

# Journal of Economics and Business

---

**Olaolu, Dele, and Obaji, Nkem Okpa. (2020), An Assessment on the Influence of Entrepreneurial Training, Risk-Taking and Innovativeness on SMEs Development in Nigeria. In: *Journal of Economics and Business*, Vol.3, No.1, 254-269.**

ISSN 2615-3726

DOI: 10.31014/aior.1992.03.01.195

The online version of this article can be found at:  
<https://www.asianinstituteofresearch.org/>

---

Published by:  
The Asian Institute of Research

The *Journal of Economics and Business* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Journal of Economics and Business* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Economics and Business, which includes, but not limited to, Business Economics (Micro and Macro), Finance, Management, Marketing, Business Law, Entrepreneurship, Behavioral and Health Economics, Government Taxation and Regulations, Financial Markets, International Economics, Investment, and Economic Development. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Journal of Economics and Business* aims to facilitate scholarly work on recent theoretical and practical aspects of Economics and Business.



ASIAN INSTITUTE OF RESEARCH  
Connecting Scholars Worldwide



# An Assessment on the Influence of Entrepreneurial Training, Risk-Taking and Innovativeness on SMEs Development in Nigeria

Dele Olaolu<sup>1</sup>, Nkem Okpa Obaji<sup>2</sup>

<sup>1</sup>Faculty of Management and Social Sciences, Baze University, Abuja, Nigeria

<sup>2</sup>Faculty of Management Sciences, National Open University of Nigeria, Abuja, Nigeria

Correspondence: Nkem Okpa Obaji, Faculty of Management Sciences, National Open University of Nigeria, Abuja, Nigeria, Tel: +2348169119771 -. E-mail: amazonsng@yahoo.com

## Abstract

Small and Medium Enterprises (SMEs) are key to local economic development, occupying a worth mentioning function in job creation, poverty alleviation and economic growth, but they run into numerous entrepreneurial hurdles. The aim of this study was to assess the influence of entrepreneurial training, risk-taking and innovativeness on SMEs development in Nigeria, with specific reference to Abuja Federal Capital Territory. The study employed a quantitative approach. All items of the questionnaire were measured using a 5 point Likert scale. Data were collected from SME owners operating within Abuja Federal Capital Territory. A sample size of 339 was drawn from a population of 2825 SME operators. However, a response rate of 43 percent valid questionnaires was retrieved from the respondents. This research supported the positive effects of entrepreneurial training and innovativeness on SME development. In terms of contribution, entrepreneurial training contributed 49.1 percent while innovativeness contributed 20.1 percent to the model. In addition, risk-taking has an insignificant small negative relationship with SME development in the study context. The study, therefore, recommends that entrepreneurial training should be taken seriously by SMEs operators as the business world experience is much more than an academic exercise. Similarly, SMEs should find a way to innovate if they must survive the harsh and competitive business environment. Finally, the study recommends that the business owner should avoid uncalculated risk, as not all risks are worth taking. The experiential results are pertinent to policymakers in order to arouse, buoy up and provide support for SMEs' development through their policies.

**Keywords:** Entrepreneurial Training, Innovativeness, Nigeria, Risk-Taking, SME Development

## 1. Introduction

Entrepreneurship exposition has progressively mentioned the critical prominence of small and medium enterprises (SMEs) to economic growth (e.g. Azudin & Mansor, 2017; Opute, 2019 – (in press)). In the context of a developing country, the literature highlights the significance of entrepreneurship and SMEs to be specific to contend with unemployment and poverty and driving economic growth for example in India (e.g. Benhard, 2013) as cited in Iwu and Opute (2019), and in Nigeria (e.g. SMEDAN, 2017).

SMEs are a worth mentioning driver of economic development (Obi, Ibidunni, Tolulope, Olokundun, Amaihian, Borishade, & Fred, 2018)), being essential to the majority of the nations globally, particularly in evolving and emergent countries (Ndiaye, Razak, Nagayev, & Ng 2018). Distinct from big businesses, SMEs are extremely flexible, revealing a superior flexibility to technical shifts, higher promotion of income distribution and better adaptability to fluctuations in the market and new customer requirements, while their organisational structure permits for faster decision making (Perez-Gomez, Arbelo-Perez, & Arbelo, 2018). However, to achieve this potential, SMEs need a constant source of long-term funding so as to invest in growth opportunities (Dowling, O'Gorman, Puncheva, & Vanwalleghem, 2019).

SMEs are viewed as the backbone of any economy (Yoshino & Taghizadeh-Hesary 2019) as they put forth an important function in reducing poverty, employment creation, foreign trade promotion and technique innovation (Luo, Wang, & Yang, 2016), as well as contributing importantly to the growth of developing economies (Winfred, 2006).

In today's world and business environment; training, innovativeness and the ability of the business owner to take well-calculated risks has the hallmark of a successful business venture. This is because training and innovation are seen as factors or indices that determine how a business performs.

The ability of the Small and Medium businesses to create and distribute wealth; thereby improving the national economy of a nation stems from their abilities to take a calculated risk. Small and medium-sized enterprises (SMEs) play vital roles in today's economy and contribute immensely to output, income and employment.

SMEs according to Henderson (2002) as cited by Fassin (2008) and Perrini (2006) serve a link between the community and the global economy and act a tool for national economic development. They also serve as the source of innovation and wealth/job creation according to Musawa and Wahab (2012).

Oyelaran-Oyeyinka, Adelaja, and Abiola, (2007) opined that Nigeria being an emerging economy; SMEs have great potentials to influence the Gross Domestic Product (GDP) of the nation in the near future if well managed. Also, study by Nwankwo, Akunuri, and Madichie, (2010) are of the view that SMEs provide over 50% of Nigeria's employment, thereby, