on a realist ontology that observed and measured phenomenon directly through quantitative means; hence, there must be a causal relationship in the research, the researcher is independent of the investigation, and the research must have deductions and hypotheses, and the replicability of their research, the reliability of observation and the generalisability of research findings (Easterby-Smith et al., 2012; Holden & Lynch, 2004; Sekaran & Bougie, 2013).

Meanwhile, the qualitative research view (epistemology), constructivism, or interpretivism is concerned about in-depth knowledge of a phenomenon instead of building on existing theories contrary to the positivist school of thought. Insights from scholars such as Creswell (2009) and Östlund et al. (2011) in the face of methodological gap and inconsistent findings suggest combining both research views calling it triangulation or mixed-method approach. Given this, the advantages of using the triangulation research approach are not limited to having a deeper insight into the causality of the relationship observed using the quantitative investigation and determining the subjective truth with the qualitative research method. On this note, the researcher identifies the relationship and causes of the existing relationship between EO and SMEs performance via a mixed-method research approach.

1.3 Research Questions

Based on the background and research problem discussed in the previous sections, a major concern of this study is to examine how EO leads to better SME performance. The study was conducted in two phases to guide the author in obtaining a more profound understanding of the identified problem. In the first phase – namely the *quantitative phase* - the author attempted to look at statistical relationships among a set of variables capturing the dimensions of EO, the demographic characteristics of entrepreneurs, the entrepreneurial ecosystem, and SME performance. Four main research questions set out below guided the first phase of the study:

1) Is there any significant relationship between EO SMEs' performance?

2) Is there any significant relationship between entrepreneurs' demographic factors and EO?

3) Is there any significant relationship between demographic factors, EO, and SMEs' performance?

4) Does the entrepreneurial ecosystem moderate the relationship between EO and SMEs' performance?

In contrast, the second phase – namely, the *qualitative phase* is concerned with understanding from a qualitative research lens how EO impacts SMEs performance- the author aimed to understand, explain, and triangulate the findings of the quantitative phase in a qualitative stance. As such, the research could converge, complement, and diverge the findings on the relationship between EO and SMEs' performance using the employed qualitative and the quantitative research methodologies as presented by

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Östlund et al. (2011), or help the researcher to understand the complex relationships between the constructs under investigation (Creswell, 1999).

1.4   Research Objectives

Sequel to providing answers to the research questions stated above using quantitative and qualitative research approaches; hence, this research aims to fulfil the following objectives:

1) To examine using quantitative research methodology the significant relationship between EO and SMEs performance.

2) To statistically determine the relationship between entrepreneurial demographics and EO.

3) To ascertain the interrelationship between the variables under investigation, namely demographic factors, EO, and SMEs' performance.

4) To empirically assert the moderating influence of the entrepreneurial ecosystem on the relationship between EO and SME performance.

Meanwhile, using the qualitative research method to support the statistical findings, the research aims to understand the complex nature of the relationship between EO and SMEs' performance. This will be achieved by understanding the nature of the relationship (significant influence via a quantitative approach) followed by understanding why and how the relationship occurs by engaging a qualitative research methodology (Östlund et al., 2011; Creswell, 1999).

1.5   Significance of the Study

This study aims to establish a link between the demographic characteristics of entrepreneurs, the dimension of EO, entrepreneurial ecosystem, and SMEs' performance to expand the knowledge, theories, and practices related to entrepreneurship in Nigerian SMEs. Besides, this study aims to clarify the relationship between the demographic characteristics of entrepreneurs, the dimension of EO, entrepreneurial ecosystem, and SMEs' performance by developing an integrative and comprehensive framework. Previous studies have investigated the influence of EO on SMEs' performance, corroborating the importance of entrepreneurial ecosystem as a moderator of the influence of EO and SMEs' performance, and indicating the entrepreneur's demographic characteristics as a predictor of EO (see Saeed et al., 2014; Rauch et al., 2009).

More importantly, and relating to the existent body of knowledge, this study contributes to a meaningful examination of the resource-based view theory (RBV) and contingency theory tenets. As RBV posits that the superior performance of firms is contingent on both their tangible and intangible resources (Kamasak, 2017; Surroca et al., 2010), the study aims to establish how the entrepreneur's orientation based on features such as innovativeness, risk-taking, competitive aggressiveness, autonomy, and perseverance.

1.6   Research Scope

The samples were chosen in this research consist of owners/managers operating businesses categorised under SMEs in Nigeria. This research objective was to investigate the perceived moderating effect of the entrepreneurial ecosystem on the relationship between EO and its dimension (innovativeness, proactiveness, risk-taking,

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competitive aggressiveness, and entrepreneurial autonomy) among SMEs operators in the selected eight (8) SMS sectors, namely manufacturing, wholesale/retail, construction, accommodation, food services, education, transport, and real estate in Nigeria.

Furthermore, the data collection process was conducted using a mixed-method or triangulation research approach. The rationale of using a triangulation research methodology lies in the fact that the researcher intends to gain a deeper insight into the established relationship using a quantitative research method.

The researcher engages the quantitative research method to gather the needed data by distributing a set of predesigned questionnaires to the identified target population from which the samples were randomly selected the SMEs located in Southwestern Nigeria. The items used in designing the questionnaire were adapted from previously validated questionnaires which several entrepreneurial scholars had adopted.

The researcher adopts the qualitative research approach to verify the relationship observed between the quantitative research methodology variables. Given this, the qualitative research approach is used to gain a deeper insight into the complex and inconsistencies reported on the relationship between EO and its dimensions and SMEs' performance.

1.7   Organisations of the Research

Chapter One: The first chapter of the research opens the whole research work by starting with the study background, followed by identifying the problem statement,

research question, and objectives. Also, this chapter presents the significance of the study, its scope, and the research outline.

Chapter Two: The second chapter presents the review of relevant literature to this investigation. The chapter starts with the overview of SMEs in the research context, that is, Nigeria. The research framework follows this. Under the research framework, the researcher adopts three (3) theories, namely the Resource-Based View (RBV), Cartesian, and the Contingency theories were employed to support this research work philosophically. After this, the relevant literature on EO and other investigated constructs was reviewed. This was followed by the research propositions, that is, the relationship between the variables under investigation. Also, this chapter explicitly explains the moderating role of the entrepreneurial ecosystem was conceptually examined.

Chapter Three: The third chapter illustrates and describes the methodology and methods employed to develop this study. In this chapter, the research approach contains the quantitative and qualitative research methods employed in the research. The quantitative research method describes the researcher's approaches to distributing the pre-designed questionnaire to the target population and the randomly selected samples. Meanwhile, this chapter also explains in detail the employed qualitative research approach used to validate the quantitative research findings. This chapter was concluded by detailing the research validity and reliability methods implemented to develop this study.

Chapter Four: The fourth chapter details the quantitative research analysis. These include the assessment of outliers, normality, linearity, and descriptive statistics. Furthermore, this chapter presents the principal data analysis where the PLS-SEM statistical software was used in conducting the confirmatory factor analysis, measurement model as well as assessing the data measurement model. After these steps or procedures, the chapter presents the hypotheses carried out via structural model assessment.

Chapter Five: The fifth chapter in this research work presents the qualitative research data analysis employed in this investigation. It presents the findings gathered from the semi-structured interviews which were conducted after analysing the quantitative data.

Chapter Six: The sixth chapter presents the combined discussion on the quantitative and qualitative research methods findings. This section discusses the research hypotheses and objectives of the study, considering the results of the data analysis. The discussion is presented in based on the hypothesised relationships in this study.

Chapter Seven: The seventh chapter concludes the thesis. It presents the research implications, recommendation, and conclusions. The theoretical, methodological and the practical implications were detailed in order to demonstrate the study's impact and contribution. This section also discusses the limitations of the study and makes recommendations for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1   Introduction

This chapter presents an overview of SMEs in Nigeria, expanding on the concept of EO as a critical element that defines the entrepreneurial purpose of both individual entrepreneurs and SMEs in terms of performance. Besides, this chapter also discusses the Cartesian approach, the configurational approach, the RBV, and contingency theory, identified as the main theories underpinning this study, expanding on innovativeness, proactiveness, risk-taking, competitive aggressiveness, and entrepreneurial autonomy as the dimensions of EO. Meanwhile, the last section of this chapter presents the research framework; the framework was formulated and guided based on the empirical findings and propositions observed from earlier studies.

2.2   Overview of Small and Medium Scale Enterprise in Nigeria

Nigeria is one of the largest economies in Sub-Saharan Africa (Etuk & Baghebo, 2014; Mekwunya, 2018). Although the country's economy relies primarily on oil production, the number of business entities engaging in all economic activities has grown in recent years. SMEs are an essential element of the recent economic development in Nigeria; they are drivers of innovation and competition and have outgrown large companies in this regard by a wide margin (Etuk et al., 2014).

Nigeria SMEs' are classified and defined according to the following criteria: annual turnover, number of employees, levels of profit, amount of capital invested, financial asset, market share, and relative size within the industry. The guidelines provided by the Central Bank of Nigeria (2005) specify SMEs as any enterprise with a maximum asset

base of 200 million Naira (NGN), excluding land and working capital, with no lower or upper limit of staff. However, the National Council of Industry in Nigeria classifies SMEs as micro, small, and medium, using the number of full-time employees and total operational costs, including working capital but excluding land cost. This classification defines micro-organisations between one and ten full-time employees and a turnover of less than NGN 1million. Small enterprises are categorised as employing between 11 to 35 full-time employees. With a turnover comprised between NGN1 million and NGN40 million, medium enterprises employ between 36 and 100 full-time employees and a turnover greater than NGN40 million but less than NGN200 million (SMEDAN, 2005). The National Economic Reconstruction Fund in 2001 set the maximum turnover for SMEs at NGN10 million.

According to the Federal Ministry of Industry, Trade, and Investment (2019), Nigeria has over 37 million SMEs, accounting for more than 84% of total jobs in the country. The ministry claims that Nigerian SMEs account for 48% of GDP and about 7% of goods and services exported from the country. Among SMEs, micro and small enterprises are the bulk, with 37 million enterprises (about 99.8 %), aside from 4,670 medium enterprises. Lagos, Oyo, and Kano State are the three states in Nigeria with the highest numbers of SMEs.

The role of SMEs in developing the Nigerian economy has been significant and provided a large portion of market opportunities created and wealth generated in the country. SMEs account for approximately 70% of the total industrial employment (Anigbogu et al., 2014: Etuk *et al.,* 2014). The Nigerian government greatly benefits from SMEs regarding taxes and levies; Oyeniran et al., (2015) regard SMEs as a channel that improves employment

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generation, increased growth, and poverty reduction investment cost will be achieved in Nigeria.

According to Anigbogu et al. (2014), about 10% of manufacturing output comes from SMEs through the utilisation of local resources; SMEs also significantly contribute to the production of food and services and rural technology transformation in the country (Aina, 2007). A healthy Nigerian SME provides employment and a breeding ground for local entrepreneurial capabilities, technical skills, technological innovativeness, and managerial competencies for private sector development (SMEDAN, 2005).

Despite SMEs being a catalyst for economic development in Nigeria, they have been characterised by a lack of adequate finance, which hinders the sector's growth (Adisa et al., 2014; Nwachukwu & Ogbo, 2012) . This aspect has been and currently is a matter of concern for national industry leaders, government, and financial institutions. In 2013, the Central Bank of Nigeria launched the SME Development Fund with a share capital of N220 billion, recognising the significant contribution of SMEs to the economy and the wide financing gap in supporting them (CBN, 2013). Banks and financial technology companies have also been filling the gap in the funding of SMEs in Nigeria. Recently, numerous schemes such as the SMEDAN, N-Power, and others have targeted SMEs in Nigeria (Adegboye & Iweriebor, 2018; Oke & Aluko, 2015).

Despite these forms of support, Nigerian SMEs still face several challenges such as availability of funds, the high cost of credit facilities, multiple taxes resulting from levies and other taxes from the state and local government, limited infrastructure, poor policies on exports, and the importation of machinery (Adesua-Lincoln, 2011; Ihua, 2009; Irefin

et al., 2012). These factors have been a setback for the growth, development, and performance of the sector in Nigeria (Adesua-Lincoln, 2011; Ihua, 2009; Irefin et al., 2012).

2.3   Theoretical Framework

2.3.1   Resource-based View Theory

The literature on entrepreneurship has primarily applied the RBV theory, which looks at how a firm's resources can be used to sustain the firm in light of competitive advantages. RBV identifies firms' resources like tangible, such as physical assets, and intangible resources, such as knowledge, skills, and competencies; the latter are also the attributes that drive profitability, growth, and ultimately, the firm's survival (Agyapong & Attram, 2019). This view holds these resources as scarce, valuable, and imitable by competitors (Barney et al., 2001). Firms' managers are expected to analyse resources, select strategies and resources, and then appraise capabilities to achieve competitive advantages against other firms.

EO in RBV entails the activities, processes, behaviours, and decision-making styles that have become critical elements in achieving the sustainable competitive advantages of SMEs (Kraus et al., 2011); this has implications for the selection, usage, management, and disposition of firms' financial assets (Nunooandoh & Darfor 2015). Entrepreneurs establish strategic orientations – mostly SME owners – as catalysts that convert initial firms' resources into capabilities (new, improved products/processes or imitated ones) into products that outsmart their competitors in the market (Mahoney, 2004). However, replenishing those resources afterward is necessary to prevent a bottleneck for firm

growth: as an organisational attribute governing the firm's productive capacity, strategic orientations are inherently resourced intensive (Yin et al., 2020).

SMEs in Nigeria is characterised mainly by individual ownership, and the level/type of EO of these firms is a demonstration of their performance over time (Gustman et al., 2012). Meanwhile, there are indications that a significant relationship does exist between other similar entrepreneurial attributes on a firm's financial and strategic decisions. This is particularly poignant for SMEs, where the owner is often the manager and has sole authority in making strategic decisions, such as those related to finance, whose outcomes are significant for the firm's performance (Agyapong & Attram, 2019). Eniola and Ektebong (2016) stated that SMEs sustain their competitive advantage through unique, tacit, tangible, and intangible resources contributing to their performances.

New firms must have productive resources to create a competitive advantage that can enhance survival or growth (Yin et al., 2020). The tenets of RBV suggest that gathering and acquiring new resources associated with better firm performance (Cai et al., 2014; Cui et al., 2018). These new ventures take risks to become market leaders through innovativeness in the market, as they possess an untraditional way of producing that combines scarce resources to create new ideas and processes and products or services (Hughes et al., 2014; Hughes & Morgan, 2007; Anokhin et al., 2011). These new ventures are characterised by a potent EO and show high potential to embrace new and original innovations to stay ahead of competitors in the market and carry a reasonably significant risk of costly failure (Linyiru, 2015; Taylor, 2010). This tendency explains why EO is a resource-intensive orientation that relies on restocking resources from external resource holders (Hughes et al., 2015).

Previous research on strategic management has established an association between EO and SMEs' performance. For example, Yin et al. (2020) highlighted that entrepreneur are high risk-taking, Jao and Susan (2007) emphasised that EO is a main resource and capability of SMEs in achieving better performance; and Pratono and Mahmood (2015) indicate SMEs' intimate knowledge of customers as a great resource that they use to achieve better performance. In addition, Sirivanh et al., (2014), examining the effect of EO and competitive advantage on SMEs' growth through the lens of RBV, found that EO has a positive relationship with the growth of SMEs.

While RBV studies established a positive relationship between EO and SMEs' performance, little consideration has been devoted to environmental dynamism. SMEs operate in even changing market situations; the Nigerian business environment is characterised by instability and uncertainty to a great extent. For EO to effectively enhance firms' performance in such an environment, contingencies within which the firms operate must be considered (Lumpkin & Dess, 1996); these contingencies are important for assessing the effect of EO on the performance of SMEs with the environment. In Miller's (1983) view, various factors must be contextualised as determinants of EO that enhance performance.

Table 2.1
Table 2. 1Literature Summary on RBV Model

S/N	Author(s) and date	Findings or Descriptions
1	Agyapong and Attram (2019)	Argues RBV to identiy firms' tangible and intangible resources, such as physical assets, knowledge, skills, and competencies; the latter are also the attributes that drive profitability, growth, and ultimately, the firm's survival
2	Kraus et al. (2011)	Activities, processes, behaviours, and decision-making styles that have become critical elements in achieving the sustainable competitive advantages of SMEs
3	Mahoney (2004)	Firms' resources into capabilities (new, improved products/processes or imitated ones) into products that outsmart their competitors in the market
4	Anokhin et al. (2011), Hughes et al. (2014), and Hughes and Morgan (2007)	Untraditional way of producing that combines scarce resources to create new ideas and processes and products or services
5	Pratono and Mahmood (2015)	EO is the main resource and capability of SMEs in achieving better performance.

2.3.2 Universality Approach

The Universality approach argues that there are some key dimensions of EO which can help explain firm-level operations (Dianez-González & Camelo-Ordaz, 2016). According to this approach, EO dimensions do not change based on the organisation or the context of the discussion. The theory is relevant in some cases, especially about international EO. Oviatt and McDougall (2005, p. 540) define it as 'the discovery, enactment, evaluation, and exploitation of opportunities across national borders – to create future goods and services. Findings from different studies have shown that the conceptualisation of EO and its impact on firm performance are based on similar constructs. For instance, Liu and Fu's (2011) study of ownership structure, strategic orientations, and internationalisation outcomes in 607 Chinese firms; their findings indicate that EO is positively associated with internationalisation, operationally defined

as the extent to which the firm aggressively seeks foreign markets, sells its products or services in foreign markets and enter into overseas locations via foreign direct investment.

In another research studies based on Chinese firms (117 small and medium-sized enterprises), Zhang et al. (2012) explored the relationships between the individual EO dimensions of innovativeness, proactiveness, and risk-taking; and two dimensions of internationalisation: multinationalism, captured by international sales as a percentage of total sales; and country scope, measured as the number of foreign countries in which the SME has operations and the cultural diversity of the SME's overseas markets. The results indicate that, among the three EO dimensions examined, proactiveness is most consistently and positively associated with a positive internationalisation performance based on the two criteria considered, while innovativeness exhibits no significant association with these criteria.

In contrast, Ripolles-Melia et al. (2007), in their study based on a sample of 155 Spanish firms, find that EO levels are significantly higher among firms that have internationalised than among their non-internationalised counterparts and that EO is positively related to international scope - measured as the number of countries in which the firm operates and percentage of international sales. The study also found EO to positively affect the speed with which firms internationalise after they start operations.

According to María Peredo and Anderson (2006), *first-mover advantages* such as technology leadership and the pre-emption of scarce assets are possible when the firm takes advantage of its EO. Munoz and Kimmitt (2018) also presented evidence of an

SME exhibiting exceptional performance related to high EO. Wiklund and Shepherd (2005) indicated that, across SME firms from different sectors, EO conceptualisation remains the same, focusing on risk-taking and proactive action, although this view has been questioned in research (Anderson et al., 2015; Lumpkin & Dess, 2001). As with other organisational theories, the entrepreneurial firm does not exist independently of the environment in which it operates (Akhtar et al., 2015). Therefore, conceptualising EO in the context of an organisation in an external environment is essential.

A theory that has gained attention and significant empirical support is the contingency perspective. Zhou et al. (2007) indicate that EO needs should be matched with the contextual factors of the organisation, identifying these factors to be external or environmental and internal or organisational in nature. External factors are those which identify changes at a sectoral level (e.g., supplier access, new entrant threats) or environment level (e.g., political challenges, technology drivers). Internal factors or organisational factors are those aspects that are present within the organisation; these can be tangible and non-tangible resources, including human capital (Javalgi & Todd, 2011), organisational image (Korsgaard et al., 2016), and prevalence of R&D (Agapie et al., 2018).

The contingency fit defined the match between the organisation's characteristics and its environment. For Lawrence and Lorsch (1967), the theory assumes *equifinality*: there are many ways to improve organisational performance, but the most suitable approach for an organisation is largely dependent on the organisation's condition. Therefore, the contingency fit identifies a balance between the firm's goals and the context in which it operates. Chowdhury (2011) concludes that business or firms' formalisation may be

discarded as a concept by new firms which operate in spaces where customer needs are complex. Wiklund and Shepherd (2005) affirm the importance of risk-taking by leaders on SMEs' performance, specifically if they operate in an unstable political and social context. From an analysis of the EO literature, it appears that there are different approaches to the discussion on contingency fit (Li et al., 2017). This section expands on these elements.

Table 2. 2Summary of Findings on EO and SMEs based on Universality Theory

S/N	Author(s) and date	Findings or Descriptions
1	Zhou et al. (2007)	Contended that a firm's EO might be linked to the network capabilities of the firm at different levels
2	Covin et al. (2006	EO can be linked to performance based on the environmental context in which the actual organisation functions
3	Wiklund and Shepherd (2005)	Reveals the importance of risk-taking by leaders on SMEs' performance, specifically if they operate in an unstable political and social context
4	Chowdhury (2011)	Business or firms' formalisation may be discarded as a concept by new firms which operate in spaces where customer needs are complex
5	Akhtar et al. (2015)	Entrepreneurial firm does not exist independently of the environment in which it operates
6	María Peredo and Anderson (2006)	*first-mover advantages* such as technology leadership and the pre-emption of scarce assets are possible when the firm takes advantage of its EO
7	Liu and Fu's (2011)	EO is positively associated with internationalisation, operationally defined as the extent to which the firm aggressively seeks foreign markets, sells its products or services in foreign markets, and enter into overseas locations via foreign direct investment.

2.3.3   Cartesian Approach

Some researchers incorporate the Cartesian approach, which contends that the firm's primary focus is on the context in which it exists and specific variables (e.g., individual or organisational entrepreneurial intent, organisational culture) (Covin et al., 2006; Zhou et al., 2007). For example, Covin et al. (2006) probed how EO can be linked to performance based on the environmental context in which the actual organisation functions. They believe that their understanding of the external environment drives an entrepreneur's EO. More organisational support mechanisms encourage autonomy and proactive thinking when there is more outstanding external support in policies and provisions.

On similar lines, Zhou et al. (2007) contended that a firm's EO might be linked to the network capabilities of the firm at different levels. They recommended that firms enhance their network skills, as this also proportionally increases the EO contribution to firm performance. These associations are always expected to be bivariate between the contingency factor (i.e., the EO dimensions) and the structural variable (e.g., the entrepreneurial intent), and such relationships can be either curvilinear or linear (Linton, 2016). The Cartesian system assumes that there can be many matches in the context of the study and the independent variable (Veciana & Urbano, 2008).

2.3.4   Contingency Theory

The contingency theory stems from the criticism of the universal approach to entrepreneurship. It posits that for the organisation to achieve a better performance, some contingency such as the organisation's structure must be accounted for (Linton, 2014). In entrepreneurship, contingency theory has been widely deployed to examine the

relationship between entrepreneur characteristics, strategy, structure, and performance (Covin & Slevin, 1989; Zahra & Covin, 1995; Chowdhury, 2011; Pratono & Mahmood, 2015).

Scholars have established the implications of a hostile environment on the relationship between EO and SMEs' performance. For example, Chowdhurry (2011) established the effect of entrepreneurs' socio-demographic characteristics on EO and SMEs' performance. The study emphasised the alignment of young entrepreneurs to the structural composition of firms in response to the complexities of the customers. Also, Pratono and Mahmood (2015) examined the entrepreneur's ecosystem to determine the effect of the environment between EO and the performance of Indonesian SMEs through the lens of contingency theory, asserting that there must be a fit between the EO and the environment within which SMEs operate to achieve better performance.

The perception of contingency theory assumes that there must be a perfect match between the context and the variables, resulting in contingency fit (Linton, 2016). Contingency theory argues that some elements of strategies, processes, and environments may cluster to form specific configurations (Meyer et al., 1993). Therefore, a finite number of configurations can be identified when there is a large sample of firms, especially if key external and internal factors are identified. To be maximally effective, firms are expected to have specific configurations that can improve performance improvement (Miller, 1990). This theory posits that some specific configurations define a firm's EO based on specific internal and external factors (Linton, 2016). Therefore, some of the theoretical contentions are fundamentally different.

The configurational view is based on the basic idea that all firms fall into very few internal configurations that are theory-based (Linton & Kask, 2017). In the research on EO, only a few researchers incorporated the configurational perception; one such study implements this approach when visualising the sub-dimensions, the structure of the organisations, and the different environmental contexts (Kao, 1993). Miller (1990) further argues that entrepreneurial-type strategies are more likely to be successful when addressing customers who look for niche services rather than cost-leadership services. Tehseen and Ramayah (2015) conclude that EO may positively influence small business performance. However, this evidence is contingent on the presence of proper access to financial capital and a dynamic environment that supports the growth of such firms.

According to Rhee et al. (2010), good association and coordination among the important performance-related variables lead to the performance enhancement of entrepreneurs. The contingency theory stands on this assumption that a proper fit among essential variables, such as industry environment and organisational procedures, leads to a structured improvement in performance (Mu & Di Benedetto, 2011). Furthermore, bringing in a moderator between two key variables will allow precision in interpretations and reduce misinterpretations (Real et al., 2014). In this case, the interconnection between EO and performance is considered for the study. Furthermore, the probable mediators of the relationship between the two variables are considered, as has been discussed in previous research (Liu & Fu, 2011).

There is a lack of agreement regarding the most fitting moderators of the relationship between EO and performance. Nevertheless, both internal (knowledge) and external variables (environment-related) factors are considered in this case (Acs et al., 2013).

Furthermore, not many promising moderators are considered for expediting the meta-analysis of contingency relationships. It is also not necessary that prior studies should have analysed moderator relationships (Ganco, 2013). However, the samples included in various studies assist in interpreting the moderating effects employing meta-analysis. If a particular attribute influences the variation in the relationships between EO and performance across different samples, then such an attribute may be considered as a moderator on such relationships.

2.4   Entrepreneurship and EO

Evidence from the literature shows that the entrepreneur has a central role in determining organisational processes and outcomes (Li & Martin, 2016). However, there has been scant evidence on how such individual and organisational factors interact to help shape the entrepreneurial status of an organisation (Pittino et al., 2016). This section provides a review of literature on the concept of entrepreneurship and EO.

The term 'entrepreneur' is a French word derived from the verb 'entrepreneur,' which means to do or undertake (Kurtako & Hodges, 2004). Therefore, from a literal perspective, an entrepreneur is considered as an individual who undertakes independent action. The earliest reference to the term 'entrepreneur' in the literature appears in 1253 (Rey, 1994). It was used to denote something bold, firm, and daring. Rey (1994), in a historical assessment of entrepreneurship and its definition, concluded that the current meaning referring to an enterprise leader evolved in the 18th century. Since then, the definition of entrepreneurship has addressed different traits of entrepreneurship by expanding on the role of entrepreneurs in contributing to society.

The writings of Cantillon (1755) led to the definition of entrepreneurship. As Cornelius et al. (2006) identified, Cantillon presented the concept of entrepreneurship from the perspective of economic implications and the role of the entrepreneur in economic development. Cantillon also highlighted the circumstances which lead to the rise of such entrepreneurship, particularly discrepancies between supply and demand in specific sectors. The author concluded that recognising the discrepancies in supply and demand and undertaking the necessary risks to take advantage of such discrepancies in a new enterprise is crucial for an entrepreneur.

Furthermore, Schumpeter (1934) defined the entrepreneur as an innovator. Schumpeter (1942, p. 83) states that 'creative destruction is the essential fact about capitalism.' The entrepreneur is considered a prime agent of economic change through such creative destruction. Schumpeter (1942) argued that new combinations are essential to the sustenance of any industry, and new ideas can drive entrepreneurship among both individuals and existing organisations. Entrepreneurs have been defined as individuals who are more alert to available opportunities (Kirzner, 1979). Many of these definitions can be considered insufficient on their own for defining entrepreneurship practices.

For instance, Cantillon's (1775) definition of an entrepreneur as a risk-taker needs to be integrated with Schumpeter's (1934) view of the entrepreneur being an innovator and driver of change. The evidence supports the argument that it would be insufficient to define an entrepreneur by these independent traits. However, it can be challenging to separate the characteristics of the entrepreneur from their actions. An entrepreneur, therefore, cannot be separated by their actions. Therefore, a normative perspective linked to defining an entrepreneur calls for a holistic definition based on the actions carried out

by the entrepreneur. Kuratko and Hodgetts (2004) believe that in such a context, entrepreneurship is dynamic and requires a vision to bring about change and create value.

The literature shows no consensus on the definition of entrepreneurship, as various authors have seen it from different perspectives. Examples of these are alertness to market opportunities (Kirzner, 1977), identification of profit opportunity through intermediary function (Deakins & Frees, 2006), innovations to create new goods and services (Shumpeter, 1934), and business combinations or ideas arising from risk and uncertainty for profit maximisation and growth (Zimmerer & Scarborough, 2005). Even though there is no consensus on the definition of entrepreneurship, the literature has revealed that it centres on the discovery, evaluation, and exploitation of opportunities to create new products and services, the organisation of markets, process and operations, and raw materials through efforts that had not been in existence (Mbhele, 2011).

According to Aloulou and Fayolle (2005), entrepreneurship is about combining resources in new ways, such as through the introduction of new products with higher quality with new methods of production, breakthroughs in new markets, conquests of new sources of supply of raw materials, and reorganisation of a new sector, so that it disrupts the market equilibrium in economic systems. Theorists have identified entrepreneurship as the ability to channel creative innovations into ventures that have value and the ability to create and sell new ideas and build new businesses (Wood et al., 2004). To complement this, Madsen (2007) presents entrepreneurship as searching for opportunities that reveal avenues for development.

Since the 1980s, the concept of entrepreneurship has gained more importance in the literature due to the increasing relationship between EO and the performance of firms (Kraus et al., 2011; Gupta & Gupta, 2015; Gorostiaga et al., 2019). This has become more critical for the sustainable competitive advantages of firms, especially small and medium enterprises, due to increasing global competition (Kraus et al., 2011). Various studies have defined the concept of EO in terms of the individual's psychological, socio-demographical, and entrepreneurial status (Gorostiaga et al., 2019).

EO is also regarded as the entrepreneurial activities of an established firm (Kraus et al., 2011) refers to the practices, processes, behaviours, and decision-making styles through which an enterprise enters a new or existing market with new or existing products or services. According to Lumpkin and Dess (1996), it is the process through which organisations seek to develop a strategic basis for decisions and entrepreneurial actions.

The development of the EO construct is a manifestation of a conception of entrepreneurship as enterprise behaviour (Lumpkin & Dess, 1996). This conception had been a significant development in the field (Coulthard, 2007). In terms of the entrepreneurial context, enterprise behaviour occurs from within, according to Levesque and Minniti (2006). The relative importance of the triggering factors of entrepreneurship depends upon contextual circumstances.

EO has been acknowledged as a determinant for the firm's performance in terms of growth and profitability. For example, Zainol and Ayadurai (2011) linked the growth performance of Malaysian firms to the innovativeness, proactiveness, and risk-taking orientation of firms, which they called EO. In current business environments, where product and business model life cycles are shortened, such characteristics are positively

associated with better performance (Hamel, 2000). Thus, EO should be considered a vital ingredient of a firm's success. While the process of entrepreneurship in firms might be good for pursuing entry into a new market, firms' EO must be considered a determinant of wealth creation by new firms (Lumpkin & Dess, 1996; Ireland et al., 2003).

Despite the literature regarding EO as a determinant of performance in firms, its effects on the performance of SMEs remain under investigation due to the global nature of SMEs, in which they are seen as the same, even though there are apparent differences between them. EO affords SMEs the chance to discover new business opportunities, which differentiates them from their counterparts in the market (Omisakin et al., 2016).

For EO to effectively enhance firm performance, it is important to consider the contingency perspective of the firm's situation (firm's situation). This consideration of contingency is crucial to assess the effect of EO on the performance of SMEs with the environment. In the view of Miller (1983), various factors must be contextualised as determinants of EO, enhancing performance.

Table 2. 3*Summary of entrepreneurship Definition*

1	Li & Martin (2016).	Entrepreneur has a central role in determining organisational processes and outcomes.
2	Kuratko and Hodgetts (2004)	Entrepreneurship is dynamic and requires a vision to bring about change and create value.
3	Deakins and Frees (2006)	Identificatifying profit opportunity through intermediary function.
4	Shumpeter (1934)	Innovations to create new goods and services

5	Zimmerer and Scarborough (2005)	Business combinations or ideas arising from risk and uncertainty for profit maximisation and growth
6	Mbhele (2011).	Centres on the discovery, evaluation, and exploitation of opportunities to create new products and services, the organisation of markets, process and operations, and raw materials through efforts that had not been in existence
7	Aloulou and Fayolle (2005)	Entrepreneurship is about combining resources in new ways, such as through the introduction of new products with higher quality with new methods of production, breakthroughs in new markets, conquests of new sources of supply of raw materials, and reorganisation of a new sector, so that it disrupts the market equilibrium in economic systems
8	Madsen (2007)	Entrepreneurship as searching for opportunities that reveal avenues for development.

2.5   Entrepreneurial Orientation and SMEs' Performance

Over the past few decades, scholars had devoted much interest in investigating the significant relationship that exists between EO and SMEs, business, firm or organisation performance (Ali, Hilman & Gorondutse, 2020; Isichei et al., 2020; Kosa et al., 2018; Leonidas et al., 2011; Linton, 2016; Salavou & Avlonitis, 2008; Shah & Ahmad, 2019).

Insights into these available findings reveal that, even though there is a significant relationship between EO and SMEs' performance, this relationship is argued to be a complicated relationship (Al-Swidi & Hossain, 2012; Kosa et al., 2018; Leonidas et al., 2011; Linton, 2016).

Two of the identified reasons for the observed complicated relationship include investigating EO as a unidimensional construct (Al-Swidi & Hossain, 2012; Anderson &

Eshima, 2013) and multidimensional constructs with risk-taking, innovativeness, proactiveness, competitive aggressiveness, and entrepreneurial autonomy as it is five (5) major dimensions (Heger & Rohrbeck, 2012; Peter & Jarratt, 2015; Shah & Ahmad, 2019).

Evidence from earlier literature reveals that despite examining the significant influence of EO from its dimensions, the results keep yielding mixed evidence. Examples of these studies include Ali et al. (2020), Shah and Ahmad (2019), concluding a significant influence of EO on SMEs' performance. Contrary to the study of Imran et al. (2020), Wahyuni and Sara (2020) examining EO as a single dimension construct posits a non-significant relationship between EO and SMEs' performance.

Findings from the study of Shah and Ahmad (2019) argued the significant effect of two dimensions of EO, namely proactiveness and risk-taking, to influence SMEs' performance. Meanwhile, Shah and Ahmad (2019) conclude a significant relationship between entrepreneurial innovativeness and proactiveness on SMEs' performance. The study of Hossain and Asheq (2019) argues that four of the five dimensions of EO, namely innovativeness, proactiveness, competitive aggressiveness, and entrepreneurial autonomy, significantly influence SMEs' performance. In contrast, the study of Isichei et al. (2020) established no significant relationship between risk-taking and SMEs' performance. However, the other four dimensions were argued to have a significant relationship to SMEs' performance.

Many studies addressing entrepreneurship have investigated innovativeness, proactiveness, and risk-taking propensity as the only three dimensions of EO (Covin &

Slevin 1989; Naman & Slevin 1993; Zahra & Garvis 2000; Kemelgor, 2002). However, Hughes and Morgan (2007) and Lumpkin and Dess (1996) indicate that EO dimensions can vary within their model in as much as the three dimensions are captured. Hence, competitive aggressiveness (Chen et al., 2010; Kreiser et al., 2013) and entrepreneurial autonomy (Shimizu, 2012) can be considered as dimensions of EO.

Table 2. 4Summary of Findings on the Relationship between EO and SME Performance

S/N	Author(s) and date	Findings or Descriptions
1	Shah and Ahmad (2019)	There is a significant relationship between entrepreneurial innovativeness and proactiveness on SMEs' performance
2	Hughes and Morgan (2007) and Lumpkin and Dess (1996)	EO dimensions can vary within their model in as much as the three dimensions are captured
3	Imran et al. (2020),	There is no link between EO and SMEs' performance
4	Wahyuni and Sara (2020)	Posits a non-significant relationship between EO and SMEs' performance
5	Ali et al. (2020)	There exists a significant influence of EO on SMEs' performance.
6	Al-Swidi and Hossain (2012) and Kosa et al. (2018).	The relationship between EO and SMEs' performance is complicated. It can produce a significant and non-nsignificant relationship depending on if it was investigated as either unidimensional construct or multidimensional construct
7	Ahmad (2019)	Argued the significant effect of two dimensions of EO, namely proactiveness and risk-taking, to influence SMEs' performance
8	Hossain and Asheq (2019)	Argues that four of the five dimensions of EO, namely innovativeness, proactiveness, competitive aggressiveness, and entrepreneurial autonomy, significantly influence SMEs' performance

2.6 Relationship between EO dimensions on SMEs' Performance

The relationship between the dimensions of EO and SMEs performance had over the years yielded inconsistent findings. For example, conclusions from studies such as Ali et al. (2020), Isichei et al. (2020), and Shah and Ahmad (2019) failed to agree on the dimensions of EO that has significant contributions to SMEs' performance. From their various investigations, significant contributions of risk-taking, entrepreneurial autonomy and innovativeness were fiercely debated. Given this, the researcher conceptually examines the relationship between each EO dimension and SMEs' performance.

2.6.1 Entrepreneurial Innovativeness and SMEs' Performance

Authors such as Al-Swidi and Hossain (2012), Zehir et al. (2015), and Falahat et al. (2018) examined the relationship between entrepreneurial innovativeness and SME' performance. Their findings reveal that entrepreneurial innovativeness plays a significant role in attaining SMEs' performance.

Furthermore, Agyapong et al., (2017) support the stance that entrepreneurial innovativeness. Supporting these stances, (Avlonitis & Salavou, 2007) conclude that innovativeness pertaining to reduction in customers' waiting time, effort, and purchasing risk significantly contributes to SMEs' performance. Further findings from (Avlonitis & Salavou, 2007) claim a non-significant relationship between innovativeness (new product development) and SMEs' performance but limited to performance as regards customers' purchase intention.

In a similar view, Kmieciak, Michna and Meczynska (2012) conclude a significant positive relationship between innovativeness and SMEs' performance indicators such as innovation activities, innovation investments, and internal communications.

Table 2. 5Summary of Findings on the Relationship between Entrepreneurial Innovativeness and SMEs' Performance

S/N	Author(s) and date	Findings or Descriptions
1	Al-Swidi and Hossain (2012)	Entrepreneurial innovativeness plays a significant role in attaining SMEs' performance
2	Zehir et al. (2015)	There is a significant relationship between entrepreneurial innovativeness and SMEs performance
3	Kmieciak, Michna and Meczynska (2012)	There is a significant positive relationship between innovativeness and SMEs' performance indicators such as innovation activities, innovation investments, and internal communications
4	Avlonitis and Salavou (2007)	There is a non-significant relationship between innovativeness (new product development) and SMEs' performance, but with limited to performance as regards customers' purchase intention
5	Avlonitis and Salavou (2007)	Concludes that innovativeness pertaining to reduction in customers' waiting time, effort, and purchasing risk significantly contributes to SMEs' performance

2.6.2 Entrepreneurial Proactiveness and SMEs' Performance

The relationship between entrepreneurial proactiveness over the years had been widely investigated among scholars. Examples of such studies are not limited to Farja et al. (2016), Sascha et al. (2012), and Zahir et al. (2015). Scholars such as Agyapong et al. (2021), Blesa and Ripollés (2003), and Farja et al. (2016) argues a significant influence of entrepreneurial proactiveness on SMEs' performance. Insights from the study of Agyapong et al. (2021) reveals that entrepreneurial proactiveness via entrepreneurial internal behavioural mindset and behaviour strongly influence SMEs' performance. Likewise, the study of Hughes and Morgan (2007), Rauch et al. (2009)) posits a significant relationship between entrepreneurial proactiveness through entrepreneurial behaviour that identifies market opportunities and exploit such before the opportunity became feasible to the firms' competitors.

Supporting this stance, findings from Adefulu et al., (2018) and Brownhilder et al., (2017) concludes the proactive activities as a first-mover advantage that significantly contributes to the implementation of firm's strategies such as market scheming that allow the entrepreneur to generate higher returns on inventory; hence, leading to firms' financial performance.

2.6.3 Risk-Taking and SMEs' Performance

Risk-taking is one of the most significant attributes of an entrepreneur (Cornelius et al., 2006). Meanwhile, entrepreneurial risk-taking comprises organisational knowledge, internal and external knowledge (Armenia et al., 2021). Risk-taking in an organisation can emerge from financial and non-financial risk (Chong et al.,2018; Khemakhem & Boujelbene, 2018). Over time, the significance of these entrepreneurial risks (financial

and non-financial) had been widely investigated in the research model (Armenia et al., 2021; Mohsni et al., 2021; Shahzad et al., 2019).

Insights from the available literature revealed a significant relationship between risk-taking and SMEs' performance (Armenia et al., 2021; Chong et al.,2018; Mohsni et al., 2021; Shahzad et al., 2019).

Results obtained from the studies by Chen and Ma (2011) and Shahzad et al., 2019) reveals that risk-taking abilities might have both positive and negative impact on SMEs' performance. Meanwhile, the study of Zimmerer & Scarborough, 2005) argues that taking risks during uncertain periods, risk-taking abilities propels a firm to perform better than those averting risk. Furthermore, studies not limited to Kosa et al. (2018), Kraus et al. (2011), and Lumpkin and Dess (2001) argues a significant relationship between risk-taking behaviour and SMEs' performance.

Contrarily, Roux and Bengesi (2014) study posited a significant negative relationship between entrepreneurial risk-taking and SMEs' performance. The findings from Roux and Bengesi (2014) conform to that of Chen and Ma (2011) and Shahzad et al. (2019). Although findings from the studies of Chen and Ma (2011) and Shahzad et al. (2019) supported both positive and negative findings, these scholars' negative relationship concerns individual risk-taking behaviours that impede organisational risks behaviour.

Table 2. 6 *Relationship between Risk Taking and SME Performance*

S/N	Author(s) and date	Findings or Descriptions
1	Armenia et al. (2021).	Entrepreneurial risk-taking comprises organisational knowledge, internal and external knowledge

2	Zimmerer and Scarborough (2005)	Taking risks during uncertain periods, risk-taking abilities propels a firm to perform better than those aversing risk
3	Chen and Ma (2011) and Shahzad et al. (2019)	reveals that risk-taking abilities might have both positive and negative impact on SMEs' performance if it is not properly calculated
4	Chong et al. (2018), and Khemakhem and Boujelbene (2018).	Risk-taking in an organisation can emerge from financial and non-financial risk
5	Shahzad et al. (2019)	A significant relationship between risk-taking and SMEs' performance

2.6.4 Competitive Aggressiveness and SMEs' Performance

Covin and Covin (1990), Dess and Lumpkin (2005) and other scholars had devoted much interest in examining the influence of EO and its dimensions, specifically competitive aggressiveness, on SMEs' performance. Several of these studies argue a significant influence of competitive aggressiveness on SMEs' performance. For example, an earlier investigation by Covin and Covin (1990) argue that firms that tend to perform higher during environmental turbulence are those who compete aggressively

Meanwhile, the study of Kozubíková and Zoubková (2016) expatriates the meaning of competitive aggressiveness in terms of developing new products to the market. Given this, the findings from the study of Kozubíková and Zoubková (2016) conclude a significant influence of competitive aggressiveness and performance. On the contrary, Hughes and Morgan (2007) failed to establish a significant relationship between competitive aggressiveness and SMEs' performance. However, the same findings conclude that younger firms that are not technologically sophisticated perform better.

2.6.5 Entrepreneurial Autonomy

Theurer et al. (2018) and Stull (2004), in their investigations, argue a significant relationship between entrepreneurial autonomy and SMEs' performance. Similarly, Kusumawardhani et al. (2012) and Pratono et al. (2018) argues a significant relationship between entrepreneurial autonomy and SMEs' performance.

Also, Viete and Erdsiek (2020), investigating mobile information and firm performance among German telecommunications, reveal that higher freedom among formal employees in their workstations significantly contributes to SMEs' performance. Among the Chinese respondents, Yan et al. (2010), in their empirical investigation, found a significant relationship between the level of discretion (autonomy) given to employees and improved SMEs' performance. Aghasi, Colombo and Rossi-Lamastra (2017), in their empirical investigation, investigate the level of autonomy between firms in acquisitions. The author found a significant negative relationship when both firms have a common ground. However, operating on their individual autonomy level enhances the acquisition scheme. A similar investigation by Zhu et al. (2015) attests to the findings from the study of Agasi et al. (2017) after investigating autonomy level and firms' performance among cross-border contingencies. Zhu et al. (2015) conclude a significant influence of autonomy on SMEs' performance. That is, firms perform better when given the needed freedom to operate.

Contrarily, findings on autonomy had been found to have a non-significant influence on SMEs' performance (Gelderen, 2016; Olowofeso & Ale, 2019). Evidence from the study of these authors reveals a non-significant influence of autonomy on firms' performance because an SME cannot operate in isolation. Thus, they need a high level of

interdependency with other SMEs operating in the industry. Additionally, a recent investigation by Van Gelderen et al., 2019) argues the non-significant relationship between entrepreneurial autonomy and SMEs' performance in a feeble and unstable economy which makes it complex for an SME to operate in isolation.

2.7.1 Determinants of Entrepreneurs' Success

There are ongoing debates among researchers and entrepreneurial scholars centred on whether entrepreneurial traits and behaviour are inherited or learned. The available evidence reveals that the nature of entrepreneurial personality is either an inborn psychological trait (Luca & Cazan, 2011; Zhao et al., 2009) or a learned attribute (Torikka, 2013). Despite the ongoing arguments, there is no consensus among scholars on what contributes to entrepreneurial success. One of the reasons given in the literature is the complex nature of entrepreneurship (Genty et al., 2015). This has resulted in different views addressing and focusing on aspects such as the ecological system (environmental factors) of entrepreneurs (Ramana et al., 2008; Pratono & Mahmood, 2015) and demographic factors (Genty et al., 2015; Polas et al., 2019).

2.7.1.1 Demographic factors of entrepreneurs

Several studies have investigated the relationship between demographic factors and the performance of entrepreneurs (Atef & Al-Balushi, 2015; Remeikiene et al., 2013;). According to Genty et al. (2015), entrepreneurs' success is subjective; as such, demographic factors like age, education, training, and previous experiences are strong determinants of the success and performance of entrepreneurs.

2.7.1.2 Age

Understanding how age affects entrepreneurs has resulted in entrepreneurs being classified into different groups: young, old, grey, and late-stage entrepreneurs (Kenny & Rossiter, 2018). Meanwhile, Cressy and Storey (1995) and Kautonen (2008) highlight the important role those older entrepreneurs play in the start-up and survival of new firms; the authors believe that older entrepreneurs do make a significant contribution to the business environment because of their diverse life experiences. Therefore, older more empirical and literary attention should be given to older entrepreneurs.

Authors have argued that age is a crucial determinant of entrepreneurial activities (Genty et al., 2016; Marin et al., 2019; Polas et al., 2015). In addition, an entrepreneur must take the risk, be innovative and proactive to become an entrepreneur, and age is directly related to the individual feeling more qualified to undertake risk within business ventures (Lévesque & Minniti, 2006). Given this literary evidence, this study regards age as a determinant of the performance of SMEs.

2.7.1.3 Gender

Gender theory has found that the cultural disposition within which individual gender exists defines the disposition to engage in acceptable behaviour for each gender (Eagly, 1987). This is particularly true in the Nigerian culture, in which the male role is associated with control or achievement, making men responsible for financial family support; women have traditionally been associated with working at home, doing housework, and looking after children and other dependent people (Marin et al., 2019). This form of stereotype resulted in men being predominant regarding start-up businesses.

2.7.1.4 Entrepreneurial education

Entrepreneurial education relates to short- or long-term programmes tailored to the teaching of basic entrepreneurial skills and practice, aiming to improve competencies for those aiming to become entrepreneurs or business owners (Torikka, 2013). The essence of this education is to train somewhat narrowly by instruction, drill, and discipline (Ogundele, 2012). This training can either be imported or adopted to a new environment (Luca & Cazan, 2011).

Entrepreneurial education can be of three types: professional, vocational, and developmental (Echtner, 1995). Professional training focuses on the theoretical aspect of entrepreneurship, often carried out in tertiary institutions for management and decision-making; vocational training focuses on skills required for the practice and frontline running of entrepreneurial activities; in contrast, developmental training or education entails education centers on enhancing individual entrepreneurial personality or traits (Genty et al., 2015).

However, the extent to which entrepreneurs can be trained is ambiguous in literature (Genty et al., 2015). The literature reveals that entrepreneurial education significantly influences decision-making processes in small businesses and performance (Huang, 2010; Torikka, 2013; Genty et al., 2015). Ogundele et al., (2012) identified a lack of management skills as one of the problems challenging entrepreneurs and suggested that proper education should be given to entrepreneurs. Osuagwu (2001) also indicates limited formal education as a major cause of entrepreneurs' failures in Nigeria.

2.7.1.5 Entrepreneurs' Experiences

Experience refers to the knowledge entrepreneurs have obtained when starting or working for a previous firm (Jo & Lee, 1996). The experience acquired by entrepreneurs in their previous ventures is important for their performance in their present venture (Hmieleski & Baron, 2009; Zhang, 2011). An entrepreneur does not necessarily need to be a top manager from his previous experience, as experience might be from any stage of the firm's development, from the start-up stage or a later stage (Mueller et al., 2012; Oviatt & McDougall, 1995; Politis & Landström, 2002). Previous experience can be successful or not: the number of years spent working in previous firms and the role played by the entrepreneur is what matters (Genty et al., (2015).

Besides, further investigation by Sarasvathy and Menon (2013) attributes entrepreneurial failure to a lack of entrepreneurial experience. Likewise, the study of Polas et al. (2019) also identifies experience as a determinant of entrepreneurs' performance.

Table 2. 7 *Effect of entrepreneurial Experience on Entrepreneurship Performance*

S/N	Author(s) and date	Findings or Descriptions
1	Sarasvathy and Menon (2013)	Entrepreneurial failure to a lack of entrepreneurial experience
2	of Polas et al. (2019)	Identifies experience as a determinant of entrepreneurs' performance
3	Polas et al. (2019)	the number of years spent working in previous firms and the role played by the entrepreneur is what matters

| 4 | (Mueller et al. (2012), Oviatt and McDougall (1995), and Politis and Landström (2002) | Entrepreneurial experience might be from any stage of the firm's development, from the start-up stage or a later stage |

2.7.1.6 Entrepreneurs' Ecosystem

The entrepreneurs' ecosystem (EE) refers to the entire network behind an individual entrepreneur or an organisation supporting entrepreneurship. EE comprises businesses, venture capitalists, business angels and banks, and institutions such as universities, public sector agencies, and entrepreneurial processes inside the ecosystem (Mason & Brown, 2014). EE is a blend of social, economic, cultural, and political components within a region, created to provide support and development to help business start-ups to grow.

Every ecosystem has unique characteristics that cannot be transferred to another environment (Ejo-Orusa, 2019). In a heterogeneous business environment like Nigeria, what works in one part of the country might not work in another part; the environment dictates businesses' entrepreneurial activities and performances (Pratono & Mahmood, 2015).

Many studies are related to EE, and many of its dimensions have evolved (World Economic Forum, 2013; Mason & Brown, 2014; Stam, 2015; Cooney, 2012). For example, Suresh and Ramraj (2012) highlight eight EE dimensions: moral, financial, network, government, technology, market, social and environmental. Mazzarol (2014) identifies a further nine EE dimensions: government policy, regulatory framework, and infrastructure, funding and finance, culture, mentors, advisors and support systems, universities as catalysts, education and training, human capital and workforce, and local

and global markets. Environmental turbulence, access to finance, and entrepreneurial personality are identified as peculiar to the Nigerian EE drawing from the poor performance of the Nigerian economy; these three dimensions negatively impact entrepreneurship (Ejo-Orusa, 2014; Isenberg, 2016: Ejo-Orusa, 2019).

2.7.1.7 Environmental turbulence

Environmental turbulence refers to the unpredictable and volatile nature of the events in the environment within which a particular business operates (Ko & Tan, 2012). Environmental turbulence may take three forms: technological turbulence, competitive intensity, and market turbulence. Technological turbulence refers to the rapid changes of technological development within the industry (Ejo-Orusa, 2019). Competitive intensity refers to the competition level among the firms operating in the industry (Chan et al., 2012). Market turbulence is regarded as the extent of the volatility and changes in customers' preferences and behaviours in the industry (Hanvanich, Sivakumar & Hult, 2006). This study refers to environmental turbulence as the exogenous factors influencing firms' operations within a given industry.

Recently, increasing globalisation has become a salient turbulent factor influencing SMEs. This has intensified the competition among SMEs and involves a rapid change in customers' preferences for a particular product or service (Wong, 2012). Environmental turbulence tends to jeopardise the relationship between EO and SMEs' performance (Martin, Martin & Minnillo, 2009; Ejo-Orusa, 2014; Pratono & Mahmood, 2015; Ejo-Orusa, 2019); and it is considered as a risk that threatens SMEs performance (Lee, 2004; Ejo-Orusa, 2019).

However, Martin et al. (2009) regard environmental turbulence as an opportunity for entrepreneurially oriented individuals or firms to become successful. This study regards environmental turbulence as a factor influencing the relationship between EO and SMEs' performance.

2.7.1.8 Access to Entrepreneurial Financing

Access to finance is an essential element for the growth and survival of any SME (ACCA, 2009). The possibilities for SMEs to expand and grow improve when they have access to adequate finance (Olomi & Urassa, 2008). Many factors have been identified in the literature as responsible for SMEs' inadequate access to finance. With this regard, Anzoategui and Rocha (2010) identify competition within the business ecosystem as a crucial reason; its absence can influence SMEs' performance directly. Beck (2007) indicates weak financial regulatory frameworks in developing countries as another reason for poor access to finance. Other factors such as high interest rates (Diagne & Zeller, 2004) and collateral requirements (Garret, 2009; Gitman, 2003) are also reasons for SMEs' poor access to finance. These studies all coalesce on indicating that access to finance within the ecosystem directly affects SMEs' performance.

2.7.1.9 National Culture

National culture is a dimension of EE that influences entrepreneurship in any given country. Culture is a multiple dimension that includes the beliefs and value systems, religion, social structures, national outlook and psychology, and patterns of behaviour (Hofstede, 2001). The Nigerian EE is heterogeneous in nature, as it consists of various tribes ethnic and religious groups within each tribe. Ethnic and religious groups have their own traditions, societal structures and frameworks, beliefs, and values: all these are

relevant to understand how members of these groups can be entrepreneurial, innovative, and transit to modern industrialism (Ejo-Orusa, 2019).

More open societies towards a free exchange of ideas, motivation to learn new knowledge, curiosity, and practicality are more successful in economic development, as their members are often inclined to act to adopt an entrepreneurship sustainability culture (Ejo-Orusa, 2019).

The Nigerian EE is characterised by tribalism and feudalism, which is a relic of pre-Industrial Revolution society. Entrepreneurship engagement in Nigeria is solely based on necessity. Hence, several entrepreneurs operating in Nigeria lack the requirements to access resources to operate. Examples of these resources include government loans and finance access that influence the entrepreneurial organisational culture (Ejo-Orusa, 2019). The embedded tribal roots have also become a challenge for entrepreneurship culture in the country. For example, the extended family system is a social arrangement that provides an innovative anti-poverty strategy for traditional society but negatively affects entrepreneurship (Burt, 2005; Cogburn & Adeya, 2000; Ejo-Orusa, 2019).

More affluent members in the Nigerian society take financial responsibility for the less privileged ones; thus, entrepreneurial attributes like saving and investing are gradually reduced. Furthermore, in a developing country average worker does not even earn a living wage, support for hangers-on has the effect of institutionalising corruption (Maksimov et al., 2017; Moyce & Schenker, 2018). Perhaps more damaging is that dependence creates a coterie of passive citizens who may never have the drive or motivation to explore new venture creation opportunities (Yingi, 2020).

2.8   SMEs' performance

SMEs and their performance are of great interest for entrepreneurs, economists, researchers, governments, organisations, and financial institutions worldwide due to their role in economic development (Eniola & Ektebang, 2014). Performance management includes evaluating the achieved objectives against the preset goals based on the efficacy of the approaches used and giving feedback on individual and corporate actions (Armstrong & Baron, 1998).

Performance measurements, especially in SMEs, are relatively new tools as most SMEs do not have a defined and scientific method for people management and goal setup (Jakhotial, 2019). Many SMEs can achieve fast growth initially and still can be overwhelmed by various problems such as unprofessional evaluators, unempirical performance indicators, and a shortage of feedback mechanisms (Na-Nan et al., 2017). To enhance performance management level, SMEs must train performance management personnel, establish empirical performance indicators, and set up a bi-directional (bottom-up and bureaucratic) performance feedback mechanism (Wickramasinghe, 2016; Na-Nan et al., 2017; Jakhotial, 2019).

Measuring business performance is pivotal for business management, and it is usually associated with the average rate of return maintained over a period of years (Porter, 1980; Barney, 2002; Mackey et al., 2007). Pfeifer and Salancik (2003) regard the average rate of return as the acceptable actions and returns generated by firms that have been operationalised and measured and viewed in different ways. In literature, three different perspectives by which firm performance can be measured are revealed: perceived success

(achieving and surpassing the predetermined objectives), firms' growth (expansion), and financial returns) (Abiodun & Harry, 2016).

The financial performance measurement has been measured within a theoretical framework based on four different approaches: goal approach (base on return on investment 'ROI'), system resource approach (ability to be in control of the needed resources so as to have a competitive edge, not limited to raw materials and human power (Alexy et al., 2018; Rule & Irwin, 1988)), stakeholder approach (based on firms' performance on return of asset and stakeholders' satisfaction that encourage larger investment (Bosse et al., 2009) and competitive value approach (Ansong & Agyemang, 2016). The goal approach allows SMEs' owners/managers to focus their attention on indicators such as revenues, returns and profitability are often used as a guide of SMEs' performance; focusing on such indicators can assist SMEs in pushing for future growth and expansion (Salloum et al., 2016). The goal approach has been commonly used to measure the performance of SMEs due to its simplicity, understandability, and being internally focused (Chong, 2008).

Ansong and Agyemang (2016) emphasised that, in case of large investments made by SMEs, achieving their internal goals might not be realistic in the short run; as such, while the goal approach stresses on achieving pre-determined targets, considering the timeframe for the income realisation of the investment might be necessary. Hence, understanding time series based on performance measurements concerning SMEs' activities is essential (Richard et al., 2008).

For SMEs, monitoring financial performance measures is needed not because of their lack of access to funds but due to their ability to generate returns (Wen et al., 2017). Returns on assets (ROA) and return on equity (ROE) are the most used financial indicators (Wen et al., 2017; Ahmad, 2011; Pastusiak et al., 2016). ROA represents a fundamental method used to evaluate a firm's profitability; it identifies a company's ability to utilise its assets, providing an evaluation of how efficiently a firm uses its assets to generate an income stream (Tangen, 2003). ROE is a metric tool that measures how well a firm has performed concerning the capital its shareholders have invested in it. Essentially, ROE shows how much returns every equity invested in the firm by its shareholders generates (Ross et al., 2010).

Other measures such as annual turnover, employment, and productivity levels have been used for measuring SMEs' performance. The study of Ipinaiye et al. (2017) use these three measures as indexes of growth for SMEs in Ireland; the study identifies how the turnover and employment index and productivity measured actual performance. Agyapong and Attram (2019) and Watson (2007) used growth, profit margin, cost efficiency, and market share to measure SMEs' performance. In contrast, Beheshti and Beheshti (2010) measures performance in terms of firms' productivity. Their studies indicate these three measures as necessary to assess SMEs when examining them in their roles as a catalyst for economic development.

Table 2. 8Summary of Factors Measuring SME Performance

S/N	Author(s) and date	Findings or Descriptions
1	Agyapong and Attram (2019) and Watson (2007)	Growth, profit margin, cost efficiency, and market share to measure SMEs' performance
2	Ipinaiye et al. (2017)	Turnover and employment index and productivity measured actual performance

3	Tangen, (2003)	ROA represents a fundamental method used to evaluate a firm's profitability; it identifies a company's ability to utilise its assets, providing an evaluation of how efficiently a firm uses its assets to generate an income stream
4	Abiodun and Harry (2016).	perceived success (achieving and surpassing the predetermined objectives), firms' growth (expansion), and financial returns)
5	Alexy et al. (2018), and Rule and Irwin (1988)	theoretical framework based on four different approaches: goal approach (based on return on investment 'ROI'), system resource approach (ability to be in control of the needed resources so as to have a competitive edge, not limited to raw materials and human power
6	Chong (2008).	The goal approach has been commonly used to measure the performance of SMEs due to its simplicity, understandability, and being internally focused

2.9 Research Propositions and Hypotheses

This section presents the hypotheses of this study by reviewing previous empirical work on EO, demographic factors of entrepreneurs, entrepreneurship ecosystems, and SMEs' performance. By reviewing the prior studies, the researcher identified the approaches and methods used and the direction of the hypotheses, identified data sources, and understood researchers' ability to critically evaluate research in the field of interest (Hart, 2018).

2.9.1 EO and SMEs' performance

EO is the strategic orientation that captures the specific decision-making aspect of SMEs. The literature review provided in previous sections identified five EO dimensions: innovativeness, proactiveness, risk-taking, comprehensive aggressiveness, and entrepreneurial autonomy; indicating the presence of a relationship between these EO

dimensions and SMEs' performance (Leonidas et al., 2011; Sidek, 2016; Al-Swidi & Hossain, 2012; Zehir et al., 2015; Linton, 2016; Kosa et al., 2018; Zhai et al., 2018). However, a study by Kreiser, Anderson, Kuratko and Marino (2020) argues a negative relationship between EO and SMEs' performance.

2.9.1.1 Innovativeness and SMEs' Performance

In the context of entrepreneurship, innovativeness entails the propensity to engage with the generation of novel ideas (Covin & Slevin, 1989); in the absence of innovation, SMEs will cease to exist in the absence of innovation, which is a crucial element that informs SMEs' survival strategy (Maldonado-Guzman et al., 2017; Omisakin et al., 2016). Previous studies identified a positive relationship between SMEs' innovativeness and performance (Leonidas et al., 2011; Sidek, 2016; Al-Swidi & Hossain, 2012; Zehir et al., 2015). Kosa et al. (2011) and Ruiz-Jiménez and del Mar Fuentes-Fuentes (2016) states that innovativeness in the business sector has a positive and significant effect on its performance. Also, they indicate innovativeness as a crucial element for improving SMEs' performance. Hence, this study posits that innovativeness will positively influence the performance of Nigerian SMEs.

H_{1a}: *Innovativeness has a positive effect on SMEs' performance in Nigeria.*

2.9.1.2 Proactiveness and SMEs' performance

Proactiveness entails seeking new opportunities by anticipating future demand in the market, for instance, by participating in existing markets through new products or using new processes for old products or services (Zahir et al., 2015). In entrepreneurship, proactive SMEs perform better than competitors due to their ability to respond promptly

to market changes (Hughes & Morgan, 2007). This ability gives them an advantage compared to their competitors and the chance to become an industry by discovering and harnessing opportunities before their rivals (Lumpkin & Dess, 1996; Zhai et al., 2018).

Several studies (Kosa et al., 2011; Hughes and Morgan, 2007; Rauch et al., 2009; Sascha et al., 2012) indicate a positive relationship between proactiveness and SMEs' performance. For instance, Zehir et al. (2015) to find out that proactiveness has a significant positive effect on the innovative performance of small and medium-sized manufacturing firms in Turkey. Also, Kraus et al. (2011) indicate proactiveness as the EO dimension having a significant influence on the performance of Dutch SMEs. Therefore, this study posits that proactiveness will have a positive effect on the performance of Nigerian SMEs.

H_{1b}: *Proactiveness has a positive effect on SMEs' performance in Nigeria.*

2.9.1.3 Risk-taking and SMEs' performance

Risk-taking is the ability of entrepreneurs to take advantage of opportunities considering associated risk factors that cannot be estimated (Lumpkin & Dess, 2001). According to Kraus et al. (2011), risk-taking is often used to describe the level of uncertainty that follows from behaving entrepreneurially; the willingness of an entrepreneur to take risks by investing money in a business with an unknown risk or an uncertain outcome makes him a leader in the market (Omisakin et al., 2016). The relationship between the EO risk-taking dimension and SMEs' performance tends to be positive (Kraus et al., 2011; Kusumawardham, 2013; Kosa et al., 2018). In their study of the furniture-making sector in central Java. Indonesia Kusumawardham (2013) indicates a positive effect between risk-taking and SMEs' performance. Kosa et al. (2011) also

show a positive effect between risk-taking and SMEs' performance in Ethiopia. Likewise, it is expected that SMEs in Nigeria will achieve a better performance if they can take advantage of opportunities in the market while facing unknown future risks. Hence, this study posits that risk-taking will influence SMEs' performance in Nigeria.

H_{1c}: Risk-taking has a positive effect on SMEs' performance in Nigeria.

2.9.1.4 Competitive Aggressiveness and SMEs' performance

Competitive aggressiveness is the tendency of firms to either directly or indirectly compete with their counterparts in the markets in view of improving their own position as market leaders. SMEs showing competitive aggressiveness tend to be leaders of their market (Lyon et al., 2000). Several studies have found a positive relationship between competitive aggressiveness and firm performance (Justine et al., 2005). Findings from Zehir et al. (2015), Kosa et al. (2011), Callaghan (2009), and Shan et al. (2016) indicate that competitive aggressiveness has a positive impact on SMEs' performance. Hence, this study posits that SMEs in Nigeria with the ability to challenge competitors tend directly or indirectly to perform better in their reference market. Therefore, the following hypothesis is proposed:

H_{1d}: competitive aggressiveness has a positive effect on SMEs' performance in Nigeria.

2.9.1.5 Entrepreneurial autonomy and SMEs' performance

Entrepreneurial autonomy refers to the rights of an entrepreneur to define and decide when, how, and what work is done (Lumpkin & Dess, 1996). An entrepreneur should

have a good decision-making instinct to be a strong leader who can undertake risky actions decisively (Kosa et al., 2011); thus, the independence and autonomy with which entrepreneurs make decisions enhance their ability to stay ahead of competitors and to outperform them. Several studies (Al-Swidi and Al-Hossan 2012; Pratono and Mahmood 2016; Kraus et al., 2011; Zahir et al., 2015; Sidek et al., 2016) indicate that entrepreneurial autonomy has a positive influence on SMEs' performance. Likewise, this study posits that entrepreneurial autonomy can enhance the performance of SMEs in Nigeria. Therefore, the following hypothesis is proposed:

H_{1e}: Entrepreneurial autonomy has a positive effect on SMEs' performance in Nigeria.

2.10 Demographic factors, Entrepreneurial Orientation, and SMEs' performance

Research on entrepreneurship has established that individuals' attributes play a significant role in becoming entrepreneurs (Remeikiene et al., 2013; Atef and Al-Balushi, 2015). For example, findings from Fellnhofer et al., (2016), Ismail, Anuar et al., (2015), Martins et al., (2018), Rees (1998), and Taatila and Down (2012) establish that age, experience, education/training, and gender are associated with students' EO in Malaysia. Espíritu-Olmos and Sastre-Castillo (2015) also identify a relationship between personality traits and entrepreneurs' EO. Other studies show a significant association between the willingness of becoming an entrepreneur and age (Cumberland et al., 2015), educational level (Dickson et al., 2008; Cumberland et al., 2015; Björklund & Krueger, 2016; Koskimaki, 2018; Genty et al., 2016; Polas et al., 2019), gender (Genty et al., 2016;

Polas et al., 2019) and experience (Rae, 2004; Sarasvathy & Menon, 2013; Genty et al., 2016).

H_{1f}: Entrepreneurial demographic characters significantly influence SMEs performance.

2.10.1 Education Level, Entrepreneurial orientation, and SMEs' Performance

Crawford et al. (2015); Björklund and Krueger (2016) and Koskimaki, (2018) asserted that the educational level of individuals influences their tendency to engage in entrepreneurial activities: the more educated people are, the more likely they engage with entrepreneurial ventures and business initiatives (Polas et al., 2019). Education provides an opportunity for learning about new business opportunities (Lindquist et al., 2015), while the information and skills gathered in training enhance the level of returns from entrepreneurial activities (Kuratko et al., 2015).

Dickson et al. (2008), Martin et al. (2013), Li, Lee, and Chen (2011) identified a positive relationship between education level and SMEs performance. Marti et al. (2013) found that individuals with higher education levels tend to perform better in their business ventures than those with lower educational levels. In addition, Dickson et al. (2008) state that education levels are significant contributors to profitability levels, sales level, and SMEs' survival rates. In light of these considerations, the study posits the following hypotheses:

> *H_{2ai}: Education has a significant effect on the innovativeness of entrepreneurs in Nigeria.*
> *H_{2aii}: Education has a significant effect on the proactiveness of entrepreneurs in Nigeria.*

H_{2aiii}: Education has a significant effect on the risk-taking of entrepreneurs in Nigeria.
H_{2aiv}: Education has a significant effect on the competitive aggressiveness of entrepreneurs in Nigeria.
H_{2av}: Education has a significant effect on the entrepreneurial autonomy of entrepreneurs in Nigeria.
H_{3a}: Education has a significant effect on SMEs' performance in Nigeria.

H_{4a}: EO mediates between educational level and SMEs' performance in Nigeria.

2.10.2 Entrepreneurial Experience, EO and SMEs' performance

Entrepreneurial experience is the experience that an individual or firm gathers while engaging in a business venture. Several studies examined the relationship between entrepreneurial experience, EO, and its dimensions (Amartefio & Agbelewu, 2017; Genty et al., 2016; Peake & Marshall, 2009; Park et al., 2017; Polas et al., 2019; Sarasvathy & Menon, 2013). Polas et al. (2019) reveal a positive effect of entrepreneurial experience when analysing undergraduate students' willingness to establish new ventures. At the same time, Unger et al. (2011) find a relatively low impact of entrepreneurial experience on SMEs' performance as part of human capital that affects business performance. In light of these considerations, the study posits the following hypotheses:

H_{2bi}: Entrepreneurial experience has a significant effect on the innovativeness of entrepreneurs in Nigeria.

H_{2bii}: Entrepreneurial experience has a significant effect on the proactiveness of entrepreneurs in Nigeria.
H_{2biii}: Entrepreneurial experience has a significant effect on the risk-taking of entrepreneurs in Nigeria.
H_{2biv}: Entrepreneurial experience has a significant effect on the competitive aggressiveness of entrepreneurs in Nigeria.

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H_{2biii}: *Entrepreneurial experience has a significant effect on the autonomy of entrepreneurs in Nigeria.*

H3b: *Entrepreneurial experience has a significant effect on SMEs' performance in Nigeria.*

H4b: *EO mediates between entrepreneurial experience and SMEs' performance in Nigeria.*

2.10.3 Gender, EO, and SMEs' performance

In literature, studies addressing gender in entrepreneurship identified a relationship between gender and EO (Polas et al., 2015; Marin et al., 2016). Similarly, studies on gender differences revealed the tendency of the male gender to be more entrepreneurially oriented than the female counterpart. According to Marin et al. (2019), the likelihood of men engaging in entrepreneurial activities is higher than for women, although this predominance is not as high in social entrepreneurship as traditional commercial entrepreneurship (Bosma et al., 2016).

Previous studies have identified gender as one of the factors affecting business ventures (Chirwa, 2004). In their study about gender differences and business outcomes business, Loscocco et al. (1991) found that male-owned businesses perform better in terms of profit than female-owned ones. Likewise, McPherson (1996) states that female business owners show lower and slower growth rates than male business owners. Considering these considerations, the study posits the following hypotheses:

H_{2ci}: *Gender has a significant effect on the innovativeness of entrepreneurs in Nigeria.*

H_{2cii}: *Gender has a significant effect on the proactiveness of entrepreneurs in Nigeria.*

H_{2ciii}: *Gender has a significant effect on the risk-taking of entrepreneurs in Nigeria.*

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H₂civ: *Gender has a significant effect on the competitive aggressiveness of entrepreneurs in Nigeria.*

H₂cv: *Gender has a significant effect on the autonomy of entrepreneurs in Nigeria.*

H₃c: Gender has a significant effect on SMEs' performance in Nigeria.

H₄c: EO mediates between entrepreneurial gender and SMEs' performance in Nigeria.

2.10.4 Age, Entrepreneurial Orientation and SMEs' performance

The relationship between entrepreneurs' age and EO has been widely investigated (Polas et al., 2019). Ruis and Scholman (2012) investigate the relationship between age, SMEs' competitive strategy, and performance; their results show a strong negative relationship between entrepreneurs' age and SMEs' performance. As individuals age, the results and impact of their business performance become negligible or negative (Ruis & Scholman, 2012). Meanwhile, Chow (2006) found a marginally positive effect for age on EO in business ventures. In light of these considerations, the study posits the following hypotheses:

H₂di; Age has a significant effect on the innovativeness of entrepreneurs in Nigeria.

H₂dii; Age has a significant effect on the proactiveness of entrepreneurs in Nigeria.

H₂diii; Age has a significant effect on the risk-taking of entrepreneurs in Nigeria.

H₂div; Age has a significant effect on the competitive aggressiveness of entrepreneurs in Nigeria.

H₂dv Age has a significant effect on the autonomy of entrepreneurs in Nigeria.

H3d: The age of an entrepreneur influences SMEs' performance in Nigeria.

H4d: EO mediates between entrepreneurial age and SMEs' performance in Nigeria.

2.11 The Moderating Effect of Entrepreneurial Ecosystem between EO and SMEs' Performance

The tenets of contingency theory assume that there must be a proper fit between entrepreneurial ecosystem and organisational measures that enhance firms' performance (Mu & Di Benedetto, 2011). According to Lumpkin et al. (2009), to remain competitive in the market, the firm's decision-makers must be aware of customer demand changes and at least implement or show concern towards implementing such. Hence, introducing moderating variables in the analysis of EO and SMEs' performance can enhance interpretations of the results (Real et al., 2014).

According to Isenberg (2016), the entrepreneur's ecosystem includes the political, economic, and technological factors influencing entrepreneurship operations. In this study, the entrepreneur's ecosystem includes the uncontrollable, exogenous variables which facilitate or inhibit entrepreneurship within a given economy (Ejo-Orusa, 2019). Variables such as environmental turbulence, national culture, access to finance, and technological/network capability are identified as the ecosystem that influences SME operations in Nigeria. Previous studies on the relationship between EO and firm performance generated mixed results (Pratono & Mahmood, 2015).

Iseberg (2011) and Olutuase et al., (2018) indicate a potential for a significant moderating effect of the entrepreneurial ecosystem on the relationship between EO and SMEs' performance. Mack and Mayer (2016) argue that the evolution of the entrepreneurial ecosystem overtime impacts entrepreneurial history that is not limited to education, access to finance, and entrepreneurship culture; hence, with the entrepreneurial

ecosystem as a moderator, scholars can better understand the complex relationship between EO and SMEs' performance. Therefore, to better understand the complex relationship between EO and SMEs' performance, the entrepreneurial ecosystem was introduced as a moderating variable between the relationship as mentioned above.

H: There is a significant moderating effect of the entrepreneurial ecosystem on the relationship between EO and SMEs' performance.

2.12 *Environmental turbulence, EO and SMEs' performance*

EO assumes that firms are conscious of changing demand and market preferences and that SME owners focus on preferences and customer demand (Lumpkin et al., 2009). SMEs with a high EO can manage market turbulence (Pratono & Mah mood, 2015) and can quickly adapt to changing preferences that may arise in the market, providing them with the opportunity to become leaders and perform better than competitors (Devezer et al., 2014). However, firms with higher levels of EO may still suffer from strategic posturing during inappropriate situations (Wales et al., 2011). The analysis proposed in this study assumes that SMEs with strong innovativeness, a higher propensity to take risks and act competitively aggressive and proactive can take advantage of intense environmental turbulence to outperform their competitors, repositioning themselves better in the market.

Considering the inconclusive findings between EO and SMEs' performance, the moderating role of environmental turbulence has been extensively studied (Bodlaj & Čater, 2019; Ferreira et al., 2020; Mason et al., (2015). Also, Renzo et al., (2009) emphasise entrepreneurs' behavioural response to changes in the market environment:

SMEs with a high EO may face a challenge of making strategic preferences during inappropriate market situations by indulging in a proactive behaviour through improving the strategic fit between the organisation and the business environment (Parker et al., 2010; Wales et al., 2011). As a result, this study posits that environmental turbulence significantly moderates between EO dimensions and SMEs' performance in Nigeria and proposes the following hypothesis:

> ***H_{5a}****: Environmental turbulence significantly moderates between innovativeness and SMEs performance in Nigeria.*
> ***H_{5b}****: Environmental turbulence significantly moderates between proactiveness and SMEs performance in Nigeria.*
> ***H_{5c}****: Environmental turbulence significantly moderates between risk-taking and SMEs' performance in Nigeria.*
> ***H_{5d}****: Environmental turbulence significantly moderates between competitive aggressiveness and SMEs' performance in Nigeria.*
> ***H_{5e}****: Environmental turbulence significantly moderates between entrepreneurs' autonomy and SMEs' performance in Nigeria.*

2.11.2 National culture, EO, and SMEs' performance

The entrepreneurial ecosystem could be self-sustaining if the culture allows it; thus, culture is considered crucial (Nadgrodkiewicz, 2013). EO regards strategic activities and decision-making activities geared towards improving SMEs' performance (Lumpkin & Dess, 1996); SMEs with good EO are action-oriented and seek every opportunity to implement new ideas focused on improving their performance. This eventually forms the beliefs and norms, and culture of the firms: SMEs operating within a cultural context that promotes the pursuit of innovation, proactiveness, risk-taking propensity, competitive aggressiveness and entrepreneurial autonomy are more likely to improve their performances compared to SMEs operating in different cultural contexts. In the long run, an entrepreneurial culture will be up-scaled, thereby sustaining the pace of the

entrepreneurial ecosystem. Iseberg (2016) identified a significant relationship between culture and EO.

While investigating the moderating role of culture between EO and SMEs' performance, Shane and Venkataraman's (2000) reveal that the intention of entrepreneurs to establish a new venture is innate in their cultural background; the cultural background, therefore, can stimulate or hinder individuals' openness to EO (Dissanayaka & Semassinghe, 2016). Considering that researchers have provided mixed findings on the relationship between EO and SMEs' performance, what motivates entrepreneurship in any country lies mainly within the individual in that society. It is a function of the extent of both internal and external stimuli concerning the spirit of entrepreneurship (Wales et al., 2011). Irrespective of the drive for entrepreneurship, national culture seems to have an essential relationship with EO (Dissanayaka & Semassinghe, 2016); therefore, understanding the role of entrepreneurship has both practical and theoretical implications for entrepreneurship SMEs' performance (Hayton et al., 2002).

Saeed et al. (2014) suggested that the relationship between EO and SMEs' performance is strengthened in a characterised culture by a low-power distance. Hofstede and Wedel (1999) argue that firms' innovativeness and performances are enhanced when the firms' strategies are tilted towards individualistic approaches. In contrast, Zahra et al., (2004) affirm that short-term-oriented organisations favour short-term financial gains over strategic goals. However, Dissanayaka and Semassinghe (2016), investigating the moderating effect of national culture between EO and the growth of firms in Sri Lanka, find that national culture is a good predictor of venture growth. Concerning SMEs and the above notions, this study suggests that the relationship between EO and SMEs

performance can be strengthened in the light of the low cultural influence of uncertainty, power distance, individualism, and collectivism; and proposes the following hypothesis:

H_{6a}: National culture significantly moderates between innovativeness and SMEs' performance in Nigeria.
H_{6b}: National culture significantly moderates between proactiveness and SMEs' performance in Nigeria.
H_{6c}: National culture significantly moderates between risk-taking and SMEs' performance in Nigeria.
H_{6d}: National culture significantly moderates between competitive aggressiveness and SMEs' performance in Nigeria.
H_{6e}: National culture significantly moderates between entrepreneurial autonomy and SMEs' performance in Nigeria.

2.13 Access to Finance, EO, and SMEs' performance

Firms' access to finance has generally been recognised as a driver for better performance. Kira and He (2012) note that SMEs' performance can improve through better access to finance, seen as an important aspect for determining the growth and survival of SMEs (Richard & Mori, 2012). Financial resources enable SMEs to maintain independence and engage in activities that promote their performance. Financial capital is the most generic resource that can easily be converted into other resources (Wiklund & Shepherd, 2005). The relationship between access to finance and EO has been investigated by studies (Wiklund & Shepherd, 2005; Zampetakis et al., 2011; Sidek et al., 2016). Although financial resources do not automatically translate into SMEs' ownership, access to them remains crucial for their performance (Zampetakis et al., 2011, Sidek et al., 2016).

The literature has identified access to finance as having a significant relationship with SMEs' performance (Liu et al., 2014; Moreira, 2016; Mohd Shariff et al., 2017). Liu et al. (2014) indicate that access to finance has a significant moderating effect between EO and SME growth in the UK. Furthermore, Adomako and Danso (2014) identified access

to financial capital as a significant moderating factor in the relationship between financial literacy and the performance of 198 SMEs in Ghana. Hence, this study assumes that an increase in finance access can strengthen SMEs' ability to risk-take, innovate, be proactive, be competitively aggressive, and become autonomous in delivering services or products. Therefore, the following hypotheses are proposed:

> **H7a**: *Access to finance moderates the relationship between innovativeness and SMEs' performance in Nigeria.*
> **H7b**: *Access to finance moderates the relationship between proactiveness and SMEs' performance in Nigeria.*
> **H7c**: *Access to finance moderates the relationship between risk-taking and SMEs' performance in Nigeria.*
> **H7d**: *Access to finance moderates the relationship between competitive aggressiveness and SMEs' performance in Nigeria.*
> **H7e**: *Access to finance moderates the relationship between entrepreneurial autonomy and SMEs' performance in Nigeria.*

2.14   Research Framework

In this study, EO is treated as a major independent variable. Also, EO is treated as a multi-dimensional construct having five dimensions - innovativeness, proactiveness, risk-taking, competitive aggressiveness, and entrepreneurial autonomy. SMEs' performance is assumed as the dependent variable and measured from the firms' financial and non-financial perspectives. The study proposes a causal relationship between EO and SMEs' performance and posits a direct relationship between the five EO dimensions and SMEs' performance. The study also assumes an indirect relationship between EO and SMEs' performance through entrepreneurs' attributes such as age, gender, education, experience, and hypothesis. This mediates the effect of these attributes on EO and SMEs' performance. Contingency theory indicates a correlation between EO and the entrepreneurial ecosystem in which it operates, characterised by environmental turbulence, national culture, and access to finance. Entrepreneurs' attributes are identified

as crucial within the Nigerian entrepreneurial ecosystem; this study analyses these attributes as moderators on the relationship between EO and SMEs' performance. To summarise, Figure 2.1 presents the conceptual framework of the study.

| Innovativeness | |
| :---: | |

| Proactiveness | |
| :---: | |

| Risk Taking | |
| :---: | |

| Competitive Aggressiveness | |
| :---: | |

| Entrepreneurial Autonomy | |
| :---: | |

H2

H1

Demographic Factors
- Age
- Education
- Gender
- Experience

H3

H4

SMEs' performance

Entrepreneurial Ecosystem
- Environmental Context
- Access to Finance
- National Culture
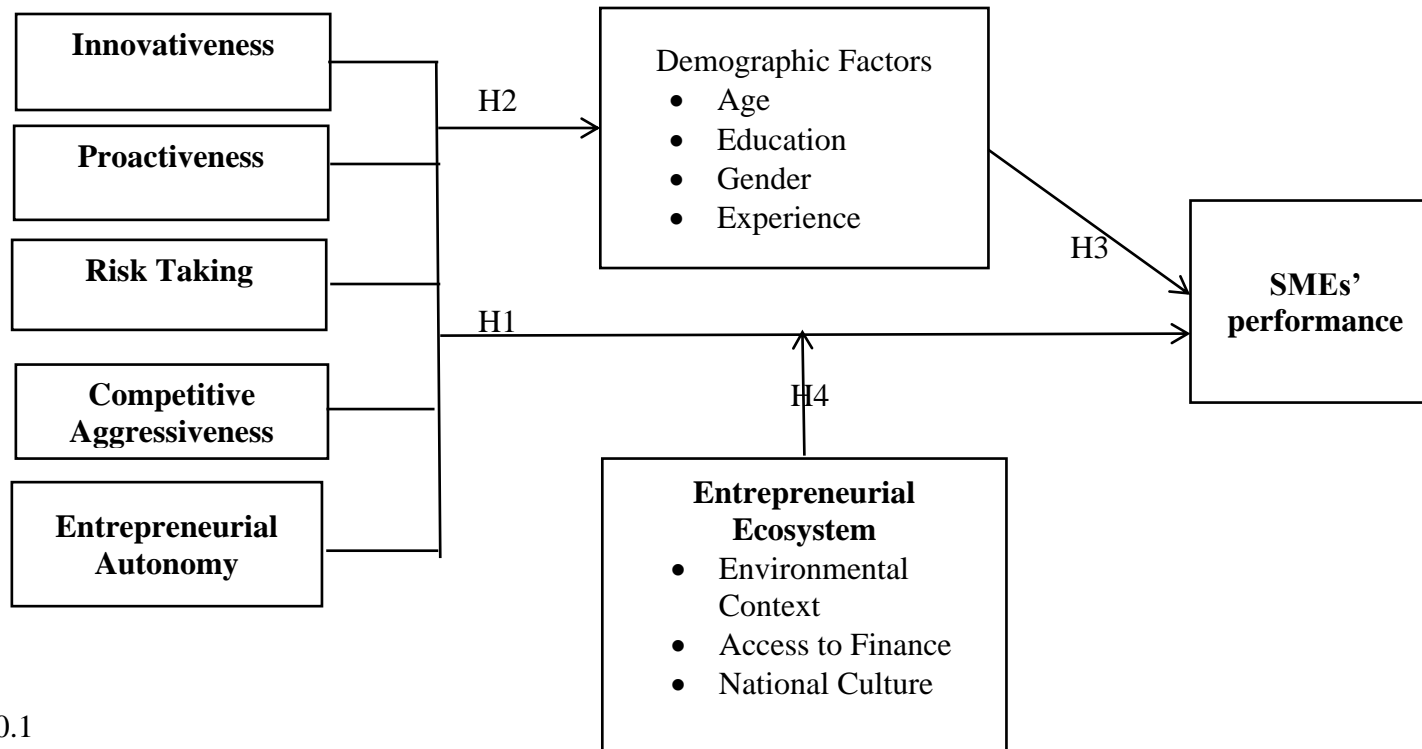
Figure 0.1
Research/conceptual Framework

2.15   Chapter Summary

In summary, this chapter presents an extensive literature review to address the research framework of the current study. Also, this chapter establishes the significance and the effects of the independent variable (Entrepreneurial Orientation 'EO') on the dependent variable SMEs' performance and the moderating effect of the entrepreneurial ecosystem and its dimensions. Besides, this chapter underpins the research work by befitting theories. The explanation for supporting this research with befitting theories is to support the research framework philosophically.

CHAPTER THREE

METHODOLOGY

3.1   Introduction

This chapter starts with a philosophical paradigm of the researcher, research design, outline the methods employed in addressing the research problems; based on a review of the methodologies used in previous entrepreneurship research, a sample of SMEs in a mixed-methods research design (i.e., quantitative methods in Phase One and qualitative methods in Phase Two) was identified as the appropriate approach for this study. This chapter presents the research design, followed by the study area, the population, and sampling techniques. The procedures for the data collection and analysis carried out in this research are also presented.

3.2   Research Approach and Philosophical Justifications

There are two major research approaches, namely the quantitative and the qualitative research approaches. The selection of either of these approaches is characterised by assumptions, processes, and data collection methods (Bryman & Bell, 2007). These two methods are usually guided by approaches known as the deductive/quantitative and inductive/qualitative approaches.

The deductive/quantitative approach is a set of techniques for applying testable theories in the real world to assess their validity. Deductive reasoning starts with a general theory applied in a specific context and provides empirical evidence for the validity of the theory's preposition (Sekaran & Roger, 2011). This approach is associated with the positivism paradigm, which usually involves collecting data in numerical form so that statistical computations can be made, and conclusions drawn (Bryman & Bell, 2015).

It provides researchers with the ability to provide objectives and valid information based on quantified measures from several cases (Cavana & Sekaran 2001; Hill & Wright 2015; Veal 2018). Usually, studies that employ this approach use samples to represent the study's population by generalising the findings to the broader population (Veal 2018). Most quantitative approaches in the social science literature reveal that they apply to all researcher phenomena.

The inductive/qualitative approach, on the other hand, is how researchers arrive at conclusions by establishing a general proposition based on observed phenomena (Sekaran, 2003). This approach emphasises the socially interpreted nature of reality, with attempts to record, analyse, and uncover the more profound meaning and significance of human behaviour and experience. It offers several advantages, such as a detailed and complex description of the subject being investigated (Miles & Huberman, 1994; Denzin & Lincoln, 2008) and a deeper understanding of the participants' personal experience (Veal, 2018). The emphasis of this approach focuses more on the process rather than sample representation of the population (Marschan-Piekkari & Welch, 2004). On the other hand, qualitative approaches include observation and interview, which allows for a close relationship between the researcher and the study subjects. Hence, the credibility of the data collected is ensured throughout the process (Creswell, 2009).

While the advantages of both the quantitative and qualitative approaches have been presented, critics have shown that the quantitative approach regards people as an object of natural science rather than social science, which should be studied differently. Hence, it fails to recognise the different perceptions of the individual (Bryman & Bell, 2018).

In the aspect of concept measurement, the quantitative approach uses assumptions rather than actual descriptions. Therefore, it faces the challenge of precision and accuracy in its outcomes (Bryman & Bell, 2011).

On the other hand, the qualitative approach uses the researcher as its main instrument of data collection, and these subjects the research in this paradigm to subjectivism (Cavana & Sekaran, 2011; Bryman & Bell, 2017). The number of participants in the inductive/qualitative approach is often not a fair representation of the study population, which results in a shortcoming in generalising the results of such studies (Veal, 2018; Bryman & Bell, 2018).

As a result of the criticisms presented above and the complex nature of entrepreneurship, which involves a process of identifying and understanding the behaviour of the entrepreneur and their orientations, a single approach such as a quantitative or qualitative approach might not provide a holistic explanation about the phenomenon of EO and its effects on SMEs' performance (Gartner & Birley 2012; Kodithuwakku & Rosa 2012). Hence, a mixed method/approach, which provides an insight into entrepreneurs' behaviour and multiple realities, is deemed appropriate for this study. Therefore, such is employed.

A mixed research approach involves integrating quantitative and qualitative methods (Creswell & Clark, 2019). It allows for a more prosperous compensation than either quantitative or qualitative approaches (Creswell & Clark, 2017). Teddlie and Tashakkori (2009) note that the mixed method of research gives researchers the ability to generalise the data collected from a quantitative approach, simultaneously providing

a deeper understanding of the investigated phenomenon. Besides, the mixed method increases the precision (Hohenthal, 2016) and validity of the data collected ((Teddlie & Tashakkori 2009; Creswell & Clark 2011).

The research design spans the detailed assumptions, views, or justifications of the straightforward data collection methods and analysis (Bloomberg & Volpe, 2012). Hence, all decisions in research should be anchored in philosophical justifications (worldviews), which underpins the overall decision at every stage of the study. The worldview represents the belief that guides the conduct of a piece of research (Creswell, 2009). This influences how the knowledge will be obtained and how the researcher collects and analyses data (Morgan, 2007). Therefore, in conducting mixed-method research, world views are essential in directing the researcher's efforts (Creswell & Plano Clark, 2011). There are different views to conduct research activities. In line with the research questions in this study, which has implications for both direct objective and subjective means of inquiry, there is a need to combine both the objective dimension and singular reality (quantitative stance) and multiple realities (qualitative stance) to provide a comprehensive understanding of the research problems.

3.3 Research Process

This section presents an overview of the process adopted in describing the process of this study. In respect to the research questions of this study, the mixed-method sequential strand was deemed the most appropriate method of inquiry. This requires multiple worldviews to guide the research process. It includes using a different philosophical stance within each study phase (Creswell & Plano Clark, 2011). The first phase of the study started with a quantitative approach. In this regard, the instrument

development, the selection of respondents, the measurement of variables, and the data analysis were based on post-positivism justification, while the second phase of the study employed a qualitative approach.
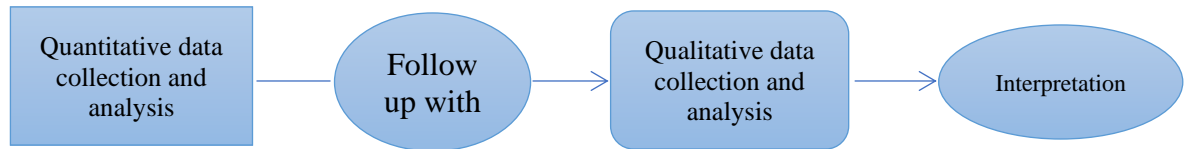
Figure 0.1
Mixed-Method Sequential Explanatory Strategy
(Source: Creswell & Plano Clark, 2011)

Stage one of the first phase of the study involves specifying the gaps that this research aims to address. This phase's outcome includes identifying the research objectives, questions and determining the research significance. These outcomes were presented in Chapter One. The second stage details the review of previous studies concerning the focus and research objectives. Activities in this stage include a review of the underpinning theory – RBV and contingency theory and related literature of constructs under investigation.

Stage three describes the research methods, the population and sample, the sampling techniques, and the sample size. The fourth stage identifies the activities of the data analysis process. These include data preparation, preliminary analysis, the measurement model, the structural model, and the structural model's validation via the interviews' results. The second phase of the study looks at the qualitative method (focus groups) to develop a deeper understanding of the investigated phenomena. This phase of the study helps the researcher to find the answer to the research questions to a greater

extent. The final stage is the concluding phase, where the research findings are discussed and recommendations for researchers and practitioners are made.

Research Phases	Method and Techniques	Outcomes
Research Gaps, Objectives and Significance	This research is motivated by the inconsistent relationship between the dimensions of EO and SMEs' performance within the ecosystem in which the firms operate.	- Selecting Topic - Problem Statement - Research Questions - Research Objectives - Scope of the Study
Literature Review, Theory and Theoretical Framework	This study reviews the concept of entrepreneurship, entrepreneurial orientation, SMEs' performance, the entrepreneurial ecosystem, and the demographic characteristics of entrepreneurs. The study also reviews RBV as the underpinning theory and empirical studies upon which the study framework and hypotheses were developed.	- Literature Review - Theoretical Model -Hypotheses Development -Underpinning Theory
Data Collection	This chapter discusses the research design, starting with the research method, the sample population, the sampling, and the data analysis. Data are collected through questionnaire and interview sessions.	- Research Design - Sampling Technique - Sample Size - Instrumentation - Pilot Study
Data Analysis	The chapter presents the analysis of the data collected in this study. Here is where the research findings are revealed. The results of the interviews are transcribed.	- Data Pre-processing - Descriptive - Preliminary data analysis - Measurement model - Structural model - Validate the structural model.
Discussions and Conclusions	The findings of the research are discussed in this chapter and important implications with regards to theory and practice were drawn.	- Discussions - Implications - Conclusions - Recommendations

Figure 0.2
The research processes

3.4 Quantitative Research Design

Research design is a framework that guides the process of a research project (Churchill et al., 2010). This study employs a survey research design conducted in a cross-sectional manner. The survey research design involves using questionnaires and interviews for data collection to make generalisations from a small sample to a large population (Creswell, 2009) and understand the concept being investigated (Bryman & Bell 2018).

The research was conducted using a cross-sectional approach, where data were gathered at a single point in time to achieve the study's objectives (Sekaran & Bougie, 2012). The choice of this design was based on its advantages over its longitudinal counterpart because it allowed the researcher to collect primary data that reflects the opinion of people (entrepreneurs) and which was better obtained in a cross-sectional setting.

Furthermore, cross-sectional settings save time and money and require a smaller number of researchers than a longitudinal study (Creswell, 2009). As such, this research design was appropriate for this study.

Furthermore, the researcher did not control the variables (EO) that determined the dependent variable (SMEs' performance). The researcher only had control over the measurement of the variables of the study. The researcher was interested in collecting data concerning EO, SMEs' performance, the entrepreneurial ecosystem, and the entrepreneurs' demographics from the SMEs in Nigeria based on their understanding and experiences. Figure 3.2 summarises the study's research design.

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                    ┌─────────────────────────────────┐
                    │   Analysis of Literature Review │
                    └─────────────────────────────────┘
                                    │
                                    ▼
                    ┌─────────────────────────────────┐
                    │            Population           │
                    │        (SMEs in Nigeria)        │
                    └─────────────────────────────────┘
                                    │
                                    ▼
                    ┌─────────────────────────────────┐
                    │   Development of Conceptual      │
                    │    Model/Research Framework      │
                    └─────────────────────────────────┘
                          │                    │
                          ▼                    ▼
            ┌──────────────────┐    ┌──────────────────────┐
            │    Hypothesis    │    │ Instrument Development│
            │   Development    │    │    (Questionnaire)    │
            └──────────────────┘    └──────────────────────┘
                          │                    │
                          └────────┬───────────┘
                                   ▼
                    ┌─────────────────────────────────┐
                    │           Pilot Study           │
                    └─────────────────────────────────┘
                                    │
                                    ▼
                    ┌─────────────────────────────────┐
                    │      Data Collection (Survey)   │
                    └─────────────────────────────────┘
                                    │
                                    ▼
                    ┌─────────────────────────────────┐
                    │          Data Analysis          │
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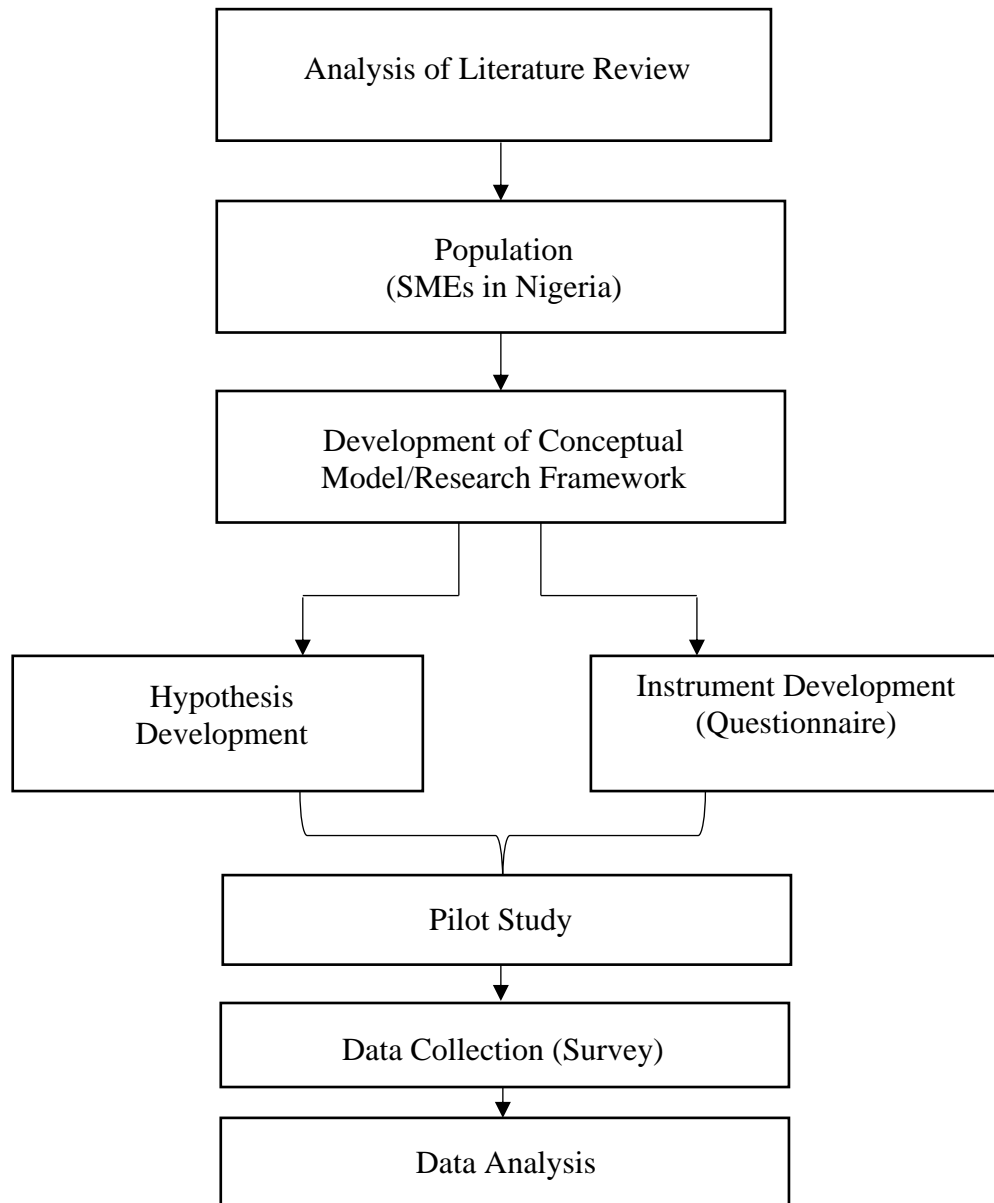
Figure 0.3
Research Design

3.4.1   Population and Sampling

The population is the total number of people a study aims to investigate (Sekaran, 2012). It is the entire group of people who are the subject of a study from which samples are drawn (Sekaran & Bougie, 2013). It is a fundamental element of research that comprises the common characteristics of all individuals in the group. Hence, it is the context and the target of a study (Babbie, 2012). Researchers do not study the entire

population of a study because they cannot obtain the entire population parameters; therefore, they study a target population, which provides lists or records of individuals in the population (Creswell, 2012).

The target population of this study is the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). SMEDAN was established to facilitate small and medium entrepreneurs and investors in accessing the resources required for their development (SMEDAN, 2019). It plays an essential role in stimulating, monitoring, and coordinating development within the SME industry in Nigeria. SMEDAN was created to help small and medium-scale businesses by providing them with the right tools for faster growth. Hence, information such as the number of registered SMEs, ownership status, industrial sector, and size of the firms are the SME records available to SMEDAN.

According to the National Bureau of Statistics (NBS) Nigeria report, 41.5 million small and medium enterprises registered with SMEDAN in 2017, with Lagos state having the highest concentration of SMEs (NBS/SMEDAN National Survey, 2017). Therefore, the target population of this study was the 41.5 million total numbers of SMEs registered by SMEDAN.

Also, the NBS/SMEDAN National Survey (2017) reports that SMEs represented about 91% of the five major economic sectors; these include wholesale/retail (42%), agriculture (20.9%), other services (13%), manufacturing (9.0%) and accommodation and food Services (5.7%). Hence, the population of this study cuts across the five economic/industrial sectors (wholesale/retail, agricultural, manufacturing,

79

accommodation, and food services, and others), which SMEs have significantly

represented in Nigeria.

3.4.2 Sample Size and Power Analysis

The sample size is the exact number of respondents drawn from the target population

(Ranjit, 2012). It was determined by using the sample size formula provided by Krejcie

and Morgan (1970). The result revealed that a sample size of 384 was required for a

41.5 million target population.

$$s = x^2 NP(1-P)/(d^2(N-1) + x^2 P(1-P)) \qquad\qquad EQUATION\ 3.1$$

S = required sample size

x^2 = table value of chi-square for one degree of freedom at the desired confidence level (3.841)

N = population

P = population proportion (assumed to be .50 since this would provide the maximum sample size)

d = degree of accuracy expressed as a proportion (.05)

The power of a statistical test is employed to reduce the cost of sampling error. It

ensures the probability of rejecting the null hypothesis, which proposes no significant

relationship between variables (Faul et al., 2007). It is also used to ensure that the

calculated sample size is adequate to examine the regression model of the study.

Snijders (2005) holds that the bigger the sample size, the more necessary the power of

a statistical test. This study used a power analysis to examine the appropriateness and

adequacy of the sample size using the G*Power 3.10 software (Faul et al., 2007). The

following parameters were used: power (1-β err prob; 0.95); alpha significance level

(α err prob; 0.05); medium effect size f² (0.15) and five predictor variables

(innovativeness, proactiveness, risk-taking, competitive aggressiveness, and

entrepreneurial autonomy). The power analysis results are shown in Figure 3.3, indicating that a minimum of a 305 sample was required to test a regression-based model for this study (Faul et al., 2007). Hence, this study holds that the sample size of 384 is adequate for this study.
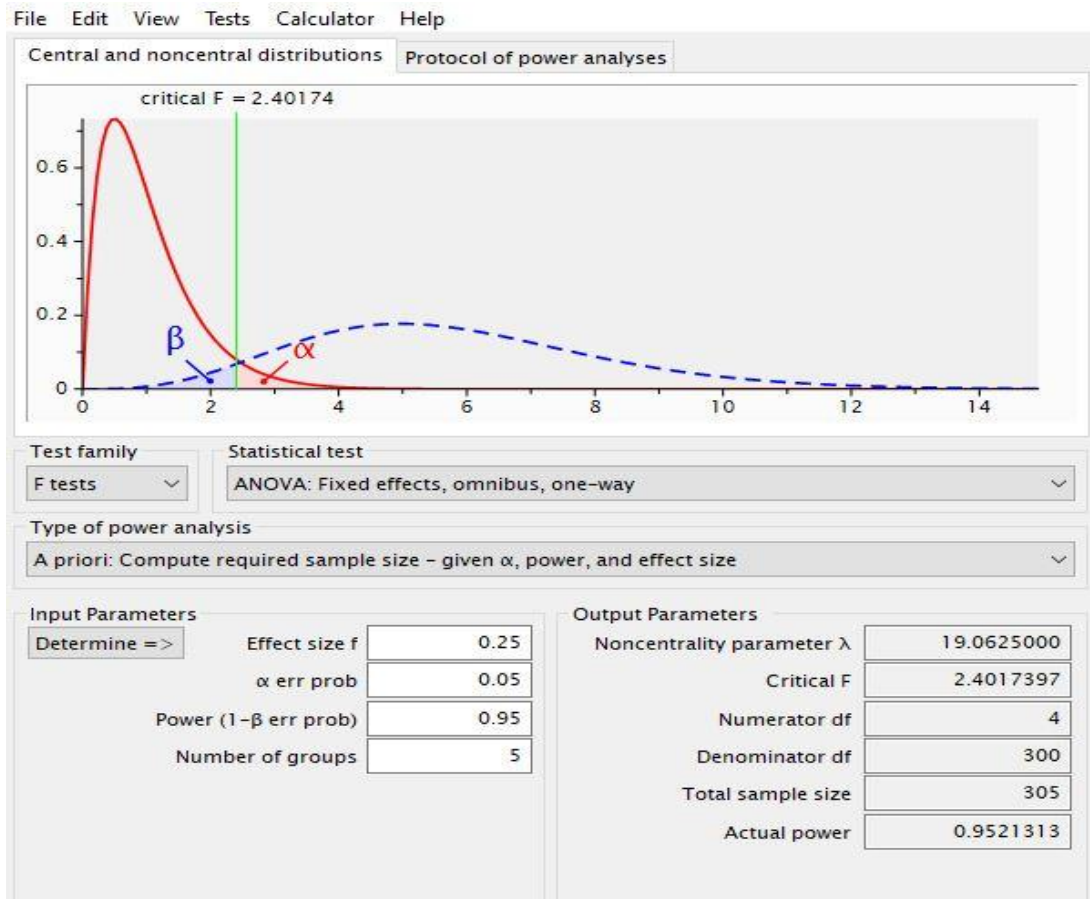
Figure 0.4
Output of an a priori power analysis

In order to ensure that the 384-sample size required achieved a fair representation of the target population, there was a need to ensure a larger sample size because of the low response rate from the respondents, as it is uncommon to achieve a 100% response rate from survey research (Keyton, 2015). Therefore, Wong (2013) advised that the minimum sample size should be increased to fulfil the highlighted research objectives. Hence, this study considered oversampling by multiplying the sample size by three (384

*3 = 1152) (Salkind, 2010). Subsequently, a 1,152 sample was taken from the target population.

3.4.3 *Sampling Technique*

This study employed a stratified random sampling technique to select 1,152 samples from the study population. A stratified random sampling allows a researcher to divide a population into a homogeneous subpopulation, known as a stratum (Thomas, 2020). It is the best choice in a probability sampling technique to ensure the diversity of the sample and a similar variance among the elements in each stratum and to lower the overall variance in the population (Nguyen et al., 2019).

This study divided the target population into five strata: wholesale/retail, agriculture, manufacturing, accommodation, food services, and other services. These are the major economic sectors represented by SMEs in Nigeria. Each stratum was then sampled using a simple random sampling technique based on the proportion contributed by each stratum to the entire population of the study. The essence of this technique is to allow the heterogeneity characteristics within the population and homogeneity characteristics within each stratum to be fully represented. According to NBS/SMEDAN (2017), wholesale/retail contributed 42%, the agriculture sector contributed 20.9%, manufacturing, 9.0%, accommodation and food services, 5.7%, services, and other services, 22.4%. Table 3.1 provides a summary of the sampling technique used.

Table 3. 1
Stratified Random Sampling

Economic/Industry Sector	Proportion contribution to SMEs in Nigeria (%)	Sample Size Selected
Wholesale/Retail	42	483.84
Agriculture	20.9	240.77
Manufacturing	9	103.68
Accommodation & Food Services	5.7	65.66
Other Services	22.4	258.05
Total	**100**	**1,152**

From Table 3.1, 484 samples were selected from the wholesale/retail sector using the simple random sampling technique. Two hundred forty-one samples were taken from the agricultural sector, 104 samples from manufacturing, 66 from accommodation and food services, and 258 samples were taken from the other sectors not specified using the simple random sampling technique.

3.4.4 Unit of Analysis

Each SME selected within the study area constitutes the unit of analysis in the research. According to Babbie (2012), a study of this nature aims at examining corporate practices concerning the performance of firms should focus on the organisation as a unit of analysis. Also, Al-Swidi and Al-Hossam (2012) affirm that explaining the EO of the firm is better explained from the management's perspective since these are the people holding executive/strategic positions for the firm. Since owners are often the manager in SMEs, the owners or managers of the selected firm are the representatives of the selected firms.

3.4.1 Research Instrument

To enhance the objectivity of the measurement of the concept, primary data were collected using a close-ended questionnaire with ordered choice questions. The

questionnaire consisted of four major sections: section one (1) contained information about the demographic characteristics of the respondents and their organisations, section two (2) elicited information about EO, section three (3) collected information about the environmental ecosystem, which included the environmental turbulence, access to finance and the national culture. Section four (4) contains information about the SMEs' performance (financial and non-financial performance of SMEs). Each measurement item of the questionnaire was adopted from previous studies to measure specific content, as specified in Appendix 1.

The demographic characteristics of the respondents and their company were measured with 12 items, which included age, gender, level of education, and year of experience of the respondents. The company's characteristics included the company's year of establishment, the number of employees, industry category of the organisation, initial start-up capital, sales turnover, and product market.

The measurements were designed using a five-point Likert type scale, ranging from 1 = strongly disagree to 5 = strongly agree for EO, entrepreneurial ecosystem, and SMEs' performance. Krosnick and Fabrigar (1991) asserted that the longer scales of five, six, and seven are more valid, reliable, and accurate than shorter scales. Hence, they were used for designing the questionnaire to enhance its validity and reliability.

3.4.1.1 Items Measuring Environmental Ecosystem

The environmental ecosystem in this research is described as peculiar independent actors which can be unexpected disruption and unpredictable in technology advancement, economy and industrial activities that influence SMEs' performance

(Manolova & Yan, 2002; Osiyevskyy, Shirokova & Ritala, 2020; Pal et al., 2014). This study, therefore, measures environmental turbulence using three dimensions, namely environmental, market and technology turbulence. Given this, eleven items were adapted from the studies of Abass and Hassan (2017), Hamad (2016), Hung and Chou (2013), Pratono (2018), Pratono and Mahmood (2014), Wilden and Gudergan (2015) to measure environmental turbulence in this research.

Table 3. 2
Items Measuring Environmental Turbulence

S/N	Environmental Turbulence
1	The preferences of our customers change quite a bit over time
2	Our customers tend to look for new products/services all the time
3	Our customers are very price-sensitive, but on other occasions, price is relatively unimportant
4	We usually witness demand for our products and services from customers who did not deal with us previously.
5	The needs of the new customers differ from the needs required by our current customers
	Market Turbulence
6	Our products/services are changing rapidly in the market
7	A large number of new product ideas have been made possible through the market
8	It is difficult to predict the changes in our business sector
	Technological Turbulence
9	Competition due to technology in the business sector is very intense
10	There are many intense promotion wars due to technology
11	Technology has caused an unpredictable change in the price of our product/service

3.4.1.2 Items Measuring Entrepreneurial Orientation

This study adopts a multidimensional approach to measure EO, namely innovativeness, proactiveness, competitive aggressiveness, risk-taking, and autonomy, to define and measure the construct EO. Hence, the items measuring EO were measured by 29 items adapted from Aloulou and Fayolle (2005), Al-Mamun et al. (2017), Arsi (2016), and Lee and Lim (2009). Table 3.3 presents the order of the adapted items.

Table 3. 3

Items Measuring EO (Dimensions)

S/N	Innovativeness
1	I put strong emphasis on marketing new products or services
2	I prefer trying out new ways rather than doing things in the usual way
3	Within the past five years I have introduce no new products
4	I am very happy when I create new business ideas
5	I prefer to try my own unique way when learning new things rather than doing it like everyone else does
6	I am able to use old business concepts in new ways
	Risk Taking
7	I undertake any business activity if the chance of success is 50 : 50
8	I am willing to risk the well-being of myself and family for the sake of my business
9	I believe that bold action are necessary to achieve my business objectives
10	I conduct research before proceeding with investments
11	I have insured my business activities
12	I enjoy facing a difficult task from which other people want to keep away
13	I prefer high risk projects with a high return
14	I prefer to make a bold investment that could harvest superior return
	Proactiveness
15	I initiate actions rather than responding to activities of my competitors
16	I always look around for business opportunities
17	I always identify and sell products that customers want and need
18	I am always the first to introduce new products on the market than my competitors
19	I enjoy turning conditions around to my advantage
	Competitive Aggressiveness
20	I believe that businesspeople have to do whatever they can to survive in business
21	I tell people about my business products and service
22	I can sell my products at lower prices than other people who sell or provide the same products
23	I am very happy when I perform better than other people who are selling the same product or service
	Autonomy
24	I like rules and guidelines because they guide me in my business activities
25	I do not impose restrictions on the activities of my staff
26	I use team work in dealing with my business activities
27	I like to do things in my own way without worrying about what others think
28	I depend on staff to assist me to find ways to solve my business problems
29	I handle the responsibilities of my organization by my self

3.4.1.3 Items Measuring National Culture

This section presents how the items used in measuring national culture was adapted.

This study describes national culture as beliefs, norms and cultures shared within a

sovereign state that include institutional practices having an influence on SMEs'

performance (Park & Ungson, 1997; Smith et al., 1996; Reus-Smit, 2009). Therefore, the items used in measuring national culture were adapted from the studies of (Doney et al., 1998; Park & Ungson, 1997; Smith et al., 1996). A sixteen item was adapted from previous studies mentioned above to measure national culture in this present research. Table 3.4 presents the breakdown of the adapted items for this present research.

Table 3. 4
Items Measuring National Culture

S/N	National Culture
1	In this society, orderliness and consistency are stressed, even at the expense of experimentation and innovation.
2	Societal requirements and instructions are spelt out in detail, so citizens know what they are expected to do.
3	In this society, followers are expected to: Question their leaders
4	In this society, power is evenly shared
5	leaders encourage group loyalty even if individual goals suffer
6	The economic system in this society is designed to maximize: Individual interests
7	In this society, children take pride in the individual accomplishments of their parents
8	parents take pride in the individual accomplishments of their children
9	boys are encouraged more than girls to attain a higher education.
10	In this society, people are generally concerned about others
11	In this society, people are generally sensitive about others
12	In this society, people are rewarded for excellent performance
13	In this society, people are rewarded to strive for continuous improved performance
14	In this society, the accepted norm is to accept the status quo
15	People place more emphasis on solving current problems
15	People are generally non-assertive
16	People are generally tender

3.4.1.4 Items Measuring SMEs' Performance

SMEs' performance in this research is defined as improvement in financial and non-financial attributes of SMEs concerning the SMEs' goals, customers', and employees' satisfaction, that is, the channels (Armstrong & Baron, 1998; Eniola & Ektebang, 2014). Although previous scholars measured performance using two dimensions, namely financial and non-financial characteristics (Dossi & Patelli, 2010; Hernaus et al., 2012).

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However, this study adopts a uni-dimensional approach to measure SMEs' performance. Given this, SMEs performance was measured by six items adapted from previous studies (Hudson et al., 2001; Sousa & Aspinwall, 2010; Taticchi et al., 2010). The rationale underlying the selections of these items lies in the fact that the selected items cover significant attributes of performance

Table 3. 5
Items Measuring SMEs' Performance

S/N	SMEs Performance
1	Profits
2	Increase in sales
3	Return on Investment
4	Increase in number of staff
5	Self-satisfaction
6	Customer satisfaction

3.4.1.5 Items Measuring Access to Finance

In this research, access to research is described as SMEs' ability to have direct or indirect access to financial services not limited to credit, deposit, insurance, and other risk management services that might enhance its performance (Beck et al., 2009; Beck, 2007; Claessens, 2006; Ganbold, 2008). In light of this, a six-item instrument was adapted from the studies of Beck, 2007), Claessens (2006), and Ganbold (2008) were used in measuring access to finance in this research.

Table 3. 6
Items Measuring Access to Finance

S/N	Access to Finance
1	I have access to finance in my business
2	There are adequate loan/credit facilities to support SMEs
3	The administrative process required to access finance for SMEs is easy
4	Collaterals required for SMEs financing is reasonable
5	SMEs loan is guaranteed
6	Availability of government support in SMEs financing

3.4.2   Pilot Test

Before the main data collection, the validity and reliability of the research instrument were ascertained through a pilot test. The aim was to ensure that the items adapted in the research instruments were valid and consistent. The pilot test entailed validating the study instrument, which was conducted through facial validation (Babbie, 2010), to validate the research instruments and gather feedback to improve the item measurements and reliability by assessing the internal consistency of the constructs. The following were the main objectives of the pilot test:

i.   To establish contact between the researcher and the respondents before the commencement of the main data collection.

ii. To examine whether the survey instruments were valid and consistent in their measurement.

iii. To foresee and forestall possible challenges that might arise during the main data collection.

3.4.3   Validity of the Survey Instrument

In this section, both the face and content validity of the measures of the study constructs/variables are examined. According to Mackenzie et al. (2011), content validity is examined to determine the adequacy of items for measuring the conceptual interpretation of the construct they represent. Meanwhile, face validity is a method of ensuring that the wordings of adopted measures are understandable and devoid of ambiguity (Kenneth & Bordens, 2005).

In this study, content validity and face validity for all items are examined by subjecting the survey instrument to a review by experts in entrepreneurship. As a result, three

experts in the entrepreneurship field were engaged in this task, and feedback from these experts was implemented to improve the survey instrument. Specifically, issues such as double-barrelled questions and ambiguity in the questionnaire's wordings were raised and corrected appropriately.

3.4.4 Reliability of the Questionnaire

Following the validity test, the reliability of the questionnaire items was also examined to ensure internal consistency. The study used a pilot sample of 30 respondents, following the suggestion of Sekaran and Bougie (2010), who suggested that 30 samples are a suitable size for a pilot test. Hence, the pilot study respondents were selected from among the SMEs in Ogun State, Nigeria. The rationale behind choosing Ogun state as the pilot area was a similarity with Lagos state in terms of the characteristics of SMEs. The pilot study questionnaires were administered to the respondents and analysed using the statistical package for the social sciences (SPSS) program. The reliability of the items of the constructs of the study was assessed through a Cronbach's alpha test.

According to Pallant (2011), Cronbach's alpha is used to establish internal consistency, which measures the extent to which all the items of the scale measure the same underlying concept of the variable being measured. Moreover, Cronbach's coefficient alpha indicates the average correlation indication between the scale items and ranges from 0 to 1 (Pallant, 2011). When the correlation among the respective items of the questionnaire is high, Cronbach's alpha is expected to be high. A Cronbach's alpha result greater than 0.7 for any construct is regarded as having good reliability (Hair et al., 2013). Table 3.2 reveals the results of the pilot test:

Table 3. 7
Summary of the pilot test reliability analysis of the constructs

Constructs	Cronbach's Alpha
SMEs' performance	0.851
Entrepreneurial orientation	
Innovativeness	0.812
Proactiveness	0.715
Risk-taking	0.811
Competitive aggressiveness	0.804
Autonomy	0.811
Entrepreneurial Ecosystem	
Environmental Turbulence	0.799
Access to finance	0.719
National culture	0.791
Demographic Characteristics	
Age	1.000
Gender	1.000
Education	1.000
Experience	1.000

The results of the pilot test analysis indicate that the Cronbach's alpha of the variables ranges between 0.715 and 0.851. Pallant (2011) asserted that a Cronbach's Alpha score greater than 0.7 is acceptable. This result shows that the values of Cronbach's Alpha are all greater than 0.7, indicating good reliability for the research instrument.

3.4.5 Method of Data Collection

Primary data were collected using a survey technique. This technique was adopted due to its ability to produce valuable facts and figures for the research questions and serve as an approach to collecting, exploring, and providing a detailed description of existing phenomena (Jelke, 2009). It is a method of gathering information from a sample of individuals through their responses to questions (Ponto, 2015). This technique is the most appropriate for achieving the research objectives in social settings such as households, communities, and organisations (Ponto, 2015).

Scholars not limited to Dwivedi et al., (2010), Harkness et al., (2004), Herstatt and Von Hippel (1992), and Martin (2006) support usage of the survey approach because it is easy to conduct, saves cost and time and has high accessibility. Survey research may use various data collection methods, with the most common being questionnaires, interviews, observations, and experiments (Martin, 2006; Petty et al., 2012; Ponto, 2015).

Hence, this study adopts the questionnaire as the instrument of data collection for the quantitative aspect. The questionnaires were administered to the targeted population, the selected SMEs in Nigeria, via mail. The use of mail administration for the questionnaires rests in its ability to reach many people within a broad geographical location (Sekaran & Bougie, 2009). Even though a low response rate characterises this method compared with other data collection mechanisms (Bryman & Bell, 2007; Creswell, 2012), it is cost-efficient, saves time, and allows the researcher to reach many respondents within the population. Sekaran and Bougie (2009) claimed that a low as 30% response rate is acceptable for a mail-administered technique. Therefore, to increase the response rate of this study, the researcher made provision to include a good cover letter and a stamped addressed envelope for returning the questionnaire after being filled by the respondents.

3.4.6   Method of Data Analysis

Regarding the research approach, the objectives, and the design of this research, the primary data collected was analysed using the statistical package for social sciences (SPSS Version 25) and the Partial Least Square – Structural Equation Modelling (PLS-SEM 3.0). The SPSS was used to present the descriptive statistics and the preliminary

analysis of the study, while PLS-SEM was employed for the inferential statistics and testing the research hypotheses.

3.4.1.1 Descriptive and Preliminary Data Analysis

The initial state of data analysis involved the descriptive and the preliminary data analysis. These two sets of data analyses were conducted using SPSS software. The preliminary data analysis was conducted to ensure the accuracy and readiness of the data collected for inferential analysis. Accordingly, the following analyses were conducted for this purpose: testing for non-response bias, missing values, and assessing outliers.

The major descriptive statistics are the frequency, mean and standard deviation (Sekaran et al., 2010). Furthermore, the categorical data which were obtained from the nominal scales in the questionnaires are analysed descriptively. For this purpose, frequency and percentages were used to describe them. Also, descriptive statistics were applied to describe the central tendency of the variables of this study using both mean and standard deviation in SPSS.

3.4.1.2 Inferential Statistics

The inferential analysis was used to assess the theoretical model and the proposed hypotheses of this study. The inferential analysis was mainly conducted with the use of PLS-SEM using the PLS-SEM 3.0 statistical software. The PLS-SEM is considered the most suitable method for this study data analysis, likened to the conventional SPSS regression analysis modelling of first-generation techniques. This is because although both techniques are alike and, in some cases, yield similar results, the former has an

advantage for estimating both the structural model (i.e., the relationship between constructs) and the measurement model (i.e., the relationship between indicators and construct) concurrently (Duarte & Roposo, 2010). Moreover, PLS-SEM allows for modelling among multiple exogenous latent variables and latent endogenous variables simultaneously (Gefen, Straub & Boudreau, 2000).

PLS path modelling can handle complex models with many structural model relations, making it more appropriate for real-life phenomena (Hair *et al.,* 2013). The soft modelling assumptions of the PLS technique provide it with a more remarkable ability to flexibly develop and validate larger complex models (Akter & Hani, 2011), such as the one in this study. Hair *et al.* (2013) asserted that PLS-SEM is an optimum program for a situation that involves several path models with latent variables and complex structural relationships. This study involved eleven path models within the structural model. Thus, using PLS-SEM is appropriate for validation.

Meanwhile, the issue of data normalisation is among the crucial issues faced by social scientists during data analysis (Mutum, 2011); in contrast, statistical properties of PLS-SEM provide a robust estimation for non-normal data sets with highly distributional properties (i.e., skewness and kurtosis) (Reinartz et al*.,* 2009; Ringle et al*.,* 2009). Non-normal data are relatively treated well in PLS; thus, the usage of PLS is appropriate for helping to avoid issues related to the non-normality of data during the analysis.

Furthermore, PLS-SEM has been demonstrated by past researchers as having the ability to test the moderation effect (Kadir et al., 2012; Henseler & Fassott, 2010). PLS results are more meaningful and valid, while the conclusion of the results of the other analytical

method is less clear, requiring several other separate methods of analysis. To understand the complex relationship associated with social science research, the use of PLS-SEM is necessary for applying a more sophisticated multivariate data analysis method (Hair *et al.*, 2013). As such, it is regarded as a powerful tool with the ability to test several relationships simultaneously.

The path modelling in SmartPLS was used to establish the measurement and structural models. The measurement model explained the assessment of the individual item reliability, the establishment of internal consistency reliability, and the convergent and discriminant validity of the study. In contrast, the structural model was used to establish the correlation and the effect of the construct's regression analysis, the R^2 value, the effect size, and the predictive relevance of the theoretical model using the PLS algorithm bootstrapping technique PLS-SEM. The bootstrapping technique also helped assess the entrepreneurial ecosystem's moderating effect and the mediating effect of entrepreneurs' demographic characteristics between EO and SMEs' performance.

3.5   Qualitative Research Design

As presented earlier, the sequential explanatory study proposed by Creswell and Plano (2011), which posits a qualitative study as a continuation of a quantitative study, is used in this study. The qualitative study was conducted after the quantitative data had been successfully analysed. The essence is to buttress, explain, interpret, and triangulate the results of the qualitative study. Furthermore, based on the features of the constructivism research paradigm, a focus group method was appropriate for the qualitative phase.

3.5.1 Focus Group

The qualitative phase of this study explains how EO, entrepreneurial ecosystem, and the demographic characteristics of entrepreneurs affect SMEs' performance in Nigeria. To achieve this objective, the author explored a group of entrepreneurs through detailed and in-depth data collection via interviews (Cresswell, 2009). The data were collected to enlighten better the role of demographic characteristics, EO, and the ecosystem on the performance of SMEs. In line with Creswell (2009) and Rakin and Elena (2014), a focus group discussion (FGD) is an in-depth field method that brings together a small homogeneous group (usually six to ten persons) to discuss topics within a study agenda. The purpose of this discussion is to use the social dynamics of the group, with the help of a moderator/facilitator, to stimulate entrepreneurs to reveal their underlying opinions, attitudes, and reasons for their behaviour and how it influences the performance of their venture. A well-facilitated group can help find out the 'how' and 'why' such behaviours are exhibited.

A focus group can be used as a standalone feature in research or as an instrument within another qualitative research (Doody et al., 2013). It is used as part of a mixed-method study incorporating quantitative and qualitative methods (Then et al., 2014). This method provides greater anonymity and facilitates the free disclosure of information among participants (Cresswell, 2009). The focus group method also provides the opportunity to have direct, intensive contact with individuals and collect rich, in-depth data, with the moderator encouraging interaction with other study participants.

Accordingly, the focus group method seems appropriate for achieving the objective of this study (i.e., to explain how EO and the entrepreneurial ecosystem affect the performance of SMEs in Nigeria). More importantly, it allows the author to explore

complex issues to capture quantitatively more deeply. Hence, through the focus group, the findings of this study are beneficial for explaining, corroborating, triangulating, and confirming the quantitative findings.

3.5.2 Sample for the Focus Group Study

The sample for the qualitative study was selected to help the researcher gain a detailed understanding of the phenomenon under investigation. Hence, the term '*purposeful sampling'* is used (Bryman & Bell, 2007). This indicates that firms or individuals are purposely selected as participants because of their understanding of the phenomenon under investigation (Cresswell, 2007).

Purposeful sampling in a qualitative study can be conducted either at the firm or individual levels (Creswell, 2009). Since the context of this study is the SME, in which the owner is the sole representative of the firm; therefore, the sampling was purposefully conducted only at the individual level. Considering the purpose of the qualitative phase, which aims to explain, corroborate, triangulate, and confirm the quantitative findings of this study. A snowball sampling technique was deemed appropriate for this study. A snowball sampling is a convenient sampling technique in the qualitative method, in which an existing subject of the study recruits future subjects among their acquaintances until data saturation is achieved (Naderifar et al., 2017). This technique allows researchers to ask the first few samples selected via the convenience technique to refer to anyone with similar views to take part in the research. This technique is time-efficient and provides a better opportunity for the researcher to communicate better with the participants (Naderifar et al., 2017; Polit-O'Hara & Beck, 2010).

The interviewed participants are people with good knowledge of EO (innovativeness, proactiveness, risk-taking, competitive aggressiveness, and entrepreneurial autonomy), entrepreneurial ecosystem (environmental turbulence, access to finance, and national culture), and the performance of SMEs in Nigeria. Hence, the following guidelines were used in referring to subsequent participants: (1) the following participant must at least own an SME within a Nigerian business environment (2) he/she should have been running the business for at least five years (3) he/she should be knowledgeable about SME business operations and performance and (4) he/she must actively be involved in entrepreneurial activities.

The snowball effect continues as information is being obtained from the participants. There is no rule regarding the number of participants to be interviewed (Merriam, 2009). Nevertheless, the number of samples in a qualitative study is limited at the saturation point or until redundancy is reached (Lincoln & Guba, 1985). Hence, data collection should be terminated when no new information can be extracted from participants. Therefore, the information saturation point determines the number of participants to be interviewed in a qualitative study.

3.5.3 Data Collection Method

This study used semi-structured interviews as the method of data collection. According to Bernard (1988), the semi-structured interview is best used when the interviewer will not get more than one chance to interview someone. The interviewer develops an interview guide that is used for the collection of data. The interviewer follows the guide or can follow topical trajectories in the conversation; this might sometimes stray from

the guide when it is appropriate. The interview guide provides a clear set of instructions for the interviewers to collect reliable, comparable, and qualitative data. Informal and unstructured interviews preceded the interview session to allow the researcher to develop a keen understanding of the topic of interest necessary for developing relevant and meaningful semi-structured questions.

Typically, a paper-based interview guide was followed, but the interviewer tape-recorded a discussion of the interview session due to the inclusion of open-ended questions. The recorded tape of the session was later transcribed for data analysis. The essence of this was to avoid the difficulties involved in conducting and jotting notes while trying to capture the respondents' answers during the interview sessions.

3.5.4   Interview Protocol

The researcher ensures the four phases of interview protocol were duly obliged. The four phases as presented by Creswell (2009) are:

>   Phase 1: Ensuring interview questions align with research questions,
>
>   Phase 2: Constructing an inquiry-based conversation,
>
>   Phase 3: Receiving feedback on interview protocols Phase
>
>   4: Piloting the interview protocol.

The first phase of developing the interview question is to ensure that the interview questions align with the research question. This process ensures conformity between the research questions and the interview questions. By so doing, the researcher was able to identify and delete the irrelevant questions.

Phase 2: Constructing an Inquiry-Based Conversation

At this stage, the researcher was able to practicalise the interview session by mastering the art of composure and asking the questions in ways different from how it was penned on the interviewer's question sheet. This is in line with the proposition of Maxwell (2013) encouraging the interviewer to develop and master the art of asking interview questions in a way different from the research question to get their subjective accurate view of the questions maintaining the research purpose.

Phase 3: Receiving feedback on interview protocol. The researcher achieves this stage by engaging in expertise contribution. Despite having expertise contribution, the researcher went back to read aloud, close reading and thinking aloud the interview questions

Phase 4: Piloting the interview protocol. The researcher, before going for the main interview process, engages some respondents in a pilot interview. The rationale is to get their opinion on the interview questions' compositions.

3.5.5 Pilot Study (Interview)

The research considers all research ethics and guides before embarking on the actual research work. Pilot test according to scholars not limited to a clear determination of interview questions, reviewing of the initial interview questions by experts, summarising and reporting the interview response. In summary, employing a pilot study enhances and helps the researcher to refine their data collection strategies, be better informed to face any potential challenges during the main data collection face, and be more confident of their research instruments used in the final data collection (Abd Gani et al., 2020; Majid et al., 2017; Malmqvist et al., 2019).

To achieve the objective of the pilot study in this research, the researcher, therefore, conduct an interview selecting five (5) entrepreneurs from the corporate society (banks) as respondents.

The researcher interviewed them normally with the intended instruments for the final interview (first draft). During this process, some issues were observed, and amendments were made. For example, the sequence and arrangements of the interview questions were challenged by a respondent who happens to have a research firm in Nigeria.

Also, another respondent, a doctorate graduate identified 'double barrelled' questions in the interview questions earlier version. All the observed issues in the pilot study were addressed and the researcher was confident in the amended interview instruments.

3.5.6   Ethical Considerations

Ethics refers to the moral principles or guidelines that have been set by the academic community when going about a research process. These guidelines are essential, as they form the basis of the research validity and reliability. Ethical guidelines are set mainly for the benefit of the participants and are vital to the research's integrity. Ethical issues were considered to avoid potential harm to the participants (Bloomberg & Volpe, 2012). In the study, the researcher requested ethical approval for data collection from the Newcastle Business School, Northumbria University (as attached in Appendix C) letter was sent to the participants together with an application letter for data collection.

The interview process kicked off with a preliminary visit, in which the researcher briefed the participants, as specified in the interview protocols. In this briefing, every participant approached to participate in the study was informed of its purpose, benefits, and data collection process.

Furthermore, the participants were given written assurances of the anonymity of their identities, the protection of the information collected from them, and how the results would be used solely for the study. The right of the participants to withdraw from participating in the interview process was also made known to them during this briefing.

More importantly, this preliminary visit assisted the researcher in refining the data collection plans, not only in terms of the data collection procedure to be followed but also in terms of data content. This visit helped the author develop relevant questions and even provide some conceptual clarification for the research procedure. It was also essential to clarify some specific terms or wordings typically used in the SME industry to avoid misunderstandings in the data collection process. Hence, the preliminary visit provided an introductory insight into data collection and minimising errors in the actual data collection process.

In the interview briefing, the time and location of the interview were agreed upon between the researcher and the participants. The researcher arrived at the agreed venue 15 minutes before time to avoid the participants having to wait for the researcher. Before the interview sessions, the participants were informed about the interview consent procedure, and they were encouraged to ask questions to prevent misinformation and misunderstandings. Finally, both the participants and the researcher

signed the consent form. This was important to show the participants' willingness to participate in the study. Besides, permission from the participants for the interviews to be audiotaped was requested before the interviews.

3. 5.6.1   *Interview Protocol*

The interview protocol guides the data collection process in focus group research (Creswell, 2008). Based on this study using sequential explanatory mixed methods, the interview protocol was prepared after the quantitative data analysis because its results drove the scenario of the qualitative study (Creswell & Plano Clark, 2011). The detail of the interview protocol as a guide for the data collection process is presented in this section.

The interview protocol comprises three sections. Section contains general questions about the demographic characteristics of the participants. This includes the position, the work experience, and the responsibilities of the participants in their firms. The essence of this section was to justify the inclusion of the participants in the study, whether they were appropriate for partaking in the interview. Section two contains general questions regarding entrepreneurship, EO, the entrepreneurial ecosystem, and SMEs' performance in Nigeria. The third section relates to the objectives of the study, precisely questions relating to the possible effect of EO on SMEs' performance and the effect of the ecosystem on EO s and SMEs' performance. The detail of the interview protocol is presented in Appendix C.

Practically, the probing technique was used during the interviews to allow the participants to share as much information as possible regarding the EO, the ecosystem,

and their SME performances. In order to obtain accurate information, the researcher audio recorded the conversations. Notes were also taken to serve as a backup in case the audio recorder malfunctioned. Upon completion of the interview session, the participants' responses were transcribed, re-checked, and summarised to ensure the data's accuracy, correctness, and adequacy.

3.5.6.2 Role of the Researcher

Using the ontological and epistemological justifications as a guide, it is common in a qualitative study that the researcher submerges herself with social reality to understand the phenomenon being investigated; thus, there was a direct interaction between the researcher and the participants. The researcher placed herself in an interpretive position to make sense of the multiple perspectives of the participants. This required the researcher to interpret and make sense of the information gathered at every interview stage. Also, the constructivist view requires the researcher to report any biases that occurred during the research process.

3.5.6.3 Mode of Analysis

They were transcribed and presented in a text format. Hence, the qualitative study data were in text form. This study adopted a hermeneutic mode of analysis. Even though this mode of analysis was used initially in interpreting the Bible (Guba & Lincoln, 1994), it is also a relevant tool in management research (Easterby-Smith et al., 2008). The selection of hermeneutics is related to its ability to provide a clear view of text when people are faced with confusing, incomplete, contradictory, and unclear views of a phenomenon (Bryman & Bell, 2007). Hence, a hermeneutic analysis was employed to make sense of perspectives regarding the phenomenon under study. The data were

analysed using ATLAS. Ti 7 software. Even though there is no rule regarding data analysis procedure in qualitative research, the eight (8)-step analysis spiral suggested by Creswell (2007) was used to make sense of the data. This comprises data managing, reading, memorising, describing, classifying, interpreting, representing, and visualising:
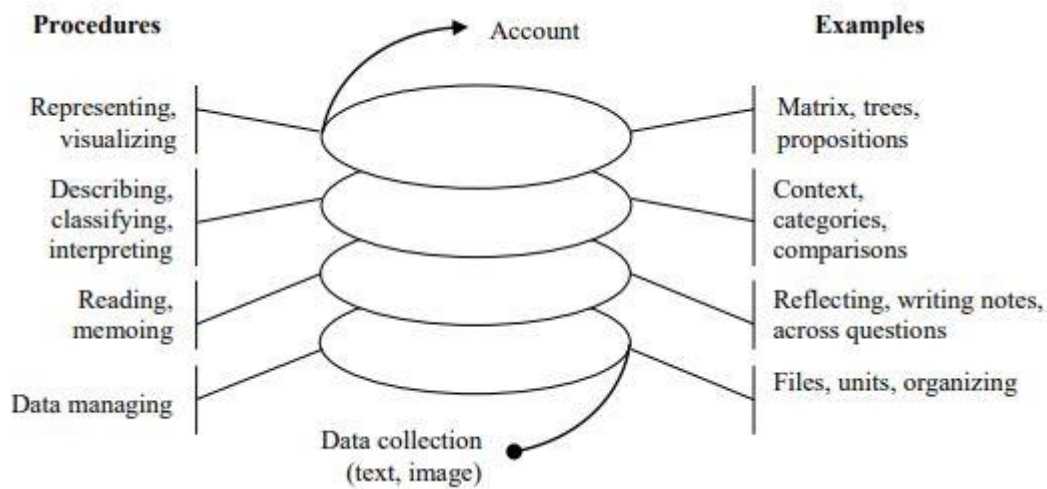
Figure 0.5
Analysis Spiral
Source: Creswell (2007: p. 151)

3.6 Validity and Reliability

Following Yin (2009), the quality of a research design must be ensured at every step through a validity and reliability assessment. This is important for the integrity of the findings. Therefore, the construct validity, internal validity, external validity, and reliability of this study were assessed.

3.6.1 Validity

Construct validity was assessed to ensure an appropriate operational measure of the concept being investigated was made. Construct validity was ensured by triangulating

the evidence with multiple sources to corroborate the process during the data collection. The essence of this was to provide convincing and accurate data analysis and findings.

In addition, internal validity is essential to establish a causal relationship between certain conditions and others (Yin, 2009). It explains how and why the independent variables (EO, entrepreneurial ecosystem) lead to the dependent variables (SMEs' performance). This study used pattern matching logic to ensure the credibility of the findings and whether the findings inferred are congruent with reality or not. Furthermore, an assessment of the external validity was necessary to establish the ability to generalise or transfer the study's findings. It ensures whether the result of this study is applicable in other contexts or settings. In this study, replication logic was used; this is analogous to multiple experiments in which the results are considered robust if the number of replications shows the same results.

3.6.2   Reliability

Reliability refers to the consistency of the data collection procedures to avoid biases and errors in the study. This study used a protocol to ensure the reliability of the study, following the suggestion of Yin (2009), who stated that the same results would be obtained if the procedure is repeated. The protocol was used to ensure that there is consistency in the data collection procedure.

3.7   Chapter Summary

This chapter presents the research methods employed to fulfil the research objectives. The chapter content includes the following subheadings, research approach and philosophy, research process, population and sampling, research instrument, pilot test,

instrument reliability and validity, data collection methods, and analyses employed. Besides, the qualitative research method presented in this chapter consists of the focus group, focus group sample, data collection method, ethical considerations, interview protocol, mode of analysis, and qualitative reliability and validity.

CHAPTER FOUR

QUANTITATIVE RESEARCH FINDINGS

4.1 Introduction

This chapter presents the empirical data analysis of the surveyed data. The chapter consists of three (3) major subsections; these are the preliminary data analysis, measurement model, and structural equation modelling, that is, the hypotheses testing.

4.2 Response Rate

A total of 1,152 questionnaires were administered to the targeted SMEs owners/managers in Nigeria, as shown in Table 4.1. of the total questionnaires sent out, 531 were returned by respondents, representing a 46.1% response rate. Of these, 18 responses were not included in the analysis due to missing values, with the remaining 513 responses considered for data analysis, bringing the effective response rate down to 44.5%. Table 4.1 presents the response rate.

Table 4. 1
Response rate

	Frequency	**Percentage (%)**
Questionnaire Distributed	1,152	100
Questionnaire Returned	531	46.1
Questionnaire Rejected	18	1.6
Questionnaire Retained	513	44.5

4.3 Data Coding

The data coding can be categorised into two. The first category of data coding assumes the items used should tally with the construct being investigated. That is, every construct should have its own distinct set of questions below it. On the other hand, the second category of coding is, construct identification. This would ensure a hitch-free analysis. This study, in this sense, follows the suggestion of Churchill (1999) by

arraigning the items in conformity with the constructs. The variables and the coded

values are presented in Table 4.2

Table 4. 2
Variable coding

Variable	Code
Innovativeness	INN
Proactiveness	PROT
Risk-taking	RKT
Competitive Aggressiveness	COAG
Entrepreneurial autonomy	AUT
National Culture	NTC
Access to Finance	ACF
Environmental Turbulence	EVT
SMEs' performance	PERF

4.2.1 Preliminary Analysis

The author conducted a preliminary data analysis, including assessing the missing

values, outliers, a test of non-response, and standard method bias, to verify the quality

of collected data before engaging with a multivariate data analysis using PLS-SEM.

4.2.2 Missing Values

Missing values affect every data analysis in different ways. Missing values accounting

for no more than 1% of total values pose no problem; accounting for about 5% poses a

bearable threat, and accounting for 15% and beyond of total responses represents a

severe issue for the outcome of the research (Acuna & Rodrigues, 2004). Hence,

missing values must either be treated by pre-replacing or via the Expected

Maximization (EM) approach (Adebambo et al., 2014). Missing values in a dataset are

usually treated with a pre-replacement method at the initial stage, while the embedded

method at the data mining stage (Adebambo et al., 2014). However, there is no best

method for treating missing values. Since the missing value percentage is less than one

percent (1%), a pre-replacement method was applied with all values traced back to the questionnaires and replaced accordingly.

4.2.3   Assessment of Outliers

Outliers indicate the abnormal behaviour of a deviation of data from its natural data variability (Pallant, 2011). The presence of outliers affects the normality of a distribution; since normality is an important assumption in SEM, outlier cases could affect the result of the statistical analysis in a significant manner (Tabachnick and Fidell (2007). Hence, outliers in the dataset were identified and removed for further data analysis. Univariate outliers were assessed by checking the frequency tables for the data outside the minimum and maximum value labels due to entry errors. Based on this, no value was detected as lying outside the value range. Furthermore, the standardised values were assessed for the items (Z-value) with a cut-off point greater than ±3.29 (p <.05) (Tabachnick & Fidell, 2007). Table 4.3 presents the number of identified outliers by selected variables.

Table 4. 3
Identified Outlying Cases Using Standardised Values (Z-values)

Items	Cases with a Z-value greater than ±3.29
INN2	4
RKT2	6
RKT4	13
RKT6	13
RKT7	6
PROT1	16
PROT2`	12
PROT4	9
PROT5	14
COAG1	11
COAG2	7
AUT1	11
AUT2	8
AUT5	7
AUT6	10
EVT2	5
EVT4	10
EVT6	11
EVT7	3
EVT8	14
EVT10	15
EVT11	12
ACF1	2
ACF2	1
ACF4	4
ACF5	2

From the above table, 35 cases were identified as outliers from a total of 26 items. The effect of these outliers was further assessed on the overall measures used to define variables, to decide whether these cases should be removed or retained in the analysis (Adebambo et al., 2014; Orr et al., 1991). This approach compares changes in each variable's mean and standard deviation when outliers are included and removed. Results of this exercise are presented in Table 4.4: given the strong effect of outliers on all variables, the author decided to remove them to proceed using statistical approaches. Hence, the remaining 467 responses were used to conduct the multivariate analysis.

able 4. 4
Effects of the identified outliers on the overall measures of the variables

Items	Mean Incl outliers	Mean Excl outliers	Difference	Std. Dev. Incl Outliers	Std. Dev. Excl outliers	Difference
INN2	4.18	4.22	0.03	0.832	0.785	0.05
RKT2	4.22	4.30	0.08	0.820	0.710	0.11
RKT4	4.21	4.30	0.09	0.892	0.709	0.18
RKT6	3.92	4.01	0.09	0.867	0.774	0.09
RKT7	4.09	4.18	0.09	0.840	0.730	0.11
PROT1	4.05	4.13	0.08	0.913	0.798	0.11
PROT2`	3.94	4.02	0.08	0.888	0.790	0.10
PROT4	4.11	4.19	0.09	0.898	0.771	0.13
PROT5	4.24	4.36	0.12	0.908	0.714	0.19
COAG1	4.02	4.10	0.08	0.894	0.747	0.15
COAG2	4.11	4.19	0.08	0.855	0.742	0.11
AUT1	3.98	4.03	0.05	0.902	0.783	0.12
AUT2	4.04	4.12	0.08	0.880	0.759	0.12
AUT5	4.01	4.07	0.06	0.894	0.826	0.07
AUT6	4.17	4.25	0.08	0.889	0.768	0.12
EVT2	4.25	4.30	0.06	0.799	0.713	0.09
EVT4	4.23	4.30	0.07	0.847	0.706	0.14
EVT6	3.93	3.98	0.05	0.837	0.782	0.05
EVT7	4.10	4.16	0.07	0.814	0.744	0.07
EVT8	4.17	4.22	0.05	0.928	0.834	0.09
EVT10	4.20	4.26	0.07	0.941	0.865	0.08
EVT11	4.08	4.13	0.05	0.873	0.796	0.08
ACF1	4.14	4.16	0.02	0.791	0.752	0.04
ACF2	4.10	4.10	0.00	0.793	0.780	0.01
ACF4	4.12	4.13	0.01	0.774	0.736	0.04
ACF5	4.24	4.24	0.01	0.751	0.726	0.02

4.2.4 Common Method Bias

Researchers in behavioural science have often regarded the common method bias as a potential source of concern. The standard method bias refers to the variance attributed to measurement procedures, rather than the actual object being investigated by the researcher (Podsakoff et al., 2003); as such, this bias represents a source for

measurement errors that can threaten the validity of relationships between constructs (Podsakoff et al., 2003; Meade et al., 2007).

The use of self-reported data from the respondents, the measure of the predictors (EO), and the criterion (firm performance) associated with variables from a single source are all potential sources of common method bias (Meade et al., 2007).

To control this issue, the researcher applied the procedural approach suggested by Podsakoff et al. (2003), which includes protecting the respondents' anonymity, eliminating ambiguity, and avoiding double-barrelled questions 'questions with more than two separate issues or topics' from the questionnaire. This approach does not guarantee the total elimination of a common method bias; hence, a statistical technique known as the Harman single factor test was applied (Kock et al., 2021; Podsakoff, 2003). Using this technique, all variables are simultaneously loaded onto an exploratory factor analysis while an un-rotated factor solution is examined to identify the factors that are necessary to explain the variables (Podsakoff et al., 2003); if only a single factor emerges from the un-rotated factor solution, then there is a substantial indication of common method variance. This exercise returned 18 components extracted from the un-rotated factor solution, indicating that common method bias is not an issue for the analysis.

4.3   Fundamental Assumptions of Statistics

Before conducting multivariate analysis, the dataset must conform to statistical assumptions such as normality and linearity assumptions (Hair et al., 2011; Henseler et al., 2009). Hence, these are examined in the study.

4.3.1 Test of Normality

Normality is the degree to which the sample distribution corresponds with the normal distribution; it is one of the assumptions of multivariate analysis (Bryne, 2010, Hair et al., 2010). To investigate normality in the data, the author analysed skewness and kurtosis: skewness in the data distributions indicates the deviation of the data from the mean, while kurtosis indicates the peak of the data sample. Positive or negative skewness depends on whether data accumulate at the left or right side of the mean. Positive kurtosis indicates heavier tails and a higher peak, while negative kurtosis indicates a flatter distribution. There is no rule of thumb on the threshold values for skewness and kurtosis when judging if the data set is normally distributed, although values should not be above 2.0 for skewness and 5.0 for kurtosis (Ghiselli et al., 1981).

Table 4.5 presents the result gathered for normality assessment: as the skewness is below two (2) and the kurtosis is less than 5 (all absolute values), it appears that the data distribution in the dataset recalls a normal distribution.

Table 4. 5
Normality Assessments

	Skewness		Kurtosis	
	Statistic	Critical ratio (z-value)	Statistic	Critical ratio (z-value)
Innovation	-0.340	0.113	-0.280	0.225
Risk-taking	-0.946	0.113	1.931	0.225
Proactiveness	-0.719	0.113	0.728	0.225
Competitive Aggressiveness	-0.404	0.113	-0.467	0.225
Entrepreneurial autonomy	-0.515	0.113	-0.344	0.225
Environmental Turbulence	-1.242	0.113	3.233	0.225
Access to Finance	-0.217	0.113	0.091	0.225
Performance	-0.436	0.113	-0.331	0.225
National Culture	-1.129	0.113	1.777	0.225

4.3.2 Test of Linearity

The objective of linearity in statistical data analysis is to eliminate Type I and, or Type II error and make an unbiased statistical inference (Levine, 2011). The linearity assumption was examined among the independent variables: innovativeness, risk-taking, proactiveness, competitive aggressiveness, and entrepreneurial autonomy. The findings reveal that the constructs are free from linearity because the correlation value (r) is less than 0.9. Meanwhile, the absence of linearity does not indicate a good regression model (Mitchell & Beauchamp, 1988). Thus, multicollinearity detection is employed. A high correlation (r = 0.9 and above) among the independent variables indicate multicollinearity (Pallant, 2011).

Multicollinearity is assessed through the tolerance value and variance inflation factor (VIF) in a regression model. Tolerance values indicate how much of the variability of the independent values is not explained by the other independent variables in the model. A value of tolerance below 0.10 indicates multicollinearity, while VIF higher than 10 indicates the presence of multicollinearity (Pallant, 2011). Table 4.6 presents the result of the linearity test.

Table 4. 6
Test of linearity

Constructs	Collinearity Statistics	
	Tolerance	**VIF**
Innovation	.909	1.100
Risk-taking	.593	1.686
Proactiveness	.516	1.936
Competitive Aggressiveness	.637	1.570
Entrepreneurial autonomy	.991	1.009

As shown in Table 4.6, the linearity test among the independent variables shows that the tolerance values are higher than 0.1 and the VIF values are than 10, indicating that multicollinearity is not an issue in this study.

4.4 Respondents' Profiles

As presented earlier in the document, returned questionnaires from 467 managers/owners of Nigerian SMEs were considered for the data analysis. As power analysis for this study suggested a total of 305 responses adequate for the investigation, the number of total responses is higher than the minimum sample size required. Table 4.7 shows the sample distribution; the largest portion of the sample is represented by the wholesale/retail industry (29.8%), with the lowest portion accounting for manufacturing (1.3%). This result indicates a fair representation of the industrial coverage of the investigated SMEs in Nigeria.

Table 4. 7
Distribution of Sample

Industry	Frequency	Percentage (%)
Agriculture	11	2.4
Manufacturing	6	1.3
Wholesale/Retail	139	29.8
Construction	49	10.5
Human Health & Social Works	17	3.6
Transport & Storage	25	5.4
Education	51	10.9
Accommodation & Food Services	22	4.7
ICT	26	5.6
Real Estate Activities	38	8.1
Oil & Gas	36	7.7
Services	14	3.0
Others	33	7.1
Total	467	100.0

The profiles of respondents are described in Table 4.8. Most of them, 36.6%, show an age between 19 and 29 years old, while just 3.6% were under 18 years old, with the bulk of responses obtained from owners/managers within the active working-age group. In terms of gender, 57.8% of respondents are men, while 42.2 are women.

About six out of ten (61%) respondents hold a certificate/diploma, with those holding a postgraduate degree (master/doctorate level) being the least represented at 2.6%; 21.8% were university graduates, while 11.1% were secondary school education. In terms of work experience, 30.8% of respondents had less than five years, with 28.1% of respondents having between 5- and 10-years' experience, 27% between 11- and 15-years' experience, and 13.3% had up to 20 years' experience, with less than one in ten indicating over 20 years' experience.

Table 4. 8
Demographic profile of the respondents

S/N	Constructs	Items	Frequency	Percentage (%)
1	Age	Under 18 years	17	3.6
		19-29 Years	171	36.6
		30-39 Years	164	35.1
		40-49 Years	82	17.6
		50 years and above	33	7.1
2	Gender	Male	270	57.8
		Female	197	42.2
3	Education	Below Secondary School	16	3.4
		Secondary School Level	52	11.1
		College (Certificate/Diploma)	285	61.0
		University (Bachelor Degree Level)	102	21.8
		Postgraduate level (Master's/Doctorate Degree)	12	2.6
4	Experience	Below 5 Years	144	30.8
		Between 5-10 Years	131	28.1
		Between 11-- 15 Years	126	27.0

Between 16-20 Years	62	13.3
Over 20 Years	4	.9

Table 4.9 shows a frequency analysis of respondents' companies. More than half of respondents managed or owned firms with a workforce between 10 and 49 employees (54.8%), while one in three worked for firms with fewer than ten (10) employees. The results indicate that the sampled respondents had adequate knowledge of running small and medium enterprises. The frequency analysis also shows that 41.1% of firms had start-up costs of more than NGN2 million, followed by 32.8% with a start-up cost of between NGN2 million and NGN5 million. Firms indicating higher start-up costs in the order of NGN5 million and NGN10 million (17.1%) and NGN10 million and NGN30 million (9%) accounted for a cumulative quarter of total responses. Concerning turnover, 46.7% of respondents declared NGN5 million in annual sales, while 37.5% declared a total between NGN5 million and NGN50 million, 15.8% declared annual sales between NGN50 million and NGN10 million.

Table 4. 9
Profile of the companies

S/N	Constructs	Items	Frequency	Percentage (%)
1	Number of Employees	Less than 10	154	33.0
		10-49	256	54.8
		50-199	57	12.2
2	Start-Up	Below 2M	192	41.1
		2M-5M	153	32.8
		5M-10M	80	17.1
		10M-30M	42	9.0
3	Sales	Less than 5M	218	46.7
		5M to 50M	175	37.5
		50M to 100M	74	15.8

4.5   Test for Non-Response Bias

Non-response bias is an error that can result from an underestimation of the sample characteristics associated with one or more responses. According to Singer (2006, p. 641), 'there is no minimum response rate below which a survey is biased and conversely, no response rate above which a survey is never biased.' Miller and Smith (1983) regarded non-respondents in research as having similar characteristics to late respondents, although late respondents, in effect, can be influenced by the follow-up effort made by the researcher (Maholtra et al., 2004). Therefore, a non-response bias must be investigated irrespective of any sample size, as it is rarely avoidable in social research.

For this study, the author used an independent sample t-test to assess a non-response bias. This was achieved by dividing the respondents into two groups based on one-timing recorded for returned questionnaires: respondents who completed the survey before sending a reminder to them were referred to as the early respondents. In contrast, those who returned their questionnaires after being reminded were regarded as late respondents. Characteristics

of both early respondents and late respondents were investigated to find out any significant difference.

Descriptive statistics associated with the test are presented in Table 4.10, revealing no significant difference between early and late respondents. In addition, Table 4.11 shows results from an independent sample t-test which compared characteristics of early respondents with those of late respondents, using items such as age ($t = -0.385$; $P < 0.70$), gender ($t = -0.557$; $P < 0.578$), experience ($t = 0.500$, $P < 0.261$), number of employees ($t = -0.545$, $P < 0.586$), and industry category ($t = 0.736$, $P < 0.462$). These results show that equality variances cannot be assumed among the late respondents and the early respondents, implying a negligible statistical difference between the two groups. Based on these outcomes, the author assesses that non-response bias is not an issue in this study.

Table 4. 10
Descriptive statistics for early and late respondents

Group		N	Mean	Std. Deviation	Std. Error Mean
Age	Early Respondents	237	2.86	0.962	0.062
	Late Respondents	230	2.90	0.997	0.066
Gender	Early Respondents	237	1.41	0.493	0.032
	Late Respondents	230	1.43	0.497	0.033
Experience	Early Respondents	237	2.20	1.077	0.070
	Late Respondents	230	2.31	1.043	0.069
Employees	Early Respondents	237	1.78	0.648	0.042
	Late Respondents	230	1.81	0.632	0.042
Category	Early Respondents	237	6.57	3.552	0.231
	Late Respondents	230	6.33	3.471	0.229

Table 4. 11
Test of equality of variance

		Levene's Test for Equality of Variances		T-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Age	Equal variances assumed	0.301	0.584	-0.385	465	0.700	-0.035	0.091	-0.213	0.143
	Equal variances not assumed			-0.385	463.016	0.701	-0.035	0.091	-0.213	0.143
Gender	Equal variances assumed	1.205	0.273	-0.557	465	0.578	-0.025	0.046	-0.115	0.064
	Equal variances not assumed			-0.557	464.320	0.578	-0.025	0.046	-0.115	0.064
Experience	Equal variances assumed	0.457	0.500	-1.125	465	0.261	-0.110	0.098	-0.303	0.082
	Equal variances not assumed			-1.125	464.998	0.261	-0.110	0.098	-0.303	0.082

Employees	Equal variances assumed	0.819	0.366	-0.545	465	0.586	-0.032	0.059	-0.149	0.084
	Equal variances not assumed			-0.545	464.986	0.586	-0.032	0.059	-0.149	0.084
Category	Equal variances assumed	0.147	0.701	0.736	465	0.462	0.239	0.325	-0.400	0.878
	Equal variances not assumed			0.736	464.979	0.462	0.239	0.325	-0.399	0.878

4.6   Descriptive Statistics of Variables

This section presents an overview of descriptive statistics and metrics related to the selected variables for this study. Table 4.12 provides information on the key constructs such as minimum value, maximum value, mean and standard deviation.

The measurements used for each item used a five-point Likert scale minimum and maximum statistics ranging between 1 and 5. The minimum values for EO are comprised between 1.50 and 2.67, with a maximum value of 5.00 for all the EO dimensions. The minimum values for the entrepreneurial ecosystem range between 1.00 and 2.67, while a maximum value of 5.00 was recorded for all EE dimensions. Finally, values for SMEs' performances are comprised between a minimum value of 1.33 and a maximum value of 5.00.

Table 4. 12
Descriptive statistics of variables

Constructs	Minimum	Maximum	Mean	Std. Deviation
Entrepreneurial orientation (EO)				
Innovativeness	1.50	5.00	3.7951	.70654
Risk-taking	2.00	5.00	4.0787	.50237
Proactiveness	1.80	5.00	4.1679	.56454
Competitive Aggressiveness	2.50	5.00	4.1044	.59115
Entrepreneurial Autonomy	2.67	5.00	4.0964	.55406
Entrepreneurial Ecosystem (EE)				
Environmental Turbulence	1.27	5.00	4.0827	.50882
Access to Finance	2.67	5.00	4.1256	.40063
National Culture	1.00	5.00	3.7175	.69256
SMEs' Performance	1.33	5.00	3.7944	.73665

The mean values are used to evaluate levels of EO, the entrepreneurial ecosystem, and the SMEs' performance. Besides the mean values, standard deviation expresses homogeneous or uniformity about EO and SMEs' performance. The mean values for EO range between 3.79 and 4.17, with standard deviation values comprised between 0.502 and 0.706. The highest mean value for the EO dimension is related to proactiveness, having a mean value of 4.1679, while innovativeness has the lowest mean equals 3.7951. These values indicate that levels of EO are marginally high among surveyed SMEs. This result indicates that proactiveness achieves the maximum level of orientation among the investigated SMEs in Nigeria (i.e., 4.1679), followed by competitive aggressiveness. This implies that more emphasis was placed on this dimension of EO than the other entrepreneurial dimensions. These two orientations are more frequently pronounced among the investigated SMEs in Nigeria. Interestingly, the standard deviation values of these constructs of EO are lower than 1.0, indicating that they have been uniformly practised among SMEs in Nigeria.

Furthermore, innovativeness has the lowest mean among the EO (i.e., 3.7951). This provides evidence that innovativeness is sometimes the least neglected EO among SMEs in Nigeria. In general, it has been shown that proactiveness, risk-taking, competitive aggressiveness, innovativeness, and entrepreneurial autonomy level are significant among the investigated SMEs in Nigeria.

Concerning the entrepreneurial ecosystem, access to finance has a relatively high mean (4.08) and the lowest standard deviation (0.40), while national culture has the lowest mean (3.72), with the highest standard deviation value (0.69). This result indicates that, despite finance being one of the challenges of SMEs in the ecosystem, there is still

relatively high access to finance among surveyed Nigerian SMEs. Conversely, the lowest mean value and the highest standard deviation for national culture may reveal this item as a challenge for surveyed SMEs within the Nigerian business ecosystem. Moreover, the mean value of SMEs' performance, measured at 3.79 with a minimum value of 0.74, could indicate SMEs' performance as relatively moderate. However, the high standard deviation might reveal that some SMEs performed exceptionally well while others performed extremely poorly.

4.6.1 Confirmatory Factor Analysis

To reduce the dimension of the constructs and remove potential errors in measurements for the identified items, the author conducted a confirmatory factor analysis in the form of principal component analysis (PCA) of SmartPLS. Since the researcher do not create a new item, rather adopt established and validated items to measure the research constructs, the exploratory factor analysis was not required (Hair et al., 2010). The initial 71 items from the total of 13 constructs were reduced to 42 items after the confirmatory factor analysis, by which items with poor loadings (reference value lower than 0.4) were deleted.

Table 4.13 summarises the items retained for each construct after conducting the confirmatory factor analysis. The retained items that measure each construct has item values of more than 0.4 loadings, although none of the constructs was dropped due to the measure of items being reduced to one. The following section presents the measurement model of the study.

Table 4. 13
Confirmatory factor analysis result

Constructs	No of Items Used	No of Deleted Items	Items Retained	Items Loadings
Demographic Characteristics of Entrepreneur				
Education	-	-	Education	1
Experience	-	-	Experience	1
Gender	-	-	Gender	1
Age	-	-	Age	1
Entrepreneurial Orientations				
Innovativeness	6	3	INN1	0.763
			INN3	0.864
			INN6	0.705
Proactiveness			PROT1	0.762
			PROT2	0.844
			PROT3	0.738
			PROT4	0.651
Risk-taking	8	4	RKT1	0.777
			RKT2	0.785
			RKT5	0.734
			RKT8	0.672
Competitive Aggressiveness	4	-	COAG1	0.684
			COAG2	0.754
			COAG3	0.822
			COAG4	0.672
Entrepreneurial Autonomy	6	3	AUT1	0.802
			AUT3	0.713
			AUT5	0.705
Entrepreneurial Ecosystem				
Access to Finance	6	4	ACF2	0.773
			ACF4	0.685
Environmental Turbulence	11	5	EVT11	0.655
			EVT5	0.735
			EVT6	0.762
			EVT7	0.681
			EVT8	0.739
			EVT9	0.666
National Culture	16	10	NCT1	0.854
			NCT4	0.777
			NCT5	0.725
			NCT6	0.831
			NCT7	0.844
			NCT8	0.766
SMEs' performance	6	-	PERF1	0.675
			PERF2	0.603
			PERF3	0.742
			PERF4	0.728
			PERF5	0.753
			PERF6	0.734

4.7   The Measurement Model

The PLS-SEM was evaluated via the SmartPLS 3.2.1 software application to assess the validity and reliability of variables involved in this analysis (Lohmöller, 2013; Ramayah et al., 2011). The construct validity examines how well the results obtained from using a measure fit the theories upon which the test is designed (Sekaran & Bougie, 2009). It provides answers to whether the instrument used in the test tap the actual concept theorised in the study. Thus, the researcher assessed the validity, convergent, and discriminant validity of the data set.

4.7.1   Convergent Validity

Convergent validity indicates the extent to which a measure correlates positively with an alternative measure of the same construct. In this study, convergent validity was assessed using the average variance extracted (AVE) and composite reliability (Hair et al., 2013). These are duly explained in the sections below. Convergent validity is established if all the measures purported to indicate a particular construct are indeed related. Table 4.14 presents the convergent validity results.

4.7.1.1 Average Variance Extracted

The average variance extracted (AVE) capture the variance shared between a construct and its measures. AVE is defined as the sum of the squared loadings divided by the numbers of indicators (Hair et al., 2013). Couchman and Fulop (2006) suggest that AVE's value for a variable should be higher than the variance shared between variables, especially with other variables. Nevertheless, Barclay et al., (1995) proposed 0.50 as the AVE rule of thumb.

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4.7.1.2 Items' Reliability

The reliability of a construct requires a high level of correlation among its indicators (Kraft, 2005). The reliability of this study was assessed through a Cronbach's Alpha. Cronbach Alpha is described as a measure of item internal consistency or scale of reliability. Hair et al. (2013) states that Cronbach's Alpha value greater than 0.7 indicates a good internal consistency among the measures of a construct, while a Cronbach's Alpha of 0.6 and above is acceptable for an exploratory study. Results of the composite reliability and Cronbach's alpha, as shown in Table 4.14, indicate good reliability among the items of each construct.

4.7.1.3 Composite Reliability

Scholars such as Henseler et al. (2012) argued that composite reliability is a more reliable estimate in estimating a variable's reliability. Garson (2016) suggests using composite reliability to measure the convergent validity of a reflective model. Convergent validity is confirmed if the research measures reflect the variables or constructs to which the researcher intends to measure. Henseler et al. (2012) suggest that the composite reliability value is 0.7 or higher on composite reliability. In this research, the CR value ranges from 0.715 to 0.914. This implies that the CR is achieved. Given this, the values are presented in table 4.14.

Table 4. 14
Measure of convergent validity of the study

	Cronbach 's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Demographic Characteristics			
Age	1.000	1.000	1.000
Experience	1.000	1.000	1.000
Gender	1.000	1.000	1.000
Education	1.000	1.000	1.000
Entrepreneurial Orientation			
Innovativeness	0.679	0.822	0.609
Entrepreneurial autonomy	0.696	0.785	0.550
Environmental Turbulence	0.802	0.857	0.501
Competitive Aggressiveness	0.728	0.824	0.541
Risk-taking	0.73	0.831	0.553
Entrepreneurial Ecosystem			
Access to Finance	0.625	0.795	0.533
National Culture	0.901	0.914	0.641
Proactiveness	0.759	0.838	0.566
SMEs' performance	0.801	0.857	0.501

4.7.2   Assessment of Determination (R^2) of the Model

The predictive power of a particular model or construct and the determination of standard path coefficients of each relationship between exogenous and endogenous variables in PLS analysis are assessed via R-squared (R2) values calculated by the endogenous variables. The interpretation of R^2 values in PLS is similar to those obtained from multiple regression analysis; according to Chin (1998) and Barclay et al. (1995), R^2 indicates the amount of variance in the construct explained by the model. Results of R^2 gathered for the variables analysed in the model indicate that the exogenous variables explain an 11.8% variance in SMEs' performance.

Table 4. 15
R-Square result

	R Square
Competitive Aggressiveness	0.016
Entrepreneurial autonomy	0.029
Innovativeness	0.047
Proactiveness	0.022
Risk-taking	0.026
SMEs' performance	0.118

4.7.3 Discriminant Validity

Discriminant validity examines the uniqueness of a specific construct to ascertain if another construct does not represent the phenomenon is captured by the construct in the model (Hair *et al.,* 2013). This study assesses the discriminant validity via the Fornel Larker criterion and Cross-Loading by comparing the square root of AVE values with the latent variable correlations (Fornell & Lacker, 1981). The discriminant validity outputs are presented in Table 4.16.

The result of the discriminant analysis is presented in Table 4.16. The square roots calculated on AVE coefficients are presented in the correlation matrix along the diagonal; the squared root of each AVE should be greater than its highest correlation with any other construct to evidence discriminant validity (Hair et al., 2013).

Table 4. 16
Fornel and Lacker Criterion

	ACF	Age	COAG	Education	AUT	EVT	Experience	Gender	INN	NCT	PPROT	Risk-taking	SME's Perf
Access to Finance	**0.73**												
Age	-0.063	**1.000**											
Competitive Aggressiveness	-0.022	0.026	**0.736**										
Education	-0.016	0.009	0.069	**1.000**									
AUT	-0.013	-0.076	0.024	-0.025	**0.742**								
EVT	0.026	-0.016	0.334	0.132	-0.023	**0.708**							
Experience	-0.086	0.175	0.12	0.252	0.118	0.073	**1.000**						
Gender	0.000	0.031	-0.014	-0.108	0.04	-0.037	-0.052	**1.000**					
Innovativeness	0.001	-0.006	0.186	0.146	0.047	0.216	0.186	-0.004	**0.78**				

National Culture	-0.034	-0.019	-0.012	-0.04	0.048	0.009	0.058	0.05	0.039	**0.801**			
Proactiveness	0.042	0.036	0.56	0.066	-0.025	0.46	0.135	-0.063	0.235	0.054	**0.752**		
Risk-taking	-0.007	0.022	0.433	0.104	0.03	0.417	0.115	-0.098	0.18	-0.024	0.566	**0.744**	
SMEs Performance	0.076	0.013	0.204	0.009	-0.097	0.198	-0.026	-0.028	0.149	-0.058	0.242	0.26	**0.708**

Note: Values in the diagonals represent the squared root of the average variance extracted while the other entries (off diagonals) represent the variable correlations.

The table shows that AVE square roots calculated for all the constructs are greater than the off-diagonal coefficients values or the elements in the corresponding rows or columns, confirming the presence of discriminant validity. These results also establish that all the constructs are valid based on their parameter estimates and statistical significance. While the measurement model of this study has been achieved through the validity and reliability of the constructs, it is still important to assess the structural model overall.

Before presenting the structural model, to the researcher revised the proposed model/framework. The rationale for the this is due to the deletions undertaken during the confirmatory factor analysis. Even though some items initially inserted in the model were deleted, none of the constructs were dropped because at least two items remain an indicator of the construct (Hair *et al*., 2012). Figure 4.1 presents the revised model of the study.

Figure 0.1
Revised Model
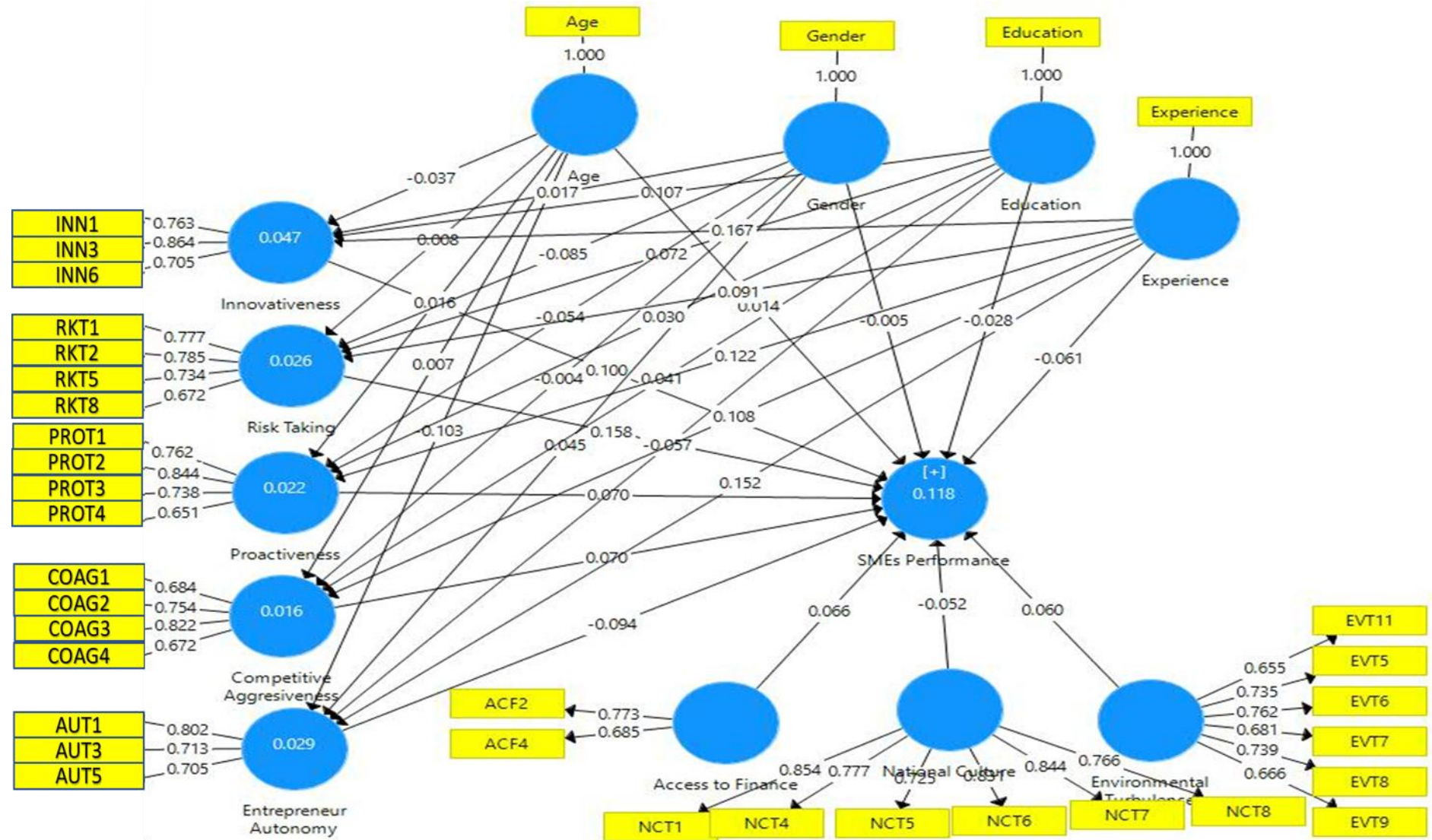
4.7.4 Effect Sizes

The path coefficient cannot provide any information about the effect size of exogenous latent variables on the endogenous construct. Hence the relevance and the extent to which the examined path changes the explaining power of the endogenous construct must be assessed (Cohen, 1988). Based on the guidelines provided by Cohen (1988), the f^2 values of 0.02, 0.15, and 0.35 respectively represent the small, medium, and large effects of the exogenous constructs on the endogenous constructs. The effect of the significant path coefficient is shown in Table 4.17. Thus, the effect size results show that the exogenous variables have effect sizes that range from small to medium, with risk-taking having the highest effect on SMEs performance, having 0.018, and gender having the least having 0.000 effects on SMEs' performance.

Table 4. 17
Effect size of the Model

	COAG	AUT	INN	PROT	RKT	PERF
Access to Finance						0.005
Education	0.002	0.003	0.011	0.001	0.005	0.001
Experience	0.011	0.022	0.026	0.014	0.008	0.004
Gender	0.000	0.002	0.000	0.003	0.007	0.000
Innovativeness						0.010
National Culture						0.003
Proactiveness						0.003
Risk-taking						0.018

4.7.5 Predictive Relevance (Q^2) of the Model

The predictive relevance (Q^2) of the model was conducted to assess its predictive capacity.

A model predictive relevance Q^2 is a surrogate used in accessing the model validity. The Q^2 utilises blindfolding techniques. Blindfolding is a sample re-use method that

allows calculating Stone-Geisser's (Q^2) value (Stone, 1974; Geisser, 1974). This represents the evaluation criterion for the cross-validated predictive relevance of the PLS path model.

Duarte and Raposo (2010) assert that the Stone-Geisser test of predictive relevance is often employed as a supplementary assessment of goodness-of-fit in Partial Least Squares Structural Equation Modelling. According to the conclusion of Akter, D'Ambra, and Ray (2011), Goodness of Fit (GoF) or predictive relevance is essential in accessing the validity of a complex model. A model is said to have a predictive relevance if the Q^2 value is greater than zero (0).

Table 4.18 shows the construct's cross-validated redundancy value: the predictive relevance of the endogenous constructs is greater than 0; this indicates a good level of predictive relevance of the model.

Table 4. 18
Predictive relevance of the model

	SSO	SSE	Q² (=1-SSE/SSO)
Access to Finance	934	934	
Age	467	467	
Competitive Aggressiveness	1868	1861.08	0.004
Education	467	467	
Entrepreneurial autonomy	1401	1386.917	0.01
Environmental Turbulence	2802	2802	
Experience	467	467	
Gender	467	467	
Innovativeness	1401	1373.167	0.02
National Culture	2802	2802	
Proactiveness	1868	1854.856	0.007
Risk-taking	1868	1844.643	0.013
SMEs' performance	2802	2675.159	0.045

Note *SSO-Sum of square of Observations; SSE – Sum of Squares of Prediction Errors; while Q^2 value = 1-SSE/SSO*

4.8   Structural Model

The researcher assesses the structural model by adhering to the guideline provided by Hair et al. (2017) and Ramayah et al. (2018). The guideline consists of a five-step measurement process, namely, (1) assessment of collinearity, (2) assessing the significance of path coefficients, which is the final result of hypothesis testing. (3) assessment of R-squared level (R^2), (4) assessment of the effect size of f^2, (5), and assessment of predictive relevance (Q^2).

To test the formulated hypotheses, the researcher employed a bootstrapping technique set to resampling 5000 bootstrap samples to determine the significance level of the loadings and the path coefficient (Hair et al., 2014). The bootstrapping technique was applied to determine the significance levels for loadings and path coefficients (Hair, Sarstedt, et al., 2014). Any p-value greater than 0.05 was not significant, meaning such hypotheses are rejected and accepted as alternative hypotheses.

4.8.1   Effect of Entrepreneurial Orientation on SMEs' performance

This section presents the results gathered from hypotheses testing carried out to examine the relationship between EO dimensions and SMEs' performance. The tested hypotheses are presented in Chapter Two.

Standard path beta coefficients (β) represent the relationships between dependent and independent variables; a $P < 0.05$ significance level for a two-tailed hypothesis is used to test the structural model relationship (Hair *et al.,* 2010). Results for path coefficients, T-values, p-values, and the decisions taken are presented in Table 4.19 and Figure 4.2.
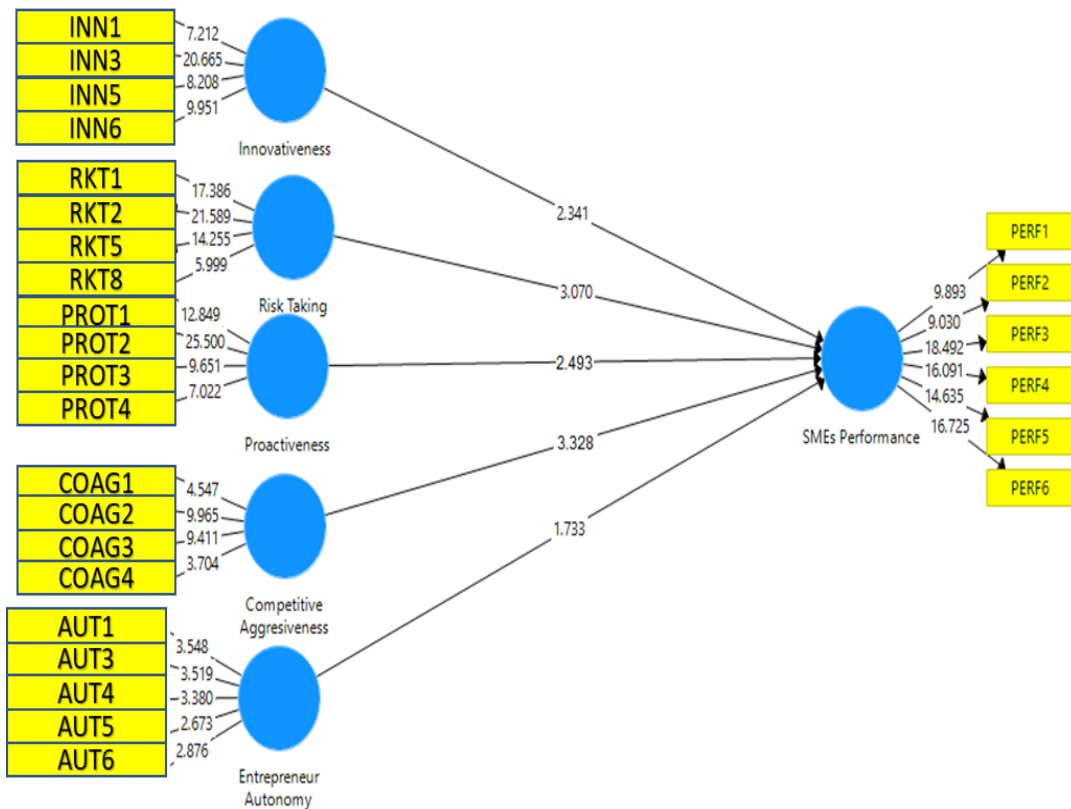
Figure 0.2
Entrepreneurial orientations and SMEs' performance

Table 4. 19
Effect of entrepreneurial orientation on SMEs' performance

Hypo	Relationship	β	Std Dev.	T Stat	P Value	Decision
H$_{1a}$	Innovativeness -> SMEs' performance	0.116	0.05	2.341	0.02	Significant
H$_{1b}$	Proactiveness -> SMEs' performance	0.265	0.106	2.493	0.013	Significant
H$_{1c}$	Risk-taking -> SMEs' performance	0.168	0.055	3.070	0.002	Significant
H$_{1d}$	Competitive Aggressiveness -> SMEs' performance	0.291	0.087	3.328	0.001	Significant
H$_{1e}$	Entrepreneurial autonomy -> SMEs' performance	-0.098	0.056	1.733	0.084	Not Significant

Four of the five stated hypotheses show significant positive effects of EO on SMEs' performance. The four significant hypotheses comprise: (1) innovativeness and SMEs' performance ($\beta = 0.116$; $t = 2.341$, $P < 0.05$); (2) proactiveness and SMEs' performance ($\beta = 0.265$; $t = 2.493$; $P < 0.05$); (3) risk-taking and SMEs' performance ($\beta = 0.168$; $t = 3.070$; $P < 0.05$) and (4) competitive aggressiveness and SMEs' performance ($\beta = 0.291$; $t = 3.328$; $P < 0.05$). The remaining path relationship between entrepreneurial autonomy and SMEs' performance ($\beta = -0.098$; $t = 1.733$; $P > 0.05$) shows no evidence of a significant effect, and the sign of the coefficient indicates a negative relationship between the two. Therefore, hypotheses H_{1a}, H_{1b}, H_{1c} and H_{1d} are supported, while hypothesis H_{1e} is not.

4.8.2   Effect of Entrepreneurial Characteristics and EO dimensions

This section presents the findings between the constructs in the research model. The first subsection under this section investigates the relationship between education level and EO dimensions, followed by the relationship between entrepreneurial experience and EO dimensions, gender and EO dimensions, and the direct relationship between age and EO dimensions.

This section presents the hypotheses findings that test the relationship between education level and EO dimensions, namely innovativeness, proactiveness, risk-taking, aggressiveness, and autonomy. Table 4.20 and Figure 4.3 present the findings in this regard.

H_{2ai}: Education level has a significant effect on the innovativeness of entrepreneurs in Nigeria.

__H_{2aii}__: Education level has a significant effect on the proactiveness of entrepreneurs in Nigeria.

__H_{2aiii}__: Education level has a significant effect on the risk-taking of entrepreneurs in Nigeria.

__H_{2aiv}__: Education level has a significant effect on the competitive aggressiveness of entrepreneurs in Nigeria.

__H_{2av}__: Education level has a significant effect on the entrepreneurial autonomy of entrepreneurs in Nigeria.

Outcomes gathered from tests reveal a significant effect in the relationship between education and innovativeness ($\beta = 0.104$; $t = 2.073$; $P < 0.05$). The remaining hypotheses between EO dimensions and education and competitive aggressiveness ($\beta = 0.032$; $t = 0.4533$; $P > 0.05$), education and proactiveness ($\beta = 0.031032$; $t = 0.479$; $P > 0.05$) and education and risk-taking ($\beta = 0.084$; $t = 1.084$; $P > 0.05$) show no evidence of a significant relationship. Hence, hypothesis H_{2ai} is supported and accepted, while hypotheses H_{2aii}, H_{2aiii}, H_{2aiv} and H_{2av} are rejected.

Furthermore, the relationship between entrepreneurial experience and EO dimensions was examined.

__H_{2bi}__: Experience has a significant effect on the innovativeness of entrepreneurs in Nigeria.

__H_{2bii}__: Experience has a significant effect on the proactiveness of entrepreneurs in Nigeria.

__H_{2biii}__: Experience has a significant effect on the risk-taking of entrepreneurs in Nigeria.

__H_{2biv}__: Experience has a significant effect on the competitive aggressiveness of entrepreneurs in Nigeria.

__H_{2biii}__: Experience has a significant effect on the autonomy of entrepreneurs in Nigeria.

As shown in Table 4.20 and Figure 4.3, results gathered from testing indicate four of the five relationship as significant: a significant effect is detected with regard to experience on innovativeness ($\beta = 0.171$; $t = 3.6833$; $P < 0.05$), proactiveness ($\beta =$

0.123; t = 2.277; P < 0.05), competitive aggressiveness (β = 0.121; t = 1.997; P < 0.05), and entrepreneurial autonomy (β = 0.154; t = 2.92; P < 0.05); while the relationship between experience and risk tasking (β = 0.086; t = 1.557; P > 0.05) does not provide evidence of a significant effect. Hence, hypotheses H_{2bi}, H_{2bii}, H_{2biv} and H_{2bv} are accepted, while hypothesis H_{2biii} is rejected.

Thirdly, the following hypotheses considering entrepreneurs' gender and EO dimensions are tested:

> H_{2ci}: *Gender has a significant effect on the innovativeness of entrepreneurs in Nigeria.*
> H_{2cii}: *Gender has a significant effect on the proactiveness of entrepreneurs in Nigeria.*
> H_{2ciii}: *Gender has a significant effect on the risk-taking of entrepreneurs in Nigeria.*
> H_{2civ}: *Gender has a significant effect on the competitive aggressiveness of entrepreneurs in Nigeria.*
> H_{2cv}: *Gender has a significant effect on the autonomy of entrepreneurs in Nigeria.*

The hypothesis testing result reveals that none of the stated hypotheses between gender and the dimensions of EO show evidence of a significant relationship. However, the relationship between gender and proactiveness (β = -0.055; t = 0.957; P > 0.05) and gender and risk-taking (β = -0.083; t = 1.623; P > 0.05) reveal a negative correlation. This indicates a negative relationship between gender proactiveness and the risk-taking of the entrepreneurs. Therefore, hypotheses H_{2ci}, H_{2cii}, H_{2ciii}, H_{2civ}, and H_{2cv} are rejected.

Lastly, the following hypotheses regarding entrepreneurs' age and EO dimensions were tested:

> H_{2di}; *Age has a significant effect on the innovativeness of entrepreneurs in Nigeria.*
> H_{2dii}; *Age has a significant effect on the proactiveness of entrepreneurs in Nigeria.*

H₂ₐᵢᵢᵢ; Age has a significant effect on the risk-taking of entrepreneurs in Nigeria.
H₂ₐᵢᵥ; Age has a significant effect on the competitive aggressiveness of entrepreneurs in Nigeria.
H₂ₐᵥ Age has a significant effect on the autonomy of entrepreneurs in Nigeria.

Results gathered from testing reveal the presence of a significant effect of age on entrepreneurial autonomy (β = -0.101; t = 2.005; $P < 0.05$), but not for the remaining hypotheses: age and proactiveness (β = 0.015; t = 2.005; $P > 0.05$), age and innovativeness (β = -0.037; t = 0.771; $P > 0.05$), age and risk-taking (β = 0.006; t = 0.112; $P > 0.05$), and age and competitive aggressiveness (β = 0.006; t = 0.110.097; $P > 0.05$). A negative effect of age on innovativeness and entrepreneurial autonomy is also detected. Therefore, only H₂ₐᵥ is accepted, while hypotheses H₂ₐᵢ, H₂ₐᵢᵢ, H₂ₐᵢᵢᵢ and H₂ₐᵢᵥ are rejected.

Table 4. 20
Effect of entrepreneurs' attributes on EO

Hypo	Relationships		Beta	Standard Error	T – Value	P Values	Decision
H$_{2ai}$	Education Innovativeness	->	0.104	0.05	2.073	0.038	Significant
H$_{2aii}$	Education Proactiveness	->	0.031	0.066	0.479	0.632	Not Significant
H$_{2aiii}$	Education -> Risk-taking		0.084	0.078	1.084	0.279	Not Significant
H$_{2aiv}$	Education Competitive Aggressiveness	->	0.032	0.07	0.453	0.650	Not Significant
H$_{2av}$	Education Entrepreneurial autonomy	->	-0.055	0.059	0.926	0.354	Not Significant
H$_{2b1}$	Experience Innovativeness	->	0.171	0.046	3.683	0.000	Significant
H$_{2bii}$	Experience Proactiveness	->	0.123	0.054	2.277	0.023	Significant
H$_{2biii}$	Experience -> Risk-taking		0.086	0.055	1.557	0.119	Not Significant
H$_{2biv}$	Experience Competitive Aggressiveness	->	0.121	0.061	1.997	0.046	Significant
H$_{2bv}$	Experience Entrepreneurial autonomy	->	0.154	0.053	2.92	0.004	Significant
H$_{2c1}$	Gender Innovativeness	->	0.023	0.052	0.442	0.659	Not Significant
H$_{2cii}$	Gender Proactiveness	->	-0.055	0.057	0.957	0.339	Not Significant
H$_{2ciii}$	Gender -> Risk-taking		-0.083	0.051	1.623	0.105	Not Significant
H$_{2civ}$	Gender Competitive Aggressiveness	->	0	0.057	0.003	0.998	Not Significant
H$_{2cv}$	Gender Entrepreneurial autonomy	->	0.045	0.052	0.865	0.387	Not Significant
H$_{2d1}$	Age -> Innovativeness		-0.037	0.047	0.771	0.441	Not Significant
H$_{2dii}$	Age -> Proactiveness		0.015	0.057	0.262	0.794	Not Significant
H$_{2diii}$	Age -> Risk-taking		0.006	0.055	0.112	0.911	Not Significant

H$_{2div}$	Age -> Competitive Aggressiveness	0.006	0.057	0.097	0.923	Not Significant
H$_{2dv}$	Age -> Entrepreneurial autonomy	-0.101	0.051	2.005	0.045	Significant
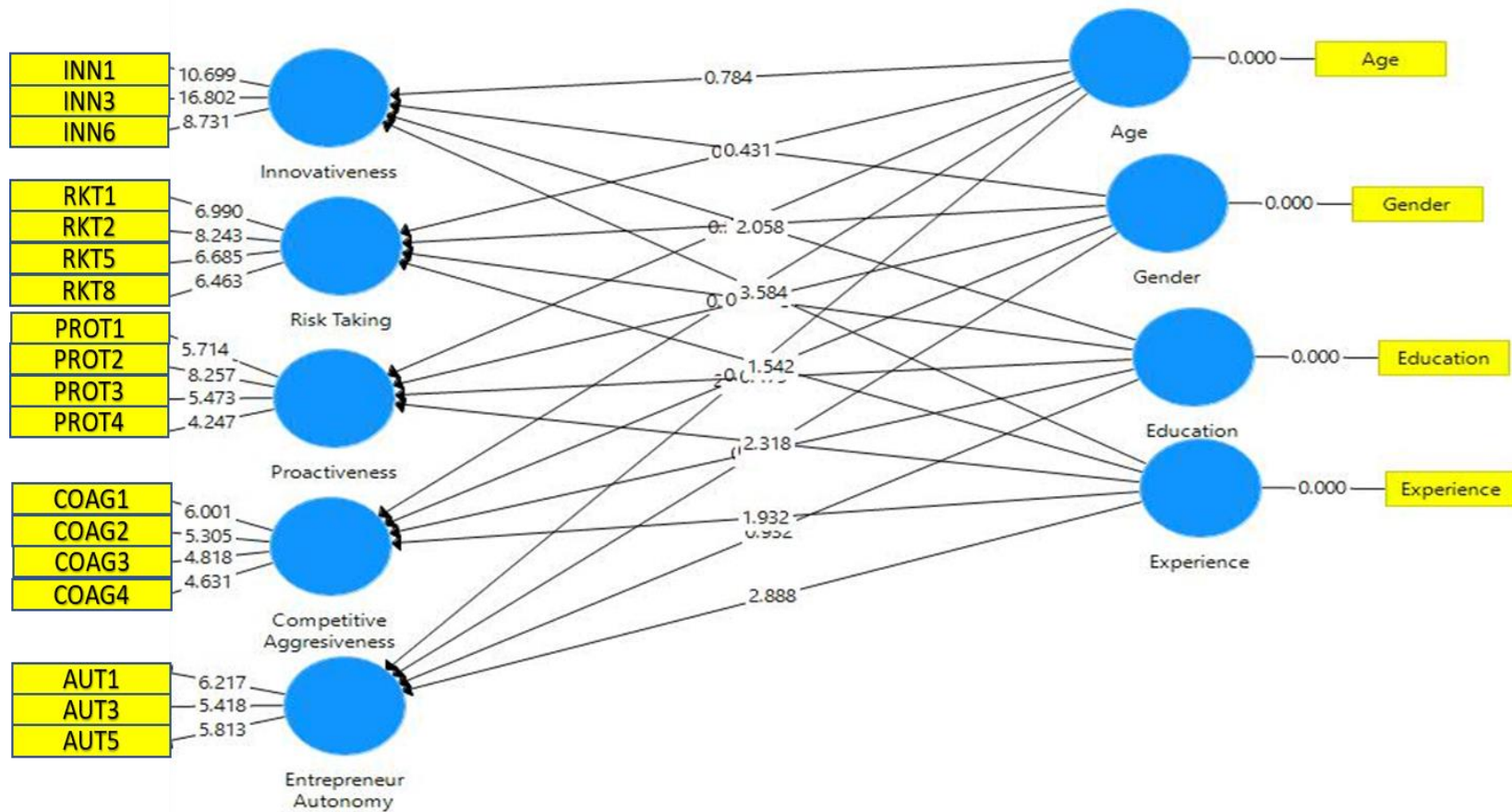
Figure 0.3
Effect of entrepreneur demographic factors on entrepreneurial orientations

4.8.3 Mediating Effect of EO between entrepreneurs' attributes and SMEs' performance

This section investigates the mediating effects of EO between entrepreneurs' attributes - education, experience, gender, and age - and SMEs' performance. The mediation test is undertaken to determine whether the mediator extends its effect on the independent variable to the dependent variables (Ramayah et al., 2011). In this study, the mediating effect is investigated to ascertain whether any effect associated with EO dimensions extends its influence from entrepreneurs' attributes to SMEs' performance.

The author, using bootstrapping method, assesses the mediating effect of EO on the relationship between entrepreneurs' attributes and SMEs' performance. Five mediators (innovativeness, proactiveness, risk-taking, competitive aggressiveness, and entrepreneurial autonomy) were inserted in the procedure, with two different links – *a, b* - established for each model. Link *a* represents the path of the independent variable to the mediator variable (X-M), while *b* represents the path from the mediator variable to the dependent variable (M-Y). A modified standard error for *a*b* was calculated and used to obtain the t-value associated with this combined link; t-values were calculated following the formula provided by Hayes and Preacher (2010):

$T_{ab} = (a*b)/S_{ab}$

Where:
> a = *the value of the relationship between the independent variable and the mediator*
> b = *the value of the relationship between the mediator and the dependent variable*
> Sab = *the standard deviation of the 'a' and 'b' above*

The mediating effect was examined using a bootstrapped sample of 5,000 as Ringle et al. (2005) recommended.

4.8.3.1 Mediating effect of entrepreneurial orientation between education level and SMEs' performance

Table 4.21 presents the result of the mediating effect of the EO dimensions between educational levels and SMEs' performance.

> H_{3ai}: Innovativeness mediates between educational level and SMEs' performance.
> H_{3aii}: Proactiveness mediates between educational level and SMEs' performance.
> H_{3aiii}: Risk-taking mediates between educational level and SMEs' performance.
> H_{3aiv}: Competitive aggressiveness mediates between educational level and SMEs' performance.
> H_{3av}: Entrepreneurial autonomy mediates between educational level and SMEs' performance.

Results indicate the presence of a mediation effect of innovativeness (t = 5.499; P < 0.05), proactiveness (t = 2.225; P < 0.05) and risk-taking (t = 4.154; P < 0.05) in the relationship between educational level and SMEs' performance, although no significant mediation effect is detected for competitive aggressiveness and entrepreneurial autonomy. Hence, hypotheses H_{3ai}, H_{3aii} and H_{3aiii} are accepted, while hypotheses H_{3aiv} and H_{3av} are rejected.

Table 4. 21
Mediating effect of entrepreneurial orientation between educational level and SMEs' performance

	Innovativeness	Proactiveness	Risk Taking	Competitive Aggressiveness	Entrepreneur Autonomy
A	0.148	0.067	0.108	0.073	-0.037
B	0.094	0.084	0.165	0.083	-0.109
Sab	0.003	0.003	0.004	0.004	0.004
T-Value	5.499	2.225	4.154	1.665	1.082
P-Value	0.000	0.003	0.000	0.097	0.279
Decision	Significant	Significant	Significant	Not-Significant	Not-Significant

4.8.3.2 Mediating effect of EO dimensions between experience and SMEs'
    performance

This section presents the result of the following hypotheses on the mediating effect of

EO between experience and SMEs' performance.

H3bi: Innovativeness mediates between entrepreneurial experience and SMEs'
        performance.
H3bii: Proactiveness mediates between entrepreneurial experience and SMEs'
        performance.
H3biii: Risk-taking mediates between entrepreneurial experience and SMEs'
        performance.
H3biv: Competitive aggressiveness mediates between entrepreneurial experience
        and SMEs' performance.
H3bv: Entrepreneurial autonomy mediates between entrepreneurial experience and
        SMEs' performance.

Table 4.22 shows evidence to support the presence of a mediating effect associated with

all the five EO dimensions: innovativeness (t = 7.275, P < 0.05), proactiveness, (t =

4.091, P < 0.05), risk-taking (t = 7.163, P < 0.05) competitive aggressiveness (t = 1.946,

P < 0.05) and entrepreneurial autonomy (t = 4.250, P < 0.05). Hence, hypotheses H3bi,

H3bii, H3biii, H3biv, and H3bv are all accepted.

Table 4. 22
Mediating effect of entrepreneurial orientation between experience and SMEs'
performance

	Innovativeness	Proactiveness	Risk Taking	Competitive Aggressiveness	Entrepreneur Autonomy
a	0.187	0.136	0.117	0.121	0.122
b	0.101	0.090	0.177	0.069	0.096
Sab	0.003	0.003	0.003	0.004	0.003
T-Value	7.275	4.091	7.163	1.946	4.250
P-Value	0.000	0.000	0.000	0.052	0.000
Decision	Significant	Significant	Significant	Significant	Significant

4.8.3.3 Mediating effect of EO between the entrepreneurs' gender and SMEs' performance

This section investigates the mediating effect of EO between entrepreneurs' gender and SMEs' performance. The following hypotheses are tested:

H_{3di}: *Innovativeness mediates between gender and SMEs' performance.*

H_{3dii}: *Proactiveness mediates between gender and SMEs' performance.*

H_{3diii}: *Risk-taking mediates between gender and SMEs' performance.*

H_{3div}: *Competitive aggressiveness mediates between gender and SMEs' performance.*

H_{3dv}: *Entrepreneurial autonomy mediates between gender and SMEs' performance.*

Results in Table 4.23 provide evidence to support a significant mediating effect of risk-taking (t = 5.556, P < 0.05) between entrepreneurs' gender and SMEs' performance. However, innovativeness (t = 0.629. P > 0.05), proactiveness (t = 0.133. P > 0.05), competitive aggressiveness (t = 0.681. P > 0.05) and entrepreneurial autonomy (t = 0.165. P > 0.05), do not show any significant impact. Hence hypothesis H_{3ciii} is accepted, while hypotheses H_{3ci}, H_{3cii}, H_{3civ} and H_{3cv} are rejected.

Table 4. 23

Mediating effect of entrepreneurial orientation between gender and SMEs' performance

	Innovativeness	Proactiveness	Risk Taking	Competitive Aggressiveness	Entrepreneur Autonomy
a	-0.018	-0.064	-0.098	-0.015	0.041
b	0.091	0.080	0.166	0.088	-0.104
Sab	0.003	0.003	0.003	0.003	0.003
T-Value	0.483	1.506	5.556	0.411	1.390
P-Value	0.629	0.133	0.000	0.681	0.165
Decision	Not Significant	Not Significant	Significant	Not Significant	Not Significant

4.8.3.4 Mediating effect of entrepreneurial orientation between the age of entrepreneur and SMEs' performance

This section examines the mediating effect of EO between entrepreneurs' age and SMEs' performance. The following hypothesis are tested:

H_{3di}: Innovativeness mediates between age and SMEs' performance.
H_{3dii}: Proactiveness mediates between age and SMEs' performance.
H_{3diii}: Risk-taking mediates between age and SMEs' performance.
H_{3div}: Competitive aggressiveness mediates between age and SMEs' performance.
H_{3dv}: Entrepreneurial autonomy mediates between age and SMEs' performance.

Results shown in table 4.24 show that only entrepreneurs' autonomy (t = 3.868, P < 0.05) has a significant mediating effect on the examined relationship, while innovativeness (t = 0.754, P > 0.05), proactiveness (t = 0.374, P > 0.05), risk-taking (t = 0.192, P < 0.05) and competitive advantage (t = 0.498, P < 0.05) do not show any significant mediating effect between age and SMEs' performance. Hence hypothesis H_{3dv} is accepted while hypotheses H_{3d1}, H_{3dii}, H_{3diii} and H_{3div} are rejected.

Table 4. 24
Mediating effect of entrepreneurial orientation between entrepreneurs' age and SMEs'
performance

	Innovativeness	Proactiveness	Risk Taking	Competitive Aggressiveness	Entrepreneur Autonomy
a	0.008	0.037	0.022	0.024	0.089
b	0.102	0.081	0.171	0.096	0.113
Sab	0.003	0.003	0.003	0.003	0.003
T-Value	0.314	0.890	1.306	0.679	3.868
P-Value	0.754	0.374	0.192	0.498	0.00
Decision	Not Significant	Not Significant	Not Significant	Not Significant	Significant

Note: *0.1–10% significant level, 0.05–5% significant level and 0.01–1% significant level*

4.8.4 Testing the Moderating Effect

The moderation effect indicates that a moderator M influences the strength or the direction of the relationship between the independent variable X and the dependent

variable Y. The test of a moderation effect warrants a statistical measure of the relationship between the independent and dependent variables under the influence of a moderator (Baron & Kenny, 1976). Three different approaches are available in statistics to evaluate moderating effects: the multi-group approach, the product indicator approach, and the two-step construct score approach (Joreskog, 1998).
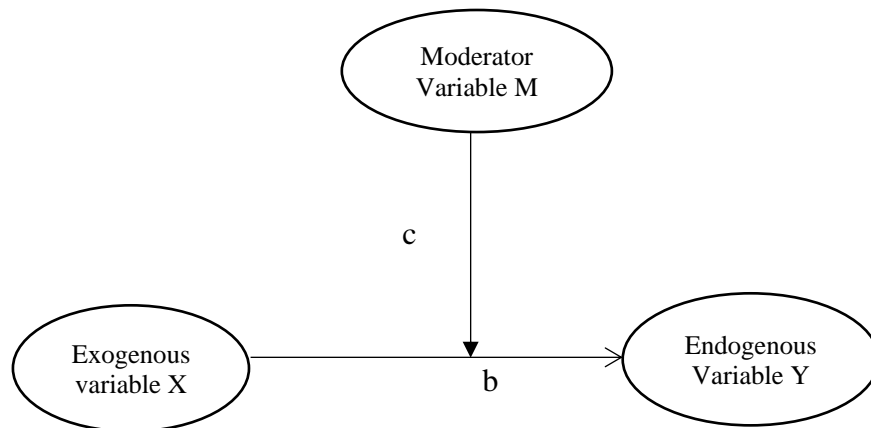
Figure 0.4
A Simple model with a moderating effect
(Source: Henseler & Fassott, 2010)

The multi-group approach is used to assess moderation effects when the moderator variable is categorical; it involves dividing the variable into its own classes before examining the moderating effect on the intended relationship. The product indicator approach is used to assess moderation effects when the variable is continuous and measured reflectively (Henseler & Fassott, 2010; Hair et al., 2013), while the two-step constructs score approach is employed for evaluating the interaction of a formatively measured continuous moderator.

The moderator variables examined in this study - access to finance, environmental turbulence, and national culture - are reflectively measured. A reflective-reflective higher-order model was employed. The logic being this is that there is a high probability

that the researcher did not exhaust all first-order constructs that constitute the higher-order construct.

The rationale behind employing a reflective measurement-reflective measurement modeling was based on the propositions by Becker et al., 2012), Hair, Sarstedt et al., (2018), and Ringle et al., (2012); on these authors account, employing a higher-order construct allows parsimony of related attributes in a model, which might not be exhausted by the researcher. Hence, to measure such higher-order construct, a reflective-reflective measure is encouraged. To assess the moderating effect on the research model, the author employs a product indicator approach in PLS. This approach involves creating a latent variable by multiplying each item from the independent variable by each item from the moderator variable being added, as shown by Figure 4.5. This study used 2,000 bootstrapping samples to assess the significance path of the sample and the moderating effect.
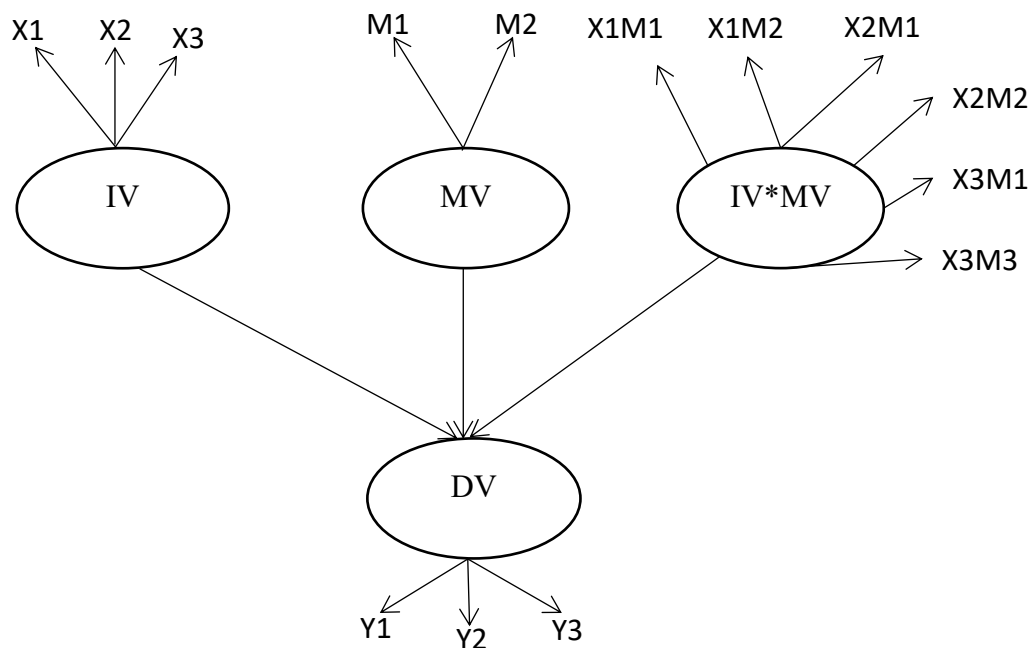
Figure 0.5
PLS Product Indicator Approach
Source: Helm et al., 2010.

4.8.4.1 Moderating effect of environmental turbulence on the relationship between entrepreneurial orientation and SMEs' performance

This section presents the moderating effect of environmental turbulence on the relationship between EO and SMEs' performance. The following hypotheses are tested:

> **H$_{5a}$:** *Environmental turbulence significantly moderates between innovativeness and SMEs' performance in Nigeria.*
> **H$_{5b}$:** *Environmental turbulence significantly moderates between proactiveness and SMEs' performance in Nigeria.*
> **H$_{5c}$:** *Environmental turbulence significantly moderates between risk-taking and SMEs' performance in Nigeria.*
> **H$_{5d}$:** *Environmental turbulence significantly moderates between competitive aggressiveness and SMEs' performance in Nigeria.*
> **H$_{5e}$:** *Environmental turbulence significantly moderates between entrepreneur's autonomy and SMEs' performance in Nigeria.*

Results shown in Table 4.25 indicate a slight change in the standardised beta coefficients for the simple effect between SMEs' performance and innovativeness (0.116 to 0.112), proactiveness and (0.265 to 0.045), risk-taking (0.168 to 0.100), competitive aggressiveness (0.291 to 0.059), and entrepreneurial autonomy (-0.098 to -0.12). The result also produced a change in the R^2 values upon the interaction of the moderator.

Using a 2,000 bootstrapped sample size, the analysis finds the presence of a significant moderating effect of environmental turbulence on the relationship between innovativeness and SMEs' performance (t = 2.756, P < 0.100); and on the relationship between entrepreneurial autonomy and SMEs' performance (t = 2.650, P < 0.10). However, environmental turbulence does not appear to have a significant effect on the relationship between proactiveness and SMEs' performance (t = 0.658, P > 0.1), risk-taking and SMEs' performance (t = 0.818, P > 0.10), competitive aggressiveness and

SMEs' performance (t = 0.436, P > 0.10). Hence, hypotheses H5a and H5e are accepted

while hypotheses H5b, H5c and H5d are rejected.

Table 4. 25
Moderating effect of environmental turbulence between entrepreneurial orientations and SMEs' performance

Hypotheses	Relationship	Beta	Std Error	T-Value	P Values	Decision
H5a	INN*EVT -> SMEs' performance	0.200	0.073	2.756	0.006***	Significant
H5b	PROT*EVT -> SMEs' performance	-0.053	0.080	0.658	0.511	Not Significant
H5c	RTK*EVT -> SMEs' performance	-0.015	0.066	0.230	0.818	Not Significant
H5d	COAG*EVT -> SMEs' performance	-0.072	0.092	0.779	0.436	Not Significant
H5d	AUT*EVT -> SMEs' performance	0.209	0.079	2.650	0.008***	Significant

Note: 0.10–10% significant level, 0.05–5% significant level and 0.01–1% significant level

4.8.4.2 *Moderating effect of national culture on the relationship between entrepreneurial orientation and SMEs' performance*

This moderating effect of national culture on the relationship between EO and SMEs'

performance is examined by testing the following hypotheses:

> ***H6a:*** *National culture significantly moderates between innovativeness and SMEs' performance in Nigeria.*
> ***H6b:*** *National culture significantly moderates between proactiveness and SMEs' performance in Nigeria.*
> ***H6c:*** *National culture significantly moderates between risk-taking and SMEs' performance in Nigeria.*
> ***H6d:*** *National culture significantly moderates between competitive aggressiveness and SMEs' performance in Nigeria.*
> ***H6e:*** *National culture significantly moderates between entrepreneurial autonomy and SMEs' performance in Nigeria.*

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The result shown in Table 4.26 reveals a slight change in the standardised beta coefficients for the simple effect of the constructs and a change in the R^2 value, which results in a small effect size when addressing the interaction of the moderator.

Based on a 2,000 bootstrapped sample size, results provide evidence of a significant moderating effect of national culture on the relationship between competitive aggressiveness and SMEs' performance (t = 1.823, P < 0.100). In contrast, there appear to be no significant moderating effect of national culture on the relationships between innovativeness and SMEs' performance (t = 0.524, P.> 0.10), proactiveness and SMEs' performance (t = 0.249, P > 0.1), risk-taking and SMEs' performance (t = 0.666, P > 0.10), and autonomy and SMEs' performance (t = 0.720, P > 0.10). Therefore, hypotheses H_{6d} are accepted while hypotheses $H_{6a.}$ H_{6b}, H_{6c} and H_{6e} are rejected in this study.

Table 4. 26
Moderating effect of national culture on the relationship between entrepreneurial orientation and SMEs' Performance

Hypotheses	Relationships	Beta	Std Error	T-Value	P Values	Decision
H_{6a}	INN*NTC -> SMEs' performance	0.051	0.096	0.524	0.600	Not Significant
H_{6b}	PROT*NTC -> SMEs' performance	-0.018	0.073	0.249	0.803	Not Significant
H_{6c}	RTK*NTC -> SMEs' performance	-0.057	0.086	0.666	0.506	Not Significant
H_{6d}	COAG*NTC -> SMEs' performance	0.099	0.054	1.823	0.069	Significant
H_{6e}	AUT*NTC -> SMEs' performance	0.084	0.116	0.720	0.472	Not Significant

4.8.4.3 Moderating effect of access to finance on the relationship between entrepreneurial orientation and SMEs' performance

This section investigates the moderating effect of access to finance on the relationship between EO and SMEs' performance. The following hypotheses are tested:

> **H_{7a}:** *Access to finance moderates the relationship between innovativeness and SMEs' performance in Nigeria.*
> **H_{7b}:** *Access to finance moderates the relationship between proactiveness and SMEs' performance in Nigeria.*
> **H_{7c}:** *Access to finance moderates the relationship between risk-taking and SMEs' performance in Nigeria.*
> **H_{7d}:** *Access to finance moderates the relationship between competitive aggressiveness and SMEs' performance in Nigeria.*
> **H_{7e}:** *Access to finance moderates the relationship between entrepreneurial autonomy and SMEs' performance in Nigeria.*

Based upon a 2000 bootstrapped sample size, the analysis indicates evidence of a significant moderating effect carried out by access to finance on the relationship between risk-taking and SMEs' performance ($t = 1.724$, $P < 0.10$); and competitive aggressiveness and SMEs' performance ($t = 3.539$, $P < 0.10$). However, access to finance appears to have no significant moderating effect on the relationships between innovativeness and SMEs' performance ($t = 0.899$, $P > 0.100$), proactiveness and SMEs' performance ($t = 0.423$, $P > 0.1$), autonomy and SMEs' performance ($t = 0.860$, $P > 0.10$). Hence, hypotheses H_{7c} and H_{7d} are accepted, while hypotheses H_{7a}, H_{7b} and H_{7e} are rejected.

Table 4. 27

Moderating effect of access to finance on the relationship between entrepreneurial orientation and SMEs' performance

Hypotheses	Relationships	Beta	Std Error	T-Value	P Values	Decision
H_{7a}	INN*ATF -> SMEs' performance	-0.058	0.065	0.899	0.369	Not Significant
H_{7b}	PROT*ATF -> SMEs' performance	-0.025	0.059	0.423	0.672	Not Significant
H_{7c}	RTK*ATF -> SMEs' performance	0.129	0.075	1.724	0.080	Significant
H_{7d}	COAG*ATF -> SMEs' performance	0.201	0.057	3.539	0.000	Significant
H_{7e}	AUT*ATF -> SMEs' performance	-0.111	0.129	0.860	0.390	Not Significant

CHAPTER FIVE

QUALITATIVE ANALYSIS AND FINDINGS

5.1   Qualitative Analysis and Findings

This chapter presents the findings gathered during the qualitative data analysis. Semi-structured interviews were conducted after analysing the quantitative data and involved selected SME managers/owners in Nigeria. The objective was to understand the quantitative findings further and gather in-depth knowledge to evaluate the appropriateness and validity of the quantitative methods applied.

Eight SME owners/managers from different industrial sectors were interviewed, representing manufacturing, wholesale/retail, construction, accommodation, food services, education, transport, and real estate. The eight participants were purposely selected among those who filled up the questionnaire for the quantitative study. The rationale underlying their selection is subjectively based on their firm's history and size. In order to use the qualitative findings to complement the quantitative research findings, the interview was conducted after the researcher had analysed the quantitative data collected via a predesigned questionnaire. The views of the semi-structured interview participants are summarised based on the themes, and some quotes were retained to highlight their points of view. The qualitative data findings support the quantitative findings, and the participants' views do not show significant variance from the quantitative findings. Instead, they complement the quantitative findings.

5.1.1 Innovativeness

Interviewees state that, while many SMEs often talk about innovativeness, the concept manifests itself in many ways, either through a vision, mission, or strategic objectives. Generally, responses indicate a lack of clarity on how innovativeness within SMEs can be achieved. Even though SMEs make many efforts to be innovative, they are sometimes let down by a lack of organisational culture supporting innovation. Organisation culture, according to Alvesson (2012), Nikpour (2017), and Schein (1990), defines how employees behave in an organisation; this includes shared culture, values, and beliefs established by SMEs' leaders or managers and communicated through several approaches. Given the lack of organisational culture among the SMEs in the study context, it translates to a lack of innovation.

Given this, interviewees agreed that SMEs must create innovative potential, capabilities, and an organisational culture that strongly communicates what is needed of their employees', providing grounds for implementing innovative ideas. Interviews with respondents, specifically respondents one, three, five, seven, and eight, reveal that:

> *'SMEs and their members create the environment and have strong views. Even if the environment changes, views still linger… our innovativeness as SMEs has improved over the recent years, but it takes a lot to convince our employees to think outside the box and do the extraordinary; they keep focusing on conventional thinking. A few of them are innovative, but we want an environment where everyone is innovative.'*

Meanwhile, respondents two, four, and six believed in giving employees the autonomy to get the job done via their individual initiative and innovativeness. However, they stressed that they implemented a reward and punishment approach to encourage positive innovativeness and punish those who disguise innovativeness as lazy.

Some of the participants pointed out that although innovativeness frequently does not pay off in the short run due to the higher costs involved, it positively influences the financial performance of firms in the long run.

According to interviews from the manufacturing industry,

> *'we spend more money ensuring that the new idea we are trying to implement meets the minimum standard. So, we spend more money experimenting with several ideas.'*

Interviewee two from the manufacturing sector points out that only a few employees were innovative in his firm, which hampered the innovative culture at his place. Human resources practices at many SMEs do not support an innovative culture of some firms; the same interviewee commented further:

> *'employees have brilliant ideas, but the liberty to practicalise their idea is limited because the firm cannot afford to waste their resources. Hence, the chance of implementing such innovativeness is limited. These ideas do not often yield innovation because of a lack of support from the firms.'*

When asked about the impact of innovativeness on SMEs' performance, the general response gathered from interviewees identified innovativeness as a key driver for performance improvement. The findings from the interviews reveal that innovativeness only indicates the development of new products or services. The respondents also acknowledged that innovativeness might also be an improvement on the old process of generating a product or service.

The participant from the education sector revealed that people are shy to be engaged in entrepreneurial activities if there is no certification to prove their education level. Likewise, the respondent reveals that customers are sceptical of entrepreneurs, specifically those offering services if they have no certification to justify their skills. Knowing this, the respondents argue against building upon this in his firm by acquiring several certificates and teaching students to present their ideas justified by the certificates they acquired.

Overall, the participants agreed that innovativeness was an essential measure of EO, which influenced the SMEs' performance in Nigeria. Nevertheless, the lack of a clearly defined organisational culture revolving around empowerment, support for employees, and creating an organisational structure that would support innovativeness among SMEs in Nigeria deters innovativeness among the interviewed SMEs owners and managers.

5.1.2 Proactiveness

According to interviewees, proactiveness contributes towards EO as it enables firms to stay abreast of changes in the market while maintaining close contact with

developments in the industry. The interviewees' perception of proactiveness tallies with the description given by Heger and Rohrbeck (2012) and Peter and Jarratt (2015), describing proactiveness as a strategic participation in the business unit and long-term foresight for future business demands. Despite this, there is a slight variance among the interviewees on what proactiveness is.

For example, the interviewees from the accommodation and food services sector believe proactiveness is an act of swiftly identifying potential market opportunities and exploiting the identified opportunities. Their quotes state:

> '*Most firms can identify market opportunities in the industry. Any organisation that is not able to identify market opportunities is not entrepreneurial. Although, SMEs being able to identify opportunities does not literarily translate into taking the opportunities. Taking advantage of opportunities in the market depends on two things: the first is whether the firm has the capabilities to fill the gap in the market, while the second is to be able to commit itself to the opportunities depending on the risks involved.*'

The interviewee provides an example:

> '*most of our accommodation and food services firms were in the city centre, and Lagos served as the main source of revenue generation. However, new business opportunities came when we realised that most tourists are more interested in the interior regions with history. We had to quickly take advantage of the opportunities by committing our*

resources before our competitors, and today, we are feeling the effect on

our market share and the performance of our firm in general. However,

our competitors were cautious of committing their resources when the

opportunities presented themselves. They said it was too risky to do

within that short time.' (Response from food services).'

For interviewees, rising technologies in the industry made it too challenging for many SMEs to keep abreast of competition, given that most firms were not able to invest in research and development compared to the industry leaders.

The participants believed that proactiveness was also an appropriate measure of EO. According to the respondents, firms had to be ready to monitor the trends and opportunities in the markets as this usually had a positive influence on the overall performance of the firms. The interviewee from the accommodation ad foodservice industrial sector states:

'*when you are proactive, you can quickly identify opportunities in the*

market and take the opportunities before your competitors. This surely

influences the market share of our firm. It also has a positive influence

on the overall performance of our firms.'

The respondent from the manufacturing and estate perceives proactiveness as a long-term foresight to predict future opportunities and prepare for such through their various strategic business units.

Given this, respondents from the estate comment:

> "*proactiveness is my view, it is the ability to forecast the next government project and, or a satellite town correctly, thus, acquire properties before any other competitor does.*"

With this, proactiveness is concluded by the respondents as an essential dimension of EO that perfectly predicts SMEs performance.

5.1.3 Risk-taking

Most interviewees identified risk-taking as an important element of EO. Identifying risk-taking as an essential element of EO conforms to the proposition of Basile. (2012), Kreiser and Davis (2010), and Naldi et al., (2007) on the significant importance of firms' risk-taking abilities and their EO, the respondents emphasised that many firms take calculated risks, and a few new entrepreneurs would take a wild risk in the market.

The interviewee from the wholesale/retail sector declares:

> '*our firm is not limited by risks that came our way.*' *Even though we understand that we cannot blindly take all risks that came our way, managing the risks we take is also a good strategy. What I mean is that we identify and reduce the risk that comes our way by having strategies and systems that allow us to manage the risk.*'

The interviewed respondents agree about the close similarity between risk-taking and innovativeness. However, they believed that firms must evaluate their proposed strategies against the available firm resources if such risk is worth taking.

On risk-taking, respondents from the construction and manufacturing sectors reveal that they seldom allow their employees, especially the recruit to take the risk. They are more concerned about their experience and the available resources, which can be expensive to acquire and replace.

Meanwhile, the education industry respondents reveal that risk-taking is part of their culture because performance in their industry is subjective. As such, they gave liberty to their employees to achieve the pre-set objectives.

The interviewee from the transport service state:

> *'You are not talking about risks if you take precautionary steps. Risk-taking involves taking bold steps by committing to risky projects. Some firms make efforts to develop internal systems that mitigate risks. This is not entrepreneurial behaviour at all.'*

A participant from the real estate sector shared a similar view to the above by saying that:

> *'in this economic situation of Nigeria, not taking risk is the biggest risk ever.'*

When probed about the influence of risk-taking on the performance of the firms, he emphasised that:

> '*risk-taking influenced performance, in his opinion, the strategic response to the observed risks dictates its outcome which can be positive or negative if there is a misconception on the nature and the type of the risk involved.*'

On this note, the researcher understood the impact of strategic decisions on risk-taking behaviour among the SMEs in the study context. The outcome of the risk indicates if it positively influences a firm's performance. According to him,

> '*we cannot predetermine the success of our attitude towards the observed risks because of the unstable environment we are operating. As you know, anything could happen at any time; especially, the government can bring out policies that might hinder or enhance our devised strategies towards risk-taking, but we often hope that it positively influences the performance.*'

Overall, the participants agreed that risk-taking was an essential measure of EO; nevertheless, they could not be specific on the strategies needed in risk-taking behaviour because of the uncertainty in the market occurring from several government policies. In addition, the participants could not ascertain before taking the risk if it would have a positive or negative influence on firm performance. However, they claim that before deciding either to take the risk or not, they strategically deliberate and weigh

their options on responding to each risk they faced. This finding is reflected in the quantitative findings of this study, where risk-taking was found to have a significant influence on SMEs' performance.

5.1.4   Competitive Aggressiveness

The participants' perspectives were that the competitive aggressiveness a firm brings to the market structure within which the firm operates is essential in determining how much a firm can challenge competitors. One of the participants believed that competitive aggressiveness is a firm's posture and that the firm's management must decide on the capabilities required to beat the competition.

The participant from the manufacturing sector opined that:

> *'Competitive aggressiveness to a large extent depends on the management of a firm and which should be able to give the confidence to employees that they can engage intensely with the competition.'*

The participant from the food service commented that:

> *'You might want to challenge anyone in the market, including the market leaders; but the question is, do you have the capability to do so?'*

However, one of the participants provided a different opinion. He states that one does not necessarily need to compete to become an entrepreneur. Some firms enjoy their own space by focusing on the customers rather than competitors. However, another

participant disagreed with this opinion, arguing that competitive aggressiveness makes one a leader in the market and that employees must also be competitive by striking for market leadership. When probed further, the participant mentioned some criteria upon which competitive aggressiveness is based.

The participant from the wholesale and retail sector noted:

> *'In our industry, the basis for competition is price, and this largely depends on costs. If we are unable to reduce our costs, we cannot pass this as a benefit to customers to improve customer loyalty and market share. However, reducing costs is not easy, especially if you want to be a cost leader in the market. It requires strong collaboration with stakeholders, particularly suppliers and retailers.*

Another interviewee commented: *'we work closely with our suppliers. They not only provide us with our raw material on time and at lower cost, but also we share the same strategic goals.'* Overall, competitive aggressiveness was a relevant and valid measure of EO, and the participants acknowledged that strategies, capabilities, and market position were the determining factors, therefore, supporting the findings in the quantitative research.

5.1.5 Autonomy

The participants were of the one view that autonomy is important for EO. Innovation, risk-taking, and proactiveness depend on the level of freedom given to employees to make decisions on behalf of the firm. The interviewees' claim asserts the findings from the study of Theurer et al., (2018) and Stull (2004), claiming that employees' autonomy

significantly predicts EO. Despite the unison on autonomy, respondents from the manufacturing, estate, and transportation clearly state that giving autonomy to employees is a great risk for the organisation because of undue advantage because of economic instability and limited resources.

The interviewee from the retailer commented:

> *'Entrepreneurial activities in an organisation are not only the duties of the management, but they must also come from the employees. We give our employees much freedom to find opportunities, take risks, experiment, and innovate.' This assertion confirms findings from the study of Theureret et al., (2018), where the scholars argue that employees' autonomy enhances their innovation, encourages risk-taking, satisfaction overall performance towards customers' satisfaction and overall firms' performance.*

The respondent from the retailer further stated:

> *'Recently, when one of our employees came up with an idea of involving customers in clothing design, we gave him the freedom to implement his innovative idea. He created a section in the firm dubbed "customer designs" and showcases designs suggested by customers. It went very well with our customers, who appreciate it.'*

However, one of the participants opined that even though giving autonomy to employees might make the firm entrepreneurial, it only works in a few industries. For example, in the banking and finance sector, autonomy is not important in determining the performance of firms (SMEs). Another participant shed more light on this perspective. He stated:

> 'We do give freedom to our employees. However, not all employees enjoy that freedom; new employees need to be guided closely. Employees who have been with us for more than four years are given more freedom because they understand our capabilities and practices.'

Meanwhile, the respondent from the education industry, claimed that: 'although we gave strict rules to our employees to meet the present target, meeting those targets solely depends on them.' Furthermore, he said, they choose to give full autonomy to employees after surge competition arises in the education industry. 'We realised that our employees are closer to the communities they reside in which we planned to serve than us, thus, giving them the autonomy to explore such market yielded more profits."

When asked about wasting of resources, the respondent from the education narrates:

> "They, 'the employees' are the resources. Limiting their abilities translates to wasting the resources you have, which leads to dissatisfaction and turnover intention."

Overall, the participants agreed that autonomy was an important measure of EO. However, its influence on firms' performance is subjective to several factors not limited to the nature of the industry and the firms' resources employees' empowerment and support.

5.1.6 Entrepreneurs' attributes

The participants agreed that age, gender, experience, and education were key factors determining entrepreneurial behaviours. The observed response from the interviewees' respondents corresponds to the findings by Arend (2014), Coleman (2016), and Kozubíková et al., (2016), who argue the significant importance of entrepreneurs' attributes in enhancing SMEs' performance.

5.1.1.6 Age

The participants agreed that age was an essential demographic factor of EO in SMEs in their opinion, they agree that the older an entrepreneur gets, the more he/she felt the responsibility to be autonomous; likewise, they believed that age has a significant relationship with risk-taking abilities and experience that predicts SMEs' performance (Arend, 2014; Coleman, 2016; Kozubíková et al., 2016).

Meanwhile, the respondents from manufacturing and construction believed that age could be decisive.

Respondents from the construction industry state that:

> *"I believed age does not really matter when you are an*
> *entrepreneur. What matters most is the age one spent in this*
> *business of a thing. Even if you are an old man and you are*

> *young in the entrepreneurial field, the decision will be 'immature,' he concluded."*

Similarly, participants from the manufacturing industry believed age have a significant influence on SMEs' performance. In his response, he gave examples of those actively engaged in the industry as young adults within the age group of 25. He further states that:

> *"those young generations have some unique skills to get things done than 'we' refers to himself the older generations. He further states that the younger generations are technology savvy; thus, they explore and grab the latest trend and designs easily, introducing them to the market.*

> *"Furthermore, he claims that "although the younger generations seem to be lazy; nevertheless, they work smartly to create design and prototype. Despite their advantages, he narrated those older entrepreneurs are the best choice in the market."*

A wholesale/retail sector participant agreed that the knowledge acquired through the entrepreneur's age matters rather than age. However, a different view from a participant from the accommodation and food service sector was that the EO of the individual declines as age increases.

According to the participant from the foodservice industry,

> *'there is less chance to become an entrepreneur as age increases; however, age tends to influence firm performance positively if and only if you are aged in the business. This is because you had been familiar with the tricks.'*

Whereas the participant from the education industry relates;

> *"From my experience, young people are vibrant when they decide to be engaged in entrepreneurial activities. However, how many of them are willing to take the risk? If they want, they are easily swept off track by peer pressure and the urge to become a leader in a short time. Hence, most of these young entrepreneurs are not mentally mature to run entrepreneurial firms. As such, when they are met with failure, they lose interest in entrepreneurial activities. With this, there are many unemployed youths in the society."*

As evident from the interviewed responses, there is clear evidence that age is a significant factor that predicts SMEs' performance. The findings in this regard connote the quantitative findings and affirm the findings from the studies of Arend (2014), Coleman (2016), and Kozubíková et al. (2016), concluding a significant relationship between age and SMEs' performance.

5.1.1.7 Gender

Similar to the respondents' view on the relationship between age and SMEs' performance, the respondent has a similar notion on the relationship between gender

and SMEs' performance. They unanimously believed that gender significantly predicts SMEs' performance. However, they have differing opinions of which gender, either male or female, significantly enhances SMEs' performance.

According to the respondents from the construction industry, the significant effect of gender emphasising on the male gender is eminent in enhancing SMEs' performance. On his account. He states that

"male is known for their dominance in any industry they operate, and if one looks at the entrepreneurial space in the country (Nigeria), and on the global scale, most of the entrepreneurs are of the male gender. He further narrates that the male gender is the breadwinner for the family; hence, they have to do everything necessary to bring food to the table.

Whereas the respondents from the retail, foodservice and education significantly impact gender in enhancing SMEs' performance. However, they are indifferent to who performs better between male and female entrepreneurs.

Respondents from the food services pointed to the fact that he is a male respondent yet acknowledged the importance of female entrepreneurs. In his statements, he said,

> *"look around; both male and female owners are doing well in this foodservice sector (pointing to restaurants around the interview's environment). He further relates those male and female entrepreneurs' main decisive factor lies in their*

interests, commitments, and entrepreneurial path. We see some

female entrepreneurs who become an entrepreneur out of

family necessity and are doing well. Likewise, unemployed

family men are making it in the market. As such, I would not

say that males entrepreneurs perform better than females or

vice-versa.

From the interviewers' responses, it is established that gender significantly predicts SMEs' performance. However, this is based on the type of industry in the gender operates. As evidenced from the interviewees' responses, male entrepreneurs performed better in the manufacturing and construction industry. Contrarily, female entrepreneurs outperform their male counterparts in the service industry, specifically in education, retail and wholesale, and food processing.

5.1.1.8 Education Level

The participants agreed that education level was an important determinant of EO. The unison in the interviewees' response confirms to the findings from scholars not limited to Emmanuel (2017), Karadag (2017), and Rodríguez-Gutiérrez et al., (2015), who argues the significant influence of entrepreneurial educational level of SMES' performance and market wellbeing. Studies by Emmanuel (2017), Karadag (2017), and Rodríguez-Gutiérrez et al. (2015) conclude that entrepreneurs with high education levels have the capacities and skills to identify, analyse and exploit market opportunities even before they make any logical sense.

The participant from the real estate company argued that education increases the chances of success for the entrepreneur. He explained further:

> *"entrepreneurs who have received education in their relevant fields tend to be more successful than those without education."*

However, from the accommodation and food service sector, another participant claimed that being successful as an entrepreneur is a function of education and the right attitude of the individual. On their account, they narrate and the researcher quote:

> *"in my opinion, I do not think education level is a factor that allows you to identify the available market opportunities because you will not be taught that in your various institution."*

The narratives from the respondents from the accommodation and food service sector tallies with Adelaja and Minai's (2018) findings and Olorundare and Kayode (2014), who claimed a discrepancy between the education taught in class and that which is needed in the society.

Whereas the participant from the education sector pointed that entrepreneurs can study the factors that lead to failures in entrepreneurship and reduce the bad influences on SMEs' performances. The participant how emphasised that individuals with an education show a strong affinity for entrepreneurial behaviour. The explained further:

> '*I found that entrepreneurship graduate students showed stronger intentions to start a business. However, the performance of the*

business depends on their individual attitudes, but these attitudes are greatly influenced by education (Respondent from the education industry).

Overall, the participants agreed that education level is an important factor influencing individuals' EO and that the attitudes of individual entrepreneurs greatly determine its impact on the performance of SMEs. Moreover, education provides entrepreneurs with the right attitude to business. However, the respondents doubt the relevance of the taught education and that which is required for SMEs' performance.

5.1.1.9 Experience

The respondents believed entrepreneurs' experience is an essential factor that precedes EO that translates to performance. The response in this regard confirms findings from Omerzel and Antončič (2008) and Swierczek and Thai (2003), arguing that experience serves as a psychological factor that motivates entrepreneurial behaviour and SMEs' performance.

For example, the participants from the wholesale/retail sector revealed their experience that:

'*My experience as an entrepreneur enhances my resource acquisition ability, which enables me to explore new opportunities in this uncertain dynamic environment timely, resulting in my business performing better in the future.*'

Supporting this is the view of the respondents from the manufacturing industry commenting that:

> *'experience allows the entrepreneur to gather market intelligence by establishing social networks with the customers, suppliers, and developers, thereby providing better performance for the firm.'*

However, the respondents are sceptical about any direct relationship between individual entrepreneur experience and SMEs performance.

For example, the respondents from the food service industry reveal that:

> *"Often, it is difficult for entrepreneurs to use previous experience to judge the next move, especially when you are unsure how risky the opportunities are. He further relates that instead of relying solely on experience, which might differ, it is better to guide the experience with intuition.*

The respondents' perceptions on the relationship between entrepreneurs' experience and SMEs' performance tallies with the conclusions from the studies of Poon et al., (2006) and Schindehutte et al., (2008). They conclude a no relationship between self-efficacy (experience) on SMEs' performance.

Also, the respondents from the estate sector relate that:

"Sometimes, your experience has an estate developer failed by mere speculation of the properties you are handling. Giving several examples of his ordeal in doing business, he recounted an instance where he overestimates the worth of a housing project simply because it was located in the Government Reserved Area (GRA) and the previous owner is a public figure. Upon reestimating the properties, my team and I have to conclude that our judgment was wrong based on our experience. We end up discovering that situation sometimes must be taken into consideration irrespective of our experience.'

In summary, entrepreneurs' experience indeed plays a significant role in predicting EO. This finding confirms the quantitative findings in the previous chapter. Also, the findings in this regard affirm the findings from earlier scholars (Omerzel & Antončič, 2008; Swierczek &Thai, 2003). Despite establishing the significant relationship between entrepreneurs' experience and EO, the respondents' interview reveals that the relationship is not linear. From their response, factors not limited to entrepreneurial attitude, environment, and contexts play a vital role on the relationship between entrepreneurs' experience and SMEs' performance, affirming findings from the study of Poon et al. (2006) and Schindehutte et al. (2008).

5.1.1.10 Access to Finance

The respondents agree on the significant tole of access to finance in ensuring SMEs' performance. The importance of finance accessibility was established in previous

literature (Angela, 2011; Gamage, 2011), concluding that without its access, the survival of such a firm is highly doubted.

The respondents from manufacturing and construction firmly assert the importance of financial accessibility, affirming findings not limited to Adelaja et al. (2018), Ibrahim and Shariff (2016), and Sibanda et al., (2018). The participants stated that financial support had been lacking in the Nigerian SMEs industry and that the little available finance was being accessed at a very high rate.

The participant from the construction industry opined that:

> *'Financial support has been the major factor responsible for our failure in Nigeria. It hinders our ability to produce efficiently. Most of us face the perennial problem of inadequate finance, such as access to finance at relatively cheap cost'.*

A participant from the education sector also pointed that access to finance enhanced through either personal finance or external finance sources is critical to support the entrepreneurial engagement strategies (EO) of entrepreneurs and the performance of SMEs. He commented that:

> *''For both our firms and staff to own and develop business activities, adequate funds must be readily available for us… In particular, our risk-taking ability is thwarted by a lack of funds with which to take commercial and market opportunities. With several*

negative side effects of using debt and the shortage of financial

products generally, autonomy and risk-taking are compromised''.

Meanwhile, a participant from the construction and food service had different views. Although they concur top the significant importance of access to finance yet, they said the crucial difference between entrepreneurs and a businessperson is the ability to get things done even when there is no or limited financial accessibility

Respondents from the construction industry illustrated:

'As an entrepreneur in this industry, yes, money does everything; yet, you can get things done without having a 'kobo' (financial unit same as cent) ... I started my firm with absolute zero kobo. Nevertheless, I have a strong network where I have access to properties waiting to be listed in the market... I also, through my network get my first customer and had a successful transaction with... during this time, my business cards were printed on credit. To clear your doubt, I have no personal office.

However, as time went on, I started having more customers and getting the needed cash to get my personal space, advertise my firm, and do many other things I needed to do.'

Overall, the participants agreed that financial barriers, difficulties accessing bank financing, and legal issues negatively influence SMEs' performance directly or indirectly through EO dimensions. At the same time, there are indications that 'true'

entrepreneurs should not be too concerned about financial accessibility confirming the findings from the study of Adelaja et al. (2018), where they conclude the importance of access to finance and ways out for entrepreneurs in case of inaccessibility using effectuation approach.

5.1.1.11 *Environmental turbulence*

In unison, the respondents believed that environmental turbulence is an important factor in the entrepreneurial ecosystem, which influences the performance of SMEs. The agreement in this connotes the findings of Chong et al., (2016) and Kuivalainen et al., (2004), arguing that response to the turbulence in the environment caused by rapid innovation, policies, consumer preference is a determinant of SMEs' performance.

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The participants agreed that firms with suitable orientations gain sustainable viability during predictable environmental turbulence. However, firms with a greater EO will experience poor performance in an unstable business environment.

The participant from the wholesale/retail sector responded:

> '*We can perform well in our business because of our ability to pre-empt and take opportunities of the market when the situation of the business environment is stable. However, the performance of our businesses drops when the situation of the environment becomes unstable because it becomes difficult for us to pre-empt what next is going to happen in the business.*'

The participants further agreed that the EO dimensions of the entrepreneurs (innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy) are significant during environmental turbulence.

The respondent from the manufacturing sector supported this assertion by explaining:

> '*Many of us who import our raw materials are risk-takers when importing our raw materials. Although the capital to run this exercise is limited due to high-interest rates, unstable government policies, and customers' concern for a greener environment. The trends are unpredictable in our market. Thus, sometimes we discern the markets by intuition when we order the needed raw materials.*'

Overall, the participants agreed that environmental turbulence was an essential factor in the entrepreneurial ecosystem and influenced the relationship between EO and SMEs' performance.

5.1.1.12   National Culture

The participants agreed that culture is a critical driving factor for entrepreneurship because it shapes and determines all other factors within the ecosystem. The participants' agreement corresponds to that idea presented by (George & Zahra, 2002; Liñán & Fernandez-Serrano, 2014).

The discussion with the participants focused on rationality, curiosity, practicality, disposition to mental work, intellectualism, inquisitiveness, motivation to learn, and

knowledge acquisition as the form of culture that affects entrepreneurship rather than religion, ethnicity, and tribal groups. In unison, the respondents agreed that societies, where the above characteristics are entrenched, are more successful in entrepreneurship tallying with the (Kreiser et al., 2010; Sirmon & Lane, 2004) findings where they argued national culture predicts SMEs' performance. However, one participant doubted if Nigerian culture has a positive influence on SMEs' performance. Response from the participants from the education sector reveals:

> *'...Individuals in these societies are much more inclined to think and act in ways consistent with the motivational and conceptual requirements for effectively adopting a modern industrial ethos, to become entrepreneurially oriented...''*

He further cited the example of societies such as European, Chinese, and West Asian ones and compared these with Nigeria. He stated:

'Interestingly, the above categorisation of societies mirrors the entrepreneurially inclined pattern of the world. Quite clearly, Nigeria is deficient in all the cognitive values noted above, and, additionally, Nigeria's cultural values, social structures, modes of behaviour, and institutional arrangements have also not adapted to the threshold that engendered the Industrial Revolution, which is the first techno-economic paradigm.'

Meanwhile, respondent from the manufacturing sector believed it was impossible to embed entrepreneurial culture in Nigeria because of feudalism. He asserted that:

'another related area of concern is Nigeria's diverse tribal focus and the flowering of feudalism. Nevertheless, feudalism is a relic of the pre-Industrial Revolution European society, which gave way to the emergence of modern industry. Unfortunately for Nigeria, the state has even legitimised feudalism, thereby making it impossible to embed the enterprise culture.'

Generally, the participants agreed that national culture is a crucial element of the entrepreneurial ecosystem, influencing the relationship between EO and SMEs' performance. However, the participants revealed that cultural diversity in the Nigerian business ecosystem has a differing outcome on the relationship between EO and SMEs' performance.

CHAPTER SIX

DISCUSSION AND CONCLUSION

6.1   Introduction

The sixth chapter of this research presents the discussions and the conclusions of the qualitative and the quantitative findings. The research objectives were to examine the relationship between EO and SMEs' performance. To achieve the pre-set objective, the research starts with the background, followed by the problem statement, research questions, and research scope. All these are the subsections in chapter one.

The research review relevant literature on the selected exogenous, moderating, mediating, and endogenous variables as presented in chapter two. This chapter enables the researcher to identify five dimensions of EO: innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy. The literature review also revealed that attributes such as age, gender, educational level, and experience could influence entrepreneurs' EO. A further review identified access to finance, national culture, and environmental turbulence as factors within the entrepreneurial ecosystem where SMEs operate, affecting the relationship between EO and SMEs' performance.

This relationship was investigated using EO as an independent variable, SMEs' performance as a dependent variable, and entrepreneurial ecosystem as the moderator variable on the relationship. Furthermore, to achieve a better and in-depth understanding of the influence of EO dimensions on SMEs' performance in Nigeria. Further in this chapter, research hypotheses were formulated based on the directions and findings from the reviewed literature. Also, the researcher underpins the research work with a befitting theory in this chapter two.

Moving to chapter three, the researcher explicitly explains the methodologies and the rationale behind choosing those research methods. On the other hand, chapters four and five cantered on analysing the quantitative and qualitative data gathered using a predesigned questionnaire and interview developed in chapter three. Meanwhile, chapter six, the current chapter discusses and concludes the research findings.

6.1 Discussion of the Findings

This section discusses the research hypotheses and objectives of the study, considering the results of the data analysis. The discussion is presented in different parts based on the hypothesised relationships in this study.

6.1.1 Effect of entrepreneurial orientation on SMEs' performance

The first objective of this study was to investigate the effect of EO on SMEs' performance in Nigeria. EO in this study is defined as the practices, processes, behaviours, and decision-making styles through which a firm enters a new or existing market with new or existing products or services. Five EO dimensions - innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy – were explicitly investigated in pursuing this objective. Findings from the structural equation modelling indicate that innovativeness, proactiveness, risk-taking, and competitive aggressiveness significantly impact SMEs' performance, while autonomy did not significantly impact SNEs' performance. The findings in these regard support findings from the studies (Al-Swidi & Hossain, 2012; Kosa et al., 2018; Leonidas et al., 2011; Linton, 2016), concluding the significant relationship between attributes of EO and SMEs' performance.

On the other hand, the findings failed to conform to scholars who believed there is no significant EO on SMEs' performance (Imran et al., 2020; Wahyuni & Sara, 2020), claiming that EO has no significant relationship with SME's performance. However, the findings in this research reveal that the samples surveyed did not believe entrepreneurship autonomy significantly affected SMEs' performance. The finding in this regard was in line with arguments from a few scholars, Olowofeso and Ale (2019), claiming that the urge to be independent has no significant impact on SMEs' performance.

Alternatively, the findings contradict Kosa et al. (2011), who claim entrepreneurial autonomy predicts SMEs performance. The good reason for the non-significant relationship between entrepreneurial autonomy and SMEs' performance might be because of the context of the study, that is, Nigeria. The study context is fashioned in a 'unique' way that before any firm can succeed, such a firm must have a strong network with several significant market players and stakeholders. However, these two factors (context and network) were beyond the research scope. Thus, they were identified as part of the study's limitations and were recommended for future studies.

6.1.1.1 Discussion on the relationship between innovativeness on SMEs' performance

Hypothesis H_{1a} posited that innovativeness had a positives effect on SMEs' performance in Nigeria. The findings in this regard support the proposed hypothesis. Therefore, the observed result affirms the arguments of earlier scholars (Al-Swidi & Hossain, 2012; Kosa et al., 2011; Leonidas et al., 2011; Ruiz-Jiménez & del Mar

Fuentes-Fuentes, 2016), arguing a significant relationship between innovativeness and SMEs' performance. Further insights into the relationship between entrepreneurial innovativeness and SMEs' performance in this study shows that the relationship between the two constructs is weak; nevertheless, the relationship is positive. Thus, the result implies that the surveyed respondents believed that innovating their products and services enhances SMEs' performance in the study context; however, the weak relationship signalled doubts (caution) on the level of innovativeness they need to implement so that their SMEs' performances can be enhanced not counterproductive.

Correspondingly, the findings from the structural model were supported by that of the interview conducted by the researcher where the respondents verbally confirm the importance of product and service innovativeness in enhancing their firm's performance. The respondents from the interview note that to enhance their competitiveness, they tweak their product line, packaging, and branding to attract more customers leading to financial and non-financial performance.

This result corroborates the findings of Al-Swidi and Hossain (2012), Zehir et al. (2015), and Falahat et al. (2018), who found that innovativeness was an important component that directly influences the performance of SMEs. Also, the findings in this regard correspond to the findings of Agyapong et al., (2017), where the authors affirmed that individual's innovative capability significantly influence SMEs' performance.

6.1.1.2 Discussion of the Influence of Proactiveness on SMEs' performance

Hypothesis H$_{1b}$ posited that proactiveness has a significant positive effect on SMEs' performance in Nigeria. This finding in this regard established the formulated hypothesis. Thus, the result implies that an increase in entrepreneur proactiveness is likely to increase SMEs' performance in Nigeria, but its impact does not seem strong within the surveyed SME sample.

The result demonstrates that surveyed SME owners/managers prefer to act, rather than react, to changes occurring within the business environment. This result corroborates those postulated by RBV, which identify firms that create strategic resources that are difficult to imitate or substitute by competitors. These firms can achieve competitive advantages in the market and so perform better. The findings between proactiveness and SMEs' performance in this study was found to reckon with findings from the earlier literature (Hughes & Morgan, 2007; Rauch et al., 2009; Sascha et al., 2012; Zahir et al., 2015) positing that successful firms are those who seek for opportunities and swiftly respond to market demands before their competitors do.

Consistently, findings from the respondents' interviews affirmed the findings observed from the SEM. The interview findings on proactiveness reveal that the respondents claim to monitor the market trends and opportunities to stay afloat by responding swiftly to any changes in market forces before their competitors do. Therefore, their proactive activities conform to the conclusion of Adefulu et al., (2018) and Brownhilder et al., (2017), claiming that entrepreneurial anticipation and initiative are taken, capitalising on first-mover advantage enhances the chances of creating new market opportunities or participating in the emerging ones.

This result corroborates findings provided by Kiprotich and Komen (2017), who indicate that proactiveness positively affects SMEs' performance and development, as it makes them readier to take advantage of market opportunities translate to performance.

6.1.1.3 Discussion of the influence of risk-taking on SMEs' performance

This research proposes a significant relationship between risk-taking and SMEs' performance. The findings agree with the formulated hypothesis, stating that the respondents surveyed in the research context agree that their risk-taking behaviour significantly influences their firms' performance. The findings in this sense connote that of Kosa et al. (2018), Kraus et al. (2011), and Lumpkin and Dess (2001), concluding a significant positive relationship between risk-taking behaviour calculated risk) and SMEs' performance. However, the result contradicts Roux & Bengesi (2014) finding, who found a significant negative effect of risk-taking on SMEs' performance and explained that the firm might not likely perform in a situation characterised by high risks. Similarly, the definition of entrepreneur reveals risk-taking ability as a significant factor that distinguishes an entrepreneur from a businessperson. Given this, risk taken abilities of the surveyed respondents enhance their SMEs performance compared to their competitors. In a nutshell, the findings imply that the higher the entrepreneurial ability to take risks, the higher the chances of their SMEs to perform.

6.1.1.4 Discussion of the effect of competitive aggressiveness on SMEs' performance

Competitive aggressiveness in this research is proposed to influence SMEs' performance (H_{1d}) significantly. As expected, the analysis result affirmed the proposition that, indeed, the survey respondents believed that competitive

aggressiveness enhances their SMEs' performance. The observed result tallies with prior literary evidence in this regard (Callaghan, 2009; Dess & Lumpkin, 2005; Shan et al., 2016) where all authors conclude a significant effect of competitive aggressiveness on SMEs' performance. Competitive aggressiveness involves dynamic capabilities in exploiting market opportunities not limited to switching between low-cost strategies and offering premium (value-added services) on goods and services provided (Grimm et al., 2006; Kim & Mauborgne, 1999). To implement this approach effectively and efficiently, RBV theory notes that such firms must be endowed with the needed resources 'tangible and intangible resources,' can be achieved via a forward or backward integration) (Agyapong & Attram, 2019; Nunooandoh & Darfor 2015; Wright & Ketchen, 2001).

6.1.1.5 Discussion of the effect of autonomy on SMEs' performance

Hypothesis H_{1e} in this research states that entrepreneurial autonomy has a significant influence on SMEs' performance. Country to the proposed hypothesis, the findings show a non-significant influence among the surveyed respondents. The result observed in this sense failed to conform to findings from earlier scholars (Kusumawardhani et al., 2012; Pratono et al., 2018) where they believed that the freedom of an entrepreneur to decide and independently act on his own intuition has a significant influence on such entrepreneur's firm performance. However, agree with Gelderen (2016) findings stating that an entrepreneur would not be able to decide without considering other market players at some points.

Among various reasons observed for the observed negative non-significant effect of entrepreneurial autonomy on SMEs' performance could be the respondents' perception

of the importance of networks, customers' demand, resource availability, and market demand in the study context 'environment' (Cenamor et al., 2019; Fatima, & Bilal, 2019; Kusumawardhani et al., 2009). The result reveals that the respondents do not believe in entrepreneurial autonomy; that is, an entrepreneurial firm could not perform in isolation, confirming Gelderen (2016) study and Olowofeso and Ale (2019) conducted in a related environment.

Perhaps, an adequate for the observed non-significant and negative relationship observed between entrepreneurial autonomy and SMEs' performance could be explained by the entrepreneurial environment and their perception of the importance of entrepreneurial networking. The study context, Nigeria is a developing economy where people get things done mainly on whom you know and not what you have in stock to offer (Apulu & Latham, 2011; Etuk, Etuk & Michael, 2014)

Another reason for the non-significant negative result might be the instability of the business environment because of weak capital market institutions, high level of corruption, economic instability, and the poor regulation and protection of property rights (Van Gelderen et al., 2019) that characterises the Nigerian landscape influence the perception of the surveyed respondents to feel that autonomy will inhibit SMEs' performance.

Albeit, investigating the entrepreneurial environment and network is beyond the scope of this research. Hence, the researcher could not explicitly ascertain the claim empirically. Thus, entrepreneurial environment and networks are identified as potential

factors that can as well influence SMEs' performance – given this; these two factors are limitations of this study.

6.1.2   Discussion of the influence of entrepreneurs' attributes on EO

Entrepreneurs' attributes such as age, gender, education, concern, and experience have been examined in this study regarding their impact on SMEs' EO. Education refers to the short or long-term training or programmes tailored towards the teaching of basic entrepreneurial skills and practice to improve competencies and the intention of becoming an entrepreneur or business owner (Torikka, 2013). Previous studies have identified the tendency of education to influence individuals' EO. This study formulated and examined five hypotheses addressing the relationship between education EO dimensions, accepting only one of them: education has a significant positive influence on entrepreneurs' innovativeness. The findings did not show any significant effect of education on proactiveness, risk-taking, competitive aggressiveness, and entrepreneurial autonomy, highlighting a negative effect on education on entrepreneurial autonomy.

The significant result of education on innovativeness implies that the more educated an entrepreneur is, the more they learn how to identify entrepreneurial and market opportunities and promptly exploit the identified opportunities (Kuratko et al., 2015; Lindquist et al., 2015; Polas et al., 2019). An educated entrepreneur can effectively integrate existing resources, interpret situations more accurately, and gradually become an innovative business idea. The findings in this sense correspond to the findings from Dickson et al. (2008), Martin et al. (2013), and Ganaie et al. (2011), concluding a significant relationship between education level and SMEs' performance. This result

supports the findings of Polas et al. (2019), and Wei et al. (2019) identified education as an important way for entrepreneurs to acquire resources and enhance innovativeness.

The results shown between education and proactiveness, risk-taking, and autonomy indicate education as not an essential antecedent to proactiveness, risk-taking, competitive aggressiveness, and autonomy. One plausible reason for this result is the poor economy and high level of unemployment, and a societal appreciation of wealth, which have made many disillusioned about the value of education (Bello-Osagie et al., 2019; Meagher, 2011; Ogun, 2010). The general, broader public perception is that tertiary education in the research context is a fraud because most successful business owners in Nigeria started their firms without any formal and prior education (Bello-Osagie et al., 2019; Bollag, 2004). This result supports the findings of Chow (2006), Rachman et al., (2020), concluding the non-significant effect of education as a factor that directly affects EO; nevertheless, the introduction of self-efficacy mediates such relationship.

Entrepreneurial experience is the experience an individual or firm obtains from previous business ventures (Genty et al., 2016). The literature review identified the entrepreneur's experience as a potential factor affecting EO. Based on this, five research hypotheses were formed between an entrepreneur's experience and the five EO dimensions; results gathered from hypothesis testing identified a significant positive effect of entrepreneurial experience on innovativeness, proactiveness, competitive aggressiveness, and entrepreneurial autonomy. However, the analysis did not show a significant effect of experience on risk-taking.

These findings imply that an increase in entrepreneurial experience can improve innovativeness, proactiveness, competitive aggressiveness, and an entrepreneur's autonomy. Entrepreneurial experience is a way of translating entrepreneurial knowledge into skills, and with that experience, people are aware of the positive and negative consequences of their actions (Boyd & Vozikis, 1994). The experience of an entrepreneur plays a role in encouraging innovativeness, competitive aggressiveness, and autonomy (Rauch & Frese, 2000). This result corroborates the findings of Park and Sung (2016), Utomo et al., (2019), and Tran & Korflesch (2017), supporting how entrepreneurial experience contribute to the success of prospective entrepreneurs.

The non-significant effect of entrepreneurial experience on risk-taking shows that experience is not a determinant of an entrepreneur's ability to take risks. The plausible reasons for the non-significant effect of experience on risk-taking might be down to the financial hurdles and improper business planning by SMEs (Okoye, 2013). The entrepreneur must be ready for adventurism, albeit while being guided and calculated. However, they often shy away from uncalculated risks in an unstable and unfriendly market environment (Okoye, 2013).

This study posited that entrepreneurs' gender has a significant impact on SMEs' EO, although none of the five hypotheses developed and tested in support of this predicament was accepted. This finding is aligned with those provided by Allen et al. (1999), Jamali (2009), and Marin et al. (2019), who indicate women as more affected by social and environmental benefits, primarily associated with their traditional societal roles as caretakers for homes, children, and other family members, while men were

identified with the economic objectives assigned, for example, with their traditional *breadwinner* roles.

However, this result contradicts Gupta et al. (2009) and Shinnar et al. (2012), who stated that gender plays a vital role in explaining entrepreneurial intentions. For the authors, women are more supportive whereas men are connected more with managerial qualities such as aggressiveness, innovativeness, proactiveness, autonomy, and risk-taking, affecting their entrepreneurial abilities.

This study posited that entrepreneurs' age has a significant impact on SMEs' EO. Results gathered from hypothesis testing indicate a significant negative influence of age on entrepreneurial autonomy, while entrepreneurial autonomy did not show any significant impact on any of the other four EO dimensions.

The significant negative influence of age on entrepreneurial autonomy identifies the age attribute as a good predictor for this EO dimension; a negative coefficient indicates that the younger the age of the entrepreneur, the higher the level of autonomy. This finding supports Afutu-Kotey et al., (2017), arguing that young entrepreneurs' determination for independence is high based on their subjective belief of business innovativeness, freedom to make a business decision and freedom to respond to situational context or market forces as presented by Gelderen (2016). Thus, the findings imply that young people are willing to adapt to market demand by willingly isolating themselves if there is a need to do so.

The analysis did not find any significant relationship between age and innovativeness, proactiveness, competitive aggressiveness, and risk-taking. One plausible factor for these outcomes can be attributed to the demographic distribution of surveyed respondents: most of them are young entrepreneurs (19 – 39), while only 7.1% of the respondents are older entrepreneurs (50 years and above). The result observed in this study conform to Ruis and Scholman (2012) investigate the relationship between the age of the entrepreneur and EO did not show a clear sign of an age effect. In contrast, the research finding differs from those reported by earlier scholars in developed countries (Rotefoss & Kolvereid, 2005; Weber & Schaper, 2004), where their findings argue a significant relationship between older entrepreneurs and the dimensions of EO. Given this, the status of a country in terms of development and the presence of entrepreneurial supports might be among the few reasons for the observed discrepancies.

6.1.3 Discussion of the mediating effect of entrepreneurial orientation between entrepreneur demographic characteristics and SMEs' performance

This study posited that the five identified EO dimensions mediate between education level and SMEs' performance, testing hypotheses to verify this predicament. The hypotheses testing revealed that innovativeness, proactiveness, and risk-taking significantly mediate the relationship between education level and SMEs' performance, while no significant mediating effect was found for competitive aggressiveness and autonomy.

The mediation pathway of innovativeness between levels of education and SMEs' performance presents the importance of product and service innovation in enhancing SMEs' performance irrespective of their education level. The findings in this sense support earlier contributions to the SME literature addressing the impact of innovativeness on SMEs' performance (Kalimuenzer & Scholl-Grissemann, 2017; Umar et al., 2018), stating an indirect relationship between entrepreneurial demographic characteristics and SMEs' performance; notwithstanding this indirect relationship is mediated by EO.

Likewise, the study context presents a mediating role of entrepreneurial proactiveness and risk-taking on the relationship between entrepreneurial education and SMEs' performance. This finding is in line with SMEs' performance (Bature et al., 2018; Kulathunga et al., 2019; Rua et al., 2018), who concludes a significant mediating effect of entrepreneurial proactiveness and risk-taking on the relationship between entrepreneurial education and SMEs' performance. Therefore, the findings imply that entrepreneurs' initiative to be proactive bridged the gap in performance irrespective of their education level.

Contrarily, the result failed to establish the mediating role of entrepreneurial aggressiveness and autonomy on the relationship between education level and SME performance. The findings in this regard agree with that of Li et al., (2009), Okangi and Letmathe (2015), and Hughes and Morgan (2007), who conclude a no significant mediating effect of entrepreneurial aggressiveness and autonomy on the relationship between education level and SME performance. Therefore, the findings imply that being proactive and aggressive in entrepreneurial engagement has nothing to do with

entrepreneur education level; instead, the significant relationship observed on the direct relationship between aggressiveness, and SMEs performance is an individual psychological factor exhibited based on the market forces and demands (Escribá-Esteve et al., 2009; Lechner & Gudmundsson, 2014).

In contrast, the non-significant mediating role of autonomy between education level and SMES' performance and the non-significant direct relationship between entrepreneurial autonomy and SMEs' performance in the research context affirmed the significant effect of networking ties among the surveyed respondents. Therefore, the findings imply that either an entrepreneur is educated or not, such an entrepreneurial firm might not perform if they decided to be autonomous. Instead, their performance solely depends on their networks.

Further results failed to establish a significant mediating role of aggressiveness and autonomy on the relationship between education and SMEs performance. This result affirmed the findings of Li et al. (2009) and Okangi and Letmathe (2015), whose studies failed to establish a significant impact of competitive aggressiveness on SMEs' performance. This finding indicates that the aggressive strategies employed by the research respondents have no intervening effect on entrepreneur education and their Firms' performance.

Likewise, the non-significant mediating effect of autonomy on the relationship between entrepreneur education and SMEs performance was observed in this study. The findings in this regard tally with the findings from (Baluku et al., 2019), revealing no significant mediating effect of entrepreneurial autonomy on the relationship between education

and performance. Therefore, the findings imply that entrepreneurs' education level does not predict entrepreneurial autonomy. Therefore, it is logical to argue that autonomy has no direct and indirect effect on SMEs' performance in the study context. Nonetheless, the finding from the semi-structured interviews revealed that several SMEs/owners give opportunities to their employees for autonomy. The rationale behind this rational argument lies in McCarthy and Perera (2012) study, who emphasised that the autonomy given by SMEs managers/owners to their employees is restricted to proposing ideas; meanwhile, decision-making solely rests with the owner or manager.

Also, the researcher examines the mediating effect of entrepreneurial experience on the relationship between the dimensions of EO (innovativeness, proactiveness, risk-taking, competitive advantages, and autonomy) on SMEs' performance. The findings reveal that entrepreneur experience mediates the relationship between four dimensions of EO, namely innovativeness, proactiveness, risk-taking, and competitive advantages on SMEs' performance.

The mediating effect of experience on these four dimensions of EO on SME performance among the surveyed samples reveals that prior experience had taught the surveyed entrepreneurs to be aggressive, proactive, rake risk to secure a significant competitive advantage that enhances their performance. The findings in this sense strictly adhere to that of Alvarez-Torres et al. (2019), Bojko (2013), Theriou and Chatzoudes (2015), Ključnikov et al. (2016), and Park et al. (2017), who argue that entrepreneurial experience is a 'strategic teacher' that influences their overall decision to either take or avert risk, be proactive, aggressive in their strategies and effectively and efficiently compete with other competitors.

Contrarily, the findings show no mediating effect of experience on the relationship between autonomy and performance. The findings imply that ability to make an individual decision that enhances SMEs' performance among the investigated samples is not because of the experience they accumulated over the years. Thus, the findings tally with the conclusion from the study of Acs and Virgill (2010), Chrysostome and Arcand (2009), and Ying et al., (2019), remarking that entrepreneurial from developing countries rely heavily on networks for survival. The rationale for the observed result lies in the RBV theory, where resources (tangible and intangible) and external relationships are vital for SMEs' survival and performance (Street & Cameron, 2007; Ying et al., 2019). More reasons for the observation are found in the study of Kusumawardhani et al. (2012) and McCarthy and Perera (2012), noting that employees could have the autonomy to initiate innovative ideas to implement such strictly lies in the SMEs' owners or managers belief.

Also, the study result investigates the significant mediating role of EO dimensions (innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy) on the relationship between gender and SMEs performance. From these five dimensions of EO, it is established in this research context that risk-taking mediate the relationship between gender and SMEs' performance. This implies that the entrepreneur's gender has an indirect influence on SMEs' performance via risk-taking attributes. This finding supports those of Pradana and Bandula (2013), who found that gender influences the risk-taking behaviour of entrepreneurs in Sri Lanka. The researcher indicated that the relationship between gender and entrepreneurial risk behaviour is mediated by risk propensity.

On the other hand, the findings failed to establish a significant mediating role of innovativeness, proactiveness, competitive aggressiveness, and autonomy) on the relationship between gender and SMEs' performance among the surveyed samples. The findings contradict evidence from the studies of Akulawa (2015) and Na and Shin (2019), who believed that SMEs owned by females have a higher rate of innovativeness and gender diversity in SMEs positively influences the propensity of firms to follow an innovative structure. In addition, the non-significant mediation effect of competitive aggressiveness on the pathway between gender and SMEs' performance indicates that competitive aggressiveness does not have an indirect effect between gender and SMEs' performance.

Likewise, the result presents a non-significant mediating effect of autonomy, proactiveness, and competitive aggressiveness on the relationship between gender and SMEs' performance among the surveyed respondents. The result, in this sense, tally with studies such as Johan, Annemarie (2014), Shave and Regain (2016), concluding a non-significant mediating effect of EO's dimension on SMEs performance. The good reason for these non-significant findings is the larger percentage of the respondents with the age group 39 years below; this group of respondents has the highest percentage of entrepreneurial experience with less than five years. Considering these demographics, the non-significant findings can therefore be attributed to the sample characteristics. Nonetheless, the samples surveyed fulfilled the conditions needed to be selected at random.

Environmental turbulence refers to the unpredictable and volatile nature of the events in the environment within which a particular business operates (Ko & Tan, 2012). The literature review revealed a tendency where environmental turbulence moderates the relationship between EO dimensions and SMEs' performance. Five hypotheses were tested to verify this mediating effect. Results indicate a significant moderating effect of environmental turbulence on the relationship between innovativeness and SMEs' performance and between autonomy and SMEs' performance. In contrast, no evidence of a mediating effect of environmental turbulence was found in the relationships between proactiveness, risk-taking, aggressiveness, and SMEs' performance.

Based on these results, it seems that innovativeness and autonomy positively influence SMEs' performance during low environmental turbulence. Individual entrepreneurs or SMEs that are innovative and more autonomous in their decisions are better placed to harness any advantage derived from a situation of high turbulence in the market. This finding confirms those from Pratono and Mahmood (2014), who found that environmental turbulence reverses the relationship between entrepreneurial management and the performance of SMEs in Indonesia.

In contrast, the absence of any moderating effect of environmental turbulence on the relationship proactiveness, risk-taking, and competitive aggressiveness and SMEs' performance seems aligned with the findings reported by other studies (Shehu and Mahmood, 2015; Abd Aziz, 2010; Aziz and Yasin, 2010). Aziz and Yasin (2010) indicate that market turbulence and competitive intensity do not moderate between EO and SMEs' performance. Similarly, Shehu and Mahmood (2015) studied the moderating role of the business environment in the relationship between EO and

business performance among Nigerian SMEs. Focusing on Nigeria SMEs, a possible reason justifying the absence of any significant moderating effect could be due to lack of firms' autonomy in decision making, but unionism networks that sometimes created an unfavourable environment and had forced many SMEs to close, relocate or operate at a reduced level of activity (Shehu & Mahmood, 2015).

Culture relates to beliefs and value systems, religion, social structures, national outlook and psychology, and patterns of behaviour (Hofstede, 2001). The literature review provided in Chapter 2 highlighted the moderating role of national culture between EO dimensions and SMEs' performance, to verify this occurrence, five research hypotheses were developed and tested. Results from testing identify only a significant moderating effect of national culture on the relationship between competitive aggressiveness and SMEs' performance but did not significantly affect the remaining EO dimensions.

The findings also reveal that national culture significantly moderates the relationship between competitive aggressiveness and SMEs' performance. The result, therefore, indicates that national culture plays a significant role in enhancing competition and SMEs' performance among the surveyed samples. This result supports findings gathered from Dissanayaka and Semmasinghe (2016), who point out that the relationship between EO and SME growth is strengthened under a strong national culture.

However, hypotheses testing indicates no influence of national culture on the strength or direction of the relationships between innovativeness, proactiveness, risk-taking, autonomy, and SMEs' performance, respectively. This finding is aligned with Udeozor

(2011), who found that culture does not influence the relationship between proactiveness and SME performance. The findings, in another sense, disagree with Dissanayaka and Semassinghe (2016), Iseberg (2016), Shane and Venkataraman (2000), who claim there is a significant effect of national culture on the relationship between competitive aggressiveness and SMEs' performance. Therefore, the findings suggest that the context of the investigation is a multicultural society with no clear broader line (cultural dynamics). Cultural dynamics of any society cannot be excluded from this inevitable change: the addition of new cultural traits to existing ones or cultural reductionism, resulting from the infusion of a new culture (Wahab et al., 2012). Hence, the respondents could not differentiate which culture influences the relationship between the investigated constructs. The non-significant result might also be because of the corrosion of western education that has infiltrated the Nigerian cultural society. Evidence from the demographic data reveals that most of the respondents are educated, affirming the claim.

Findings on the moderating effect of financial accessibility on the relationship between EO dimensions and SMEs' performance reveals that financial accessibility moderates the relationship between two dimensions of EO and SMEs performance; these dimensions are risk-taking and aggressiveness. The moderation effect of access to finance between competitive aggressiveness and SMEs' performance revealed an improvement in the relationship between competitive proactiveness and aggressiveness on SMEs' performance by introducing access to finance. This implies, with the ease of access to finance, the entrepreneurs could take some financial risks by implementing aggressive strategies that enhance their performance over their competitors in the market.

This finding is in line with Liu, Cowling, and Zhang (2014) and Kitigin (2017), who found that access to finance moderates between growth orientation, risk-taking, and SMEs' growth. Therefore, committing business resources such as finance to an uncertain business situation can increase the performance of a business. This finding is similar to Bello (2018), Bature et al., (2020), who found that access to finance moderates between EO and SMEs' performance.

The findings did not support the moderating hypotheses of access to finance between innovativeness, proactiveness, and autonomy. This is in line with Sharif et al., (2020), who found that access to finance does not moderate between EO and the performance of the gem and jewellery industry in Thailand. A reason for this non-significant moderation effect might relate to the capital structure of SMEs in Nigeria since most of the companies in the industry are micro firms (less than 50 employees) and have countless experiences. The owners-managers preferred to use their internal sources of finance over external funding. SMEs are more likely to use their own source of funds to operate a business than the costlier external source (Evbuomwan et al., 2013). In addition, many SMEs do not have the collateral security to obtain loans (Sherif et al., 2020).

CHAPTER SEVEN

RESEARCH IMPLICATIONS, LIMITATIONS AND CONCLUSIONS

7.1   Introduction

This chapter concludes the whole research work by merging the findings from the quantitative and qualitative research. To achieve this, the seventh chapter was divided into four (4) major sections, namely, implications of study (under this section, the theoretical, methodological and the practical implications of findings were detailed), recommendation, limitations, and conclusion.

7.2   Implications of Study

The following three sections of this research detailed the research implications. The developed model and the employed research methodologies and the research findings made significant practical, theoretical, and methodological contributions to studies examining the relationship between EO and SMEs' performance, especially evidence from the developing country.

7.2.1   Theoretical Implications

The study explored the influence of EO dimensions on SMEs' performance; this relationship was explained through the interaction of the entrepreneurial ecosystem, RBV, cartesian and contingency theory. RBV emphasises the strategic attributes of SMEs and entrepreneurs, which are crucial for cultivating firm performance. From the RBV perspective, EO dimensions have become essential resources for achieving competitive advantages and better performance in SMEs. Likewise, the findings from

this study affirm the effectiveness of universality theory via the significance of EO dimensions.

In a similar view, employing the cartesian approach, the findings made us understand the interrelationship between EO dimensions that have significant relationships to SMEs performance and provides an explanation on the variables which the researcher found not to have a significant relationship to SMEs' performance.

Secondly, adopting RBV theory, this study confirmed the links between EO and SMEs' performance through the moderating effect of the entrepreneurial ecosystem. It also explains how innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy enhance SMEs performance and how the surveyed entrepreneurs respond to the entrepreneurial ecosystem. The study identifies innovativeness, proactiveness, risk-taking, and competitive aggressiveness as strong measures of EO among Nigerian SMEs. However, this study could not link autonomy as a significant factor that impacts SMEs' performance among the investigated SMEs.

Hence, the findings in this research are important to entrepreneurial policymakers, academics and other entrepreneurship practitioners on the importance and the relationship between the selected factors namely, the relationship between EO and SME performance via the moderating effect of the entrepreneurial ecosystem and the influence of innovativeness, proactiveness, risk-taking, competitive aggressiveness, and autonomy enhance on SMEs' performance. By so doing, higher education institution management, policymakers and entrepreneurship stakeholders could make,

adjust and revisit entrepreneurial policies to ensure the attainment of entrepreneurship objectives.

7.2.2 Methodological Implications

The study contributes to the enrichment of the research methodology literature by employing a mixed method which started with a quantitative phase and was followed by a qualitative phase. By engaging the mixed-method research approach, the researcher could untangle the existing complex relationship between the EO dimensions and SMEs performance, the observed inconsistencies in previous scholars' findings. Also, engaging the respondents in an interview, it is observed that several salient factors not limited to contextual culture, entrepreneurs' psychological attributes, the industry in which the entrepreneur operates, and networks made the simple relationship between EO and SMEs' performance a complex one.

Furthermore, the employed research methodologies in this study explain the rationale behind the non-significant relationship between entrepreneurial autonomy and SMEs performance in the context of developing economy; instead of just reporting the non-significant relationship between entrepreneurial autonomy and SMEs' performance.

Concerning the practical implication for academia, this research unearths the pros of investigating entrepreneurship relationships using more than one research approach.

7.2.3 Practical Implications

The findings of this research are helpful for the academics, SMEs policymakers, the national governments and the SMEs stakeholders in the following ways expressed below:

i.   The findings of this research are of practical importance to the SMEs policymakers, practitioners, and stakeholders. From the view of SME managers/owners, the findings untangle the complex relationship between several factors that could enhance national GDP via SMEs performance. These include the impact of government policies on SMEs strategic decisions, the importance of access to finance in boosting SMEs' operations, and the overall impact of networks among SMEs owners and operators.

ii.   Concerning the effect of education level in enhancing SMEs' performance via opportunities recognition and exploitation, the findings in this research reveal the importance of not just education level; however, the significant importance of education contents itself in helping to identify entrepreneurial opportunities, analysing such opportunities and the swift exploit of the identified opportunities. This is vital for the SMEs' policymakers and academia.

7.3   Recommendation

Considering the research implications, that is, theoretical, methodological, and practical implications. The researcher, therefore, implores the government (study context) via entrepreneurship policymakers, higher education institution management, trade unions and other entrepreneurship stakeholders to understand the role of 'inclusion' during entrepreneurship policy formulation, implementation, and evaluation so that, at least the anticipated and formulated policies could cater of a larger population, hence, its objective in unemployment reduction can be achieved.

Furthermore, based on the complex nature of entrepreneurship, the researcher, therefore, recommends to future scholars to employ the diverse philosophical approaches in solving entrepreneurial issues, specifically, such which is investigated in this research; that is, the relationship between EO and SMEs' performance.

The ending recommendation the researcher posited is, to encourage a close relationship between the higher institution management and entrepreneurs in the industry. By doing this, the higher education institution managements will be updated about the changes in the entrepreneurship industry; hence, they could adjust their curriculum accordingly.

7.4   Limitations

Concerning the mixed evidence concluded by prior studies on the relationship between EO and SMEs' performance, this research employing a triangulation research methodology concludes that the methods adopted by earlier scholars are not detailed enough to make a verdict on the investigated relationship, that is, the effectiveness and the significance of EO on SMEs' performance.

Similarly, engaging the respondents in an interview to supplement the quantitative findings reveals the importance of networks, industry types, and entrepreneurs' psychological factors as constructs that impact the relationship between EO and its dimensions on SMEs performance. The identified variables were beyond the research scope. Thus, to empirically establish their effects on the relationship investigated in this research, the researcher employs future scholars to examine their effect to avoid any form of speculations that might further enhance inconsistencies in research findings.

Furthermore, the generalisability of the findings in this research is not encouraged because the samples selected are chosen from a single geopolitical zone; meanwhile, Nigeria has six geopolitical zones within its territory. Given this, the researcher calls for similar investigations from other geopolitical zones outside the scope of the current study.

On this note, the researcher concludes that employing the model developed coupled with the methodologies will assist researchers to identify and understand the complex relationship between EO and SMEs' performance.

7.5   Conclusions

The findings from this research support the stance that EO and some of its dimensions, namely proactiveness, risk-taking, innovativeness, and competitive aggressiveness, are significant factors that enhance firms (SMEs) performance. Contrarily, autonomy in the study context failed to enhance or influence SMEs' performance using quantitative and qualitative research methods. The non-significant relationship observed in this study does not imply that entrepreneurial autonomy in individual decision-making, personalised strategic planning, and implementation is not essential. It implies that to thrive in the study context, entrepreneurs need to establish a strong network with the market players and stakeholders.

Moving to the relationship between entrepreneurial characteristics and EO dimensions, the findings in this study successfully establish lines between entrepreneurial education and experience on entrepreneurial innovativeness. Similarly, a significant relationship

was established between entrepreneurs' experience and proactiveness, age and experience on entrepreneurial autonomy.

Furthermore, it was established in this research context that entrepreneurial innovativeness, risk-taking and proactiveness mediates the relationship between education level and SMEs' performance. Considering the mediating role of risk-taking on the relationship between gender and SMEs' performance, a significant relationship was also established. In this regard, the researcher suggests adding other potential factors beyond this research scope that might influence the relationship between EO and its dimensions in enhancing SMEs performance into the current research model.

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QUESTIONNAIRE

INFLUENCE OF ENTREPRENEURIAL ORIENTATION ON THE PERFORMANCE OF SMES IN NIGERIA: MODERATING ROLE OF ENTREPRENEURIAL ECOSYSTEM

INTRODUCTION

The survey is conducted to examine the influence of entrepreneurial orientation on the performance of SMES in Nigeria through the moderating role of entrepreneurial ecosystem. I would like to seek your sincere views on the questions asked in this study. I assure you that your responses will be kept confidential and solely for the sake of this research.

Thank you very much for your time and support.

INFLUENCE OF ENTREPRENEURIAL ORIENTATION ON THE

PERFORMANCE OF SMES IN NIGERIA: MODERATING ROLE OF

ENTREPRENEURIAL ECOSYSTEM

A. Demographic Information

1) **Age:** Under 18 years [ ]   19 – 29 Years [ ]   30 – 39 years [   ]   40 – 49   Years [ ]   50 Year and above

2) **Gender:**   Male [ ]   Female [ ]

3) **Education:**   Below Secondary School [ ]   Secondary School Leaver [ ]

College (Certificate/Diploma) [   ]   University   (bachelor degree level) [ ]

Postgraduate level (master/Doctorate) [ ]

4) **Experience:**   Below 5 Years [ ]   5 – 10 Years [ ]   11 – 15 Years [   ]   16 – 20 Years [ ]   Over 20 years [ ]

5) **Number of employees:** Less than 10 [ ]   10 - 49 [ ]   50 – 199 [ ]

6) **Industry category:**   Agriculture [ ]   Manufacturing   [   ]   Wholesale/Retail [ ]   Construction [ ]   Human   Health & Social Work [ ]   Transport &   Storage [ ]   Education [ ]   Accommodation & Food Service [ ]   ICT [ ]   Real Estate [ ]   Oil & Gas [ ]   Services [ ]   Others [ ]

7) **Start Up Capital:** Below ₦2M [ ]   ₦2M - ₦5M [ ]   ₦5M – ₦10M [ ]   ₦10M - ₦30M

8) **Annual Sales:**   Less than ₦5M [ ]   ₦5M – less than ₦50M   ₦50M   –   less than   ₦100M   More than ₦100M

B.   ENTREPRENEURIAL ORIENTATION

Please tick ( ) the response that most represents your view on entrepreneurial orientations by selecting from the available options: 1 – Strongly Disagree and 5 – Strongly Agree.

S/N		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I put strong emphasis on marketing new products or services					
2	I prefer trying out new ways rather than doing things in the usual way					
3	Within the past five years I have introduce no new products					
4	I am very happy when I create new business ideas					
5	I prefer to try my own unique way when learning new things rather than doing it like everyone else does					
6	I am able to use old business concepts in new ways					
7	I undertake any business activity if the chances of success is 50 : 50					

8	I am willing to risk the well-being of myself and family for the sake of my business					
9	I believe that bold action are necessary to achieve my business objectives					
10	I conduct research before proceeding with investments					
11	I have insured my business activities					
12	I enjoy facing a difficult task from which other people want to keep away					
13	I prefer high risk projects with a high return					
14	I prefer to make a bold investment that could harvest superior return					
15	I initiate actions rather than responding to activities of my competitors					

16	I always look around for business opportunities					
17	I always identify and sell products that customers want and need					
18	I am always the first to introduce new products on the market than my competitors					
19	I enjoy turning conditions around to my advantage					
20	I believe that business people have to do whatever they can to survive in business					
21	I tell people about my business products and service					
22	I am able to sell my products at lower prices than other people who sell or provide the same products					
23	I am very happy when I perform better than					

	other people who are selling the same product or service				
24	I like rules and guidelines because they guide me in my business activities				
25	I do not impose restrictions on the activities of my staff				
26	I use teamwork in dealing with my business activities				
27	I like to do things in my own way without worrying about what others think				
28	I depend on staff to assist me to find ways to solve my business problems				
29	I handle the responsibilities of my organization by my self				

C. ENTREPRENEURIAL ECOSYSTEM

Kindly tick ( ) to indicate the extent to which you agree to the following statements on **entrepreneurial ecosystem** using the scale provided. *1 – strongly disagree; 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree*

S/N		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	The preferences of our customers change quite a bit overtime					
2	Our customers tend to look for new products/services all the time					
3	Our customers are very price-sensitive, but on other occasions, price is relatively unimportant					
4	We usually witness demand for our products and services from customers who did not deal with us previously.					
5	The needs of the new customers differ from					

	the needs required by our current customers					
6	Our product/services is changing rapidly in the market					
7	A large number of new product ideas have been made possible through the market					
8	It is difficult to predict the changes in our business sector					
9	Competition due to technology in the business sector is very intense					
10	There are many intense promotion wars due to technology					
11	Technology has caused an unpredictable change in price of our product/service					

S/N		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	I have access to finance in my business					
2	There are adequate loan/credit facilities to support SMEs					
3	The administrative process required to access finance for SMEs is easy					
4	Collaterals required for SMEs financing is reasonable					
5	SMEs loan is guaranteed					
6	Availability of government support in SMEs financing					

S/N		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	In this society, orderliness and consistency are					

S/N		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	stressed, even at the expense of experimentation and innovation.					
2	Societal requirements and instructions are spelled out in detail, so citizens know what they are expected to do.					
3	In this society, followers are expected to: Question their leaders					
4	In this society, power is evenly shared					
5	leaders encourage group loyalty even if individual goals suffer					
6	The economic system in this society is designed to maximize: Individual interests					

S/N		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
7	In this society, children take pride in the individual accomplishments of their parents					
8	parents take pride in the individual accomplishments of their children					
9	boys are encouraged more than girls to attain a higher education.					
10	In this society, people are generally concerned about others					
11	In this society, people are generally sensitive about others					
12	In this society, people are rewarded for excellent performance					
13	In this society, people are rewarded to strive					

S/N		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	for continuous improved performance					
14	In this society, the accepted norm is to accept the status quo					
15	People place more emphasis on solving current problems					
15	People are generally non-assertive					
16	People are generally tender					

D. SMEs' PERFORMANCE

Kindly tick ( ) to indicate the extent to which you agree to increase in the following statements on the performance of your firm using the scale provided. *1 – strongly disagree; 2 – disagree, 3 – neutral, 4 – agree, 5 – strongly agree*

S/N	SMEs' Performance	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Profits					
2	Increase in sales					
3	Return on Investment					
4	Increase in number of staff					

5	Self-satisfaction					
6	Customer satisfaction					

Interview Protocol

Interview Protocol with Entrepreneurs in Nigeria

Semi Structured Interview Guide

Research Tittle

Researcher

Research Questions

Participant

Name of the organization:

Position:

Location:

Time and duration:

Interview question for entrepreneurial orientation

These are conversational style questions *to ensure that the interviews are at ease related to the topic being investigated. It aims is to understand the interviewees' views on entrepreneurship in their organizations.*

Q1. What are your views about entrepreneurship in your organization?

Q2. Does the current level of entrepreneurial activities allow you to improve your organizational performance?

Q3. What are your views on innovation in your organization?

Q4. Do you think that your organisation is ready to innovate?

Q5.   Do you think being innovative is essential for improving the performance of your organization?

Q6. To what extent would you describe the organization as innovative in developing new product or services?

(***Probes*:*** *Are your employees actively engaged in generating new ideas of doing things? Do you invest in research and development? How has the innovativeness affected your organizational performance?*)

Q7. Do you think that proactiveness is essential for our organization to be entrepreneurial?

Q8. Does your organization participate in strategic alliances with the competitors?

Q9. Do you generally take new initiatives/strategic actions ahead of your competitors proactively or do you prefer to "wait and see" and or adopt "the new" later

(***Probes*:*** *if yes, what are your strategies of being proactive? How has it affected your firm's performance?* Are there resources and capabilities that you have or lack that makes this approach your chosen strategy?)

Q10. Do you think that competitive aggressiveness is essential for your organization to be entrepreneurial?

Q11. How far does market conditions determine the performance of your organization?

(***Probes*:*** *What are your competitive strategies? How has competitive aggressiveness affected the performance of your organization?)*

Q12. Do you think providing autonomy to the employees makes your organization more entrepreneurial?

Q13. What kind of autonomy do you provide to your employees?
(***Probes*:** *How important it is to provide autonomy to the employees in the organization?* *Are all employees given autonomy equally or it is at the discretion of the management? How has giving autonomy to employees affect your organization performance?*)

Q14. Do you differentiate between internal and external risks?

Q15. Does your organization support a risk-taking culture?
(***Probes*:** *What risk management strategies are in place to manage internal risks. How do you manage external risks? How do you see the relationship between risks and opportunity?*)

Q16. Do you actively monitor the market for opportunities?

Q17. What kind of industry and market trends do you particularly look for?
(***Probes*:** *Are your employees actively engaged in finding opportunities in the market? How do you keep pace with technological developments? How do you enhance your capabilities and resources? How has this risk taking affected the performance of your organization?*)

Interview question for Entrepreneurial Ecosystem

Q1. Entrepreneurial orientations such as innovativeness, proactiveness, risk taking, competitive aggressiveness and autonomy is very much about ecosystems with several partners. Does your firm often take the back seat in such setups? Is this a problem?

Q2. **Are factors like environmental turbulence, access to finance and national culture factors be considered when opening a new business in Nigeria?**

Q3**. Is there any others factors of the ecosystem to consider?**

(***Probe***: if yes, kindly mention)

Q4. **Do these factors affect your innovativeness, proactiveness, risk taking, competitive aggressiveness and autonomy as an entrepreneur and your ability to improve the performance of your firm?**

(***Probe****s*: if yes, kindly explain how each factor affects the relationship between the entrepreneurial orientation and performance of firms. Are there things your firm can do to level the playing field in such relationships?)

Interview Questions: Demographic characteristics of entrepreneurs

Q1. Do you think your age has a relationship with your entrepreneurial orientations?

(Probes: if yes, explain how)

Q2. Do you think your gender has a relationship with your entrepreneurial orientations?

 (Probes: if yes, explain how)

Q3. Do you think your educational level has a relationship with your entrepreneurial orientations?

(Probes: if yes, explain how)

Q4. Do you think your experience as an entrepreneur has a relationship with your entrepreneurial orientations?

Probes: if yes, explain how)

Faculty of Business and Law

Informed Consent Form for research participants

Title of Study:	Investigating the role of entrepreneurial orientation dimensions on firm performance of Nigeria SMEs
Person(s) conducting the research:	Ogbolu Gbemisola
Programme of study:	Doctor of Philosophy
Address of the researcher for correspondence:	Room 415 Newcastle Business School Northumbria University City Campus East Newcastle-upon-Tyne NE1 8ST United Kingdom
Telephone:	+447876323399
E-mail:	gbemisola.l.ogbolu@northumbria.ac.uk

Description of the broad nature of the research:	This research intends to investigate the influence of entrepreneurial orientation dimensions on firm performance of Nigeria SMEs.

This research will seek empirical evidence on adoption rates of Entrepreneurial Orientation dimension by Small and Medium Enterprises in Nigeria.

This research will critically examine the challenges Nigerian SMEs faces in adoption of the different dimension of entrepreneurial orientation.

This research will conduct empirical evaluation on how successful adoption of entrepreneurial orientation dimension such as autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness affect the performance of SME's in Nigeria.

Additionally, this study seeks to give policy makers such as the government and the SMEs in the country suggestions for improvement |
| | pertaining to the usage of Entrepreneurial orientation in fostering the performance of SMEs.

This will be achieved through qualitative and quantitative research based on questionnaires sampled among owners, |

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	CEOs, or top managers of identified SMEs.
Description of the involvement expected of participants including the broad nature of questions to be answered or events to be observed or activities to be undertaken, and the expected time commitment:	This research will be through questionnaire and semi structured interview. Peradventure the response rate is low questionnaires schedule prepared in advance will be handed to participants in their offices. The questionnaire will last for about 45 minutes. Participants identity will be protected. Participants involvement will be entirely voluntary, and withdrawal will be granted at any point of the research process.
Description of how the data you provide will be securely stored and/or destroyed upon completion of the project.	The data collected will be downloaded and stored into the University's software and secured with a password. Once data are generated, it will be stored in a secured location provided by the university to avoid unauthorised access.

Information obtained in this study, including this consent form, will be kept strictly confidential (i.e.
will not be passed to others) and anonymous (i.e. individuals and organisations will not be
identified *unless this is expressly excluded in the details given above*).

Data obtained through this research may be reproduced and published in a variety of forms and for a variety of audiences related to the broad nature of the research detailed above. It will not be used for purposes other than those outlined above without your permission.

Participation is entirely voluntary, and participants may withdraw at any time.

By signing this consent form, you are indicating that you fully understand the above information and agree to participate in this study on the basis of the above information.
Please keep one copy of this form for your own records

Date:

Participant's signature:

Student's signature: **Date:**

Faculty of Business and Law

Student Research Ethical Issues Form

Student Name:	Gbemisola Ogbolu
Programme of Study	Business and Law
Title of Research Project:	Investigating the Role of Entrepreneurial Orientation Dimensions on Firm Performance of Nigeria SMEs
Start Date of Research	October 2017
Supervisor	Prof Ignazio Cabras

Risk Status (please ☐ Red Amber Green ✓ mark one box): ☐

Please refer to the Ethics Diagnostic Tool for advice on Risk Status (available in Blackboard – NB034BC: B and L Research).

	Comments
Brief description of the proposed research methods including, in particular, whether human subjects will be involved and how.	This research will adopt quantitative and qualitative methodology. The respondents will be a cross section of SMEs owners, CEOs or top managers of SMEs in the south west of Nigeria (Lagos, Ogun, Oyo, Osun, Ondo and Ekiti State.) This research will cover all sectors of SMEs in the southwest of Nigeria with employee size of less than 200.
How will informed consent of research participants be acquired? (If appropriate attach draft informed consent form)	Participants will be contacted, and their consent sought before any data collected.
Will the research involve an organization(s)?	Yes

(If appropriate attach draft organisational consent form)	
How will research data be collected, securely stored and anonymity protected (where this is required)	The data collected will be downloaded and stored into the University's software and secured with a password. Once the data are generated, hard copies will be stored in a secured location provided by the university to avoid unauthorised access.
How will data be destroyed after the end of the project? (Where data is not to be destroyed please give reasons)	The data collected will be destroyed according to NBS guidelines
Any other ethical issues anticipated?	No

Student Signature (indicating that the research will be conducted in conformity with the above and agreeing that any significant change in the research project will be notified and a further "Project Amendment' Form submitted).

Date: …………………………**Student Signature:**…………………………………………

Supervisor:

I confirm that I have read this form and I believe the proposed research will not breach

University policies.

Date:……………………… **Signature:**………………………………………….

Please Note:

The appropriate completion of this form is a critical component of the University Policy on Ethical Issues in Research and Consultancy. If further advice is required, please contact the Faculty Research Ethics Committee through ethicssupport@northumbria.ac.uk in the first instance.

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RESEARCH ORGANISATION INFORMED CONSENT FORM

Faculty of Business and Law

University of Northumbria

Completion of this form is required whenever research is being undertaken by Business and Law staff or students within any organisation. This applies to research that is carried out on the premises, or is about an organisation, or members of that organisation or its customers, as specifically targeted as subjects of research.

The researcher must supply an explanation to inform the organisation of the purpose of the study, who is carrying out the study, and who will eventually have access to the results. In particular issues of anonymity and avenues of dissemination and publications of the findings should be brought to the organisations' attention.

Researcher's Name: Gbemisola Ogbolu
Student ID No. (if applicable): 15036222

Researcher's Statement:

You are invited to participate in a research project titled "Investigating the Role of Entrepreneurial Orientation Dimensions on Firm Performance of Nigeria SMEs".

The project is part of a PhD research programme at the Newcastle Business School, supervised by Prof. Ignazio Cabras and Dr, Richard Nyuur. The main objective of this study is to investigate the influence of entrepreneurial orientation dimensions on the performance of Nigeria SMEs. This research will investigate the relationship between entrepreneurial orientation and firm performance of Nigeria SMEs. The research will aim to examine the contribution of each dimension of entrepreneurial orientation– autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness – on firm performance This research is expected to provide a better understanding of entrepreneurial activities of Nigeria SMEs.

The focus of this research is on Nigeria SMEs.

Please be assured that participation in this research is voluntary and based on organisational informed consent. All information received will be kept strictly confidential and solely for the objectives stated above. The organization will have the option of remaining anonymous and is free to withdraw from the project at any time. The output of the research will be submitted to the Business School, Northumbria University, and may also be disseminated in reputable

academic Journals and/or conferences relevant to the subject. Upon request, a summary of the findings will be made available to the organization for its own records.

Attached alongside this form is a project information sheet that gives more explanation about the project and highlights what you will be asked to do should you consent to participate in this research. If you require further clarifications, please do not hesitate to contact me by telephone on +447876323399 or via email at Gbemisola.l.ogbolu@northumbria.ac.uk. Thank you

Any organisation manager or representative who is empowered to give consent may do so here:

Name:

_____

Position/Title:

_____

U:\Desktop\New folder (3)\Faculty Organisation Informed Consent Form (June 2013)(1).doc

Organisation   Name:

_____

Location:

_____

If the organisation is the Faculty of Business and Law please completed the following:

Start/End Date of Research / Consultancy project:	Start: End:
Programme Year	

Sample to be used: seminar group, entire year etc.	264
Has Programme Director/Leader, Module Tutor being consulted, informed.	

Anonymity must be offered to the organisation if it does not wish to be identified in the research report. Confidentiality is more complex and cannot extend to the markers of student work or the reviewers of staff work, but can apply to the published outcomes. If confidentiality is required, what form applies?

[ ] No confidentiality required
[ ] Masking of organisation name in research report
[   ] No publication of the research results without specific organisational consent
[ ] Other by agreement as specified by addendum

Signature: _____   Date: _____

This form can be signed via email if the accompanying email is attached with the signer's personal email address included. The form cannot be completed by phone, rather should be handled via post.

RESEARCH APPROVAL – INSURANCE DECISION Questions

Please consider all the activity of your research, including what may seem minor aspects.

1. **Will your intended research involve ANY of the following?**
    a. Investigating / participating in methods of contraception
    b. Assisting with or altering the process of conception,
    c. treating or preventing disease or diagnosing disease
    d. ascertaining the existence degree of or extent of a physiological condition
    e. inducing anaesthesia or otherwise preventing or interfering with the normal operation of a physiological function
    f. The use of drugs
    g. The use of surgery (other than biopsy)
    h. Genetic engineering
    i. Subjects under age 5
    j. Subjects known to be pregnant
    k. Pharmaceutical product /appliance designed/manufactured by the University
    l. Work outside the UK involving human volunteers
    m. Aircraft, aero spatial devices, drones (UAVs)[1], hovercraft, waterborne craft[1]

YES	*NO*

2. **If you answered yes to the above, is your proposed research limited ONLY to the following activity?**

   i. Questionnaires, interviews, psychological activity including CBT; ii. Venepuncture (withdrawal of blood); iii. Muscle biopsy; iv. Measurements or monitoring of physiological processes including scanning; v. Collections of body secretions by non-invasive methods; vi. Intake of foods or nutrients or variation of diet within published safe limits to health (other than administration of drugs).

YES	*NO*

   Your signature: Your student number:

   Gbemisola Ogbolu

The rating for the On Line Research Approval system and the action you need to take is outlined below

Questions   **Rating**

Q1 Yes Q2 No	**High**	you will **NOT** be insured until you have provided a copy of your research proposal to <u>fi.insurance@northumbria.ac.uk</u> and gained confirmation that insurance is in place
Q1 Yes Q2 Yes	**Medium**	Insurance is in place for this
Q1 No Q2 No	**Low**	Insurance is in place for this

Anne Hudson, Insurance Advisor – 2016 v3

1 If you are only using existing University UAV's/drones or University boats under the supervision of University staff--- these ARE insured. Please note for drones you must comply with <u>*CAA rules*</u>

Travel Risk Assessment

OVERSEAS TRAVEL- beyond EU or where non-standard risk involved   template version: 13 February 2017

Please refer to the University Travel& Expenditure Policy and the Health and Safety page on the intranet when completing this form. The box spaces can expand as you type so that full information can be given. NOTE: Any travel involving fieldwork must comply with the Fieldwork Code of Practice

Travellers' name: Approver's name:

Dates of travel:	Name all **university travellers** and state if staff or student	List all **locations to be visited***(Country, region, city)*itinerary to be stored with risk assessment	Control Risks – gbemisola.L.ogbolu@northumbria.ac.uk **City/Region Risk Level**:	Current Drum cussac copy or summarise the guidance given by the "Current Travel Advice" for the particular country)
Dec 2, 2019 - Nigeria **Feb 28, 2018 - Nigeria**		**South West of Nigeria (Lagos, Ogun, Oyo, Osun, Ondo and Ekiti State)**	**Lagos State: Moderate Travel Risk** **Ogun State: Low Travel Risk** **Oyo State: Low Travel Risk** **Osun State: Low Travel Risk** **Ondo State: Low Travel Risk** **Ekiti State: Low Travel Risk**	**NIGERIA: Criminal activity is prevalent across much of the country, with kidnappings and armed robbery posing significant threats to both local and foreign nationals. Low-level conflicts in the Niger Delta, Middle Belt and the remote Northeast remain ongoing concerns as the government has yet to fully address underlying grievances. Civil and labour unrest over a range of socio-economic grievances and political developments occur frequently in the country's major population centres. Infrastructure in major urban centres is relatively well-developed but is basic in rural areas, while recurrent electricity and fuel**

				shortages remain ironic deficiencies in the oil rich country.

Has the leading traveller gained experience of <u>business travel</u> in the locations to be visited during the past 12 months? **Yes**

Risk assessment

Use guidance on Foreign & Commonwealth Office, TravelHealthPro website and Control Risks –For controls to adopt, please complete the table below.. Travellers are asked to use their best judgment to estimate risks (L (low), M (medium), and H (high) in identifying controls to mitigate risks. When in doubt, please contact your travel approver for further guidance. Suggested hazards are pre-entered – but more can be added in light of information you enter in the boxes above.

ACTIVITY HEADINGS	HAZARD	PERSONS AT RISK	Use these categories to answer the questions: H/M/L = high/medium/low	Controls: What have you done / or will do to reduce risks?	How severe could the hazard be	How likely would the hazard be

			How severe could the hazard be?	How likely is the hazard to happen?		after your control measures?	after your control measures?
Internal travel during trip	Traffic accidents	All	M	L	Thorough observation and alertness. Avoidance of roadside walk during day or night.	L	L
	Mugging/hijack/kidnap	All	L	L		L	L
	Political unrest	All	L	L		L	L
	Personal safety (e.g. attack, etc.)	All	L	L		L	L
	Theft of belongings	All	L	L		L	L
	Climate (e.g. altitude, severe heat, etc.)	All	M	L	Being guided by appropriate clothing given the time of year and weather forecast. However, extent of walking required is minimal as fieldwork will be carried out in office environments	L	L
	Geographic (e.g. earthquake, flood, etc.)	All	L	L		L	L

	Pre-existing conditions	NA	NA	NA			
	Remoteness from medical support	Fieldworker	L	L		L	L
Equipment	Nature of equipment used may be hazardous – specify and show controls	NA	NA	NA			
Work activity	e.g. are you researching in a remote area? Interviewing political leaders/foreign dignitaries? Involving night time working?	NA	NA	NA			
Cultural	What risks are there if you fail to comply with local culture?	All	L	L	PhD researcher is adequately aware of the cultural norms having lived in the country for several years	L	L
Social time	e.g. involved in higher risk sports (motor racing/off piste skiing) OR other high risk action (e.g bungee jumping, etc)	NA	NA	NA			

LEAD TRAVELLER DECLARATION

There is no known reason to prevent the named travellers from involvement in the activities stated overseas.	<u>Yes</u> / No

I have reviewed and taken action (if needed) from the travel health assessment	<u>Yes</u> / No
I have Downloaded and will keep with me at all times a copy of <u>Travel Insurance Summary and Emergency contacts</u> from the staff intranet	<u>Yes</u> / No
I have ensured my "In Case of Emergency" (ICE on Key Travel's on line system) contact details are up-to-date on the travel provider's system	Yes / No
I hold a current <u>EHIC card</u> where some / all of my travel is in Europe. (Eligibility details can be found on the <u>NHS website</u>. If staff / students are eligible, a valid card must be taken for all travel.)	Yes / <u>No</u>
My line manager has a copy of my itinerary with destinations, contact names and numbers – so that the University knows my location each day and how to get in touch with me	<u>Yes</u> / No
If my internal travel plans change I will advise my line manager	<u>Yes</u> / No
I have registered & downloaded the <u>Key Travel App</u> onto my mobile telephone. (If appropriate I shall buy new SIM cards in my destination country to reduce phone charges and advise Northumbria and Key Travel of the number)	Yes / No
I have updated my next of kin details on <u>MY HR</u>	Yes / No
I shall maintain a contingency fund in case of emergencies (recognising that in such situations it is often difficult to access banking facilities)	<u>Yes</u> / No
I shall evacuate from or abandon my trip if advised to by either Northumbria University or the Foreign and Commonwealth Office	<u>Yes</u> / No
In the week preceding my travel I will recheck the security situation in my destination cities and alert my line manager to any changed risk rating	<u>Yes</u> / No
I agree that on my return I will report any issues experienced during my trip to my line manager and the booker".	<u>Yes</u> / No

Travel Risk Assessment
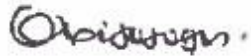

northumbria
UNIVERSITY NEWCASTLE

When completing my risk assessment I have calculated my H/M/L ratings according to this table

To be completed by the person undertaking the risk assessment:	
Name: **Gbemisola Ogbolu**	**Job Title:** **PhD STUDENT**
Signature:	**Date:** 10/11/18

To be completed by the Approver :

I consider this risk assessment to be suitable and sufficient to control e risks to the health & safety of both employees undertaking the tasks and any other person

th who may be affected by the activities.

Name:	**Job Title:**

Signature:	Date:
……………………………………..	……………………..

NB – If Approver does not agree that the risk assessment is suitable and sufficient then the assessment must be reviewed.

A copy of the risk assessment and itinerary should be retained in the faculty / service for reference in case of issues during/post travel.

GROUP TRAVELLERS DECLARATION – to be read and signed by others travelling in the group

I agree to implement the identified control measures identified in the attached risk assessment in order to minimise any risks, in line with University guidance and specialist travel security advice from the FCO and Control Risks Group (CRG).

Name of traveller Signature: **Gbemisola Ogbolu**   Date: **09-11-2018**

RESEARCH PROJECT INFORMATION SHEET

Investigating the Role of Entrepreneurial Orientation Dimensions on

Firm Performance of Nigeria SMEs

You are invited to participate in the above research project about the relationship between entrepreneurial orientation and firm performance of Nigeria SMEs. It is being conducted by:

Gbemisola Ogbolu

PhD Suite, Room 417,

Newcastle Business School

Faculty of Business and Law,

City Campus East

Northumbria University

Email: gbemisola.l.ogbolu@northumbria.ac.uk

This project is part of a PhD research at the Faculty of Business and Law of Northumbria University, and is supervised by Prof. Ignazio Cabras (Ignazio.Cabras@northumbria.ac.uk) and Dr. Richard Nyuur (richardnyuur@northumbria.ac.uk) **What is this Study about?**

The main objective of this study is to investigate the influence of entrepreneurial orientation dimensions on firm performance of Nigeria SMEs. This study will empirically investigate the relationship between entrepreneurial orientation and firm performance of Nigerian SMEs.

Moreover, this research will provide policy makers and Nigeria SMEs with recommendations to show how entrepreneurial orientation can improve SMEs performance in Nigeria. The findings of this study will also be used to suggest directions for future research on entrepreneurial orientation and Nigeria SMEs.

Why are you invited to participate?

Your firm has been identified as a potential participant in this research project because you met the criteria set by National Enterprise Development Programme (NEDEP) for SMEs in Nigeria and Nigeria Association of Small and Medium Enterprises (NASME).

What will you be asked to do?

If you agree to participate in this research, you will be asked to help provide response (questionnaire) to several pre-defined questions relevant to the research subject. The questionnaire will last for about 45 minutes. You may be contacted later for further insight on any information.

The information you will provide will be treated with strict confidentiality and no third party will have access to it. The data you will provide will be used for research purposes only.

What if I change my mind during or after the study?

Taking part in this research is completely voluntary and you can withdraw your participation at any time without explanation or prejudice. You may also withdraw any unprocessed data from the study by contacting the researcher, Gbemisola Ogbolu (*see contact details above*).

Results of this research

Results of this study will be used to produce a thesis that will be submitted to the Faculty of Business and Law. It may be published on the Website of Northumbria University, or in other forms relating to the broad nature of this research. A summary of the findings will be made available to participating organizations upon request.

What if I have questions about this study?

This information sheet is for you to keep as a reference. If you have any questions about the study, please contact Gbemisiola Ogbolu.

If you have any complaints about the way the research project is being conducted you can raise them with the Principal Supervisor (Prof Ignazio Cabras: ignazio.cabras@northumbria.ac.uk).

The Researchers and the University would like to thank you for your contribution to this project.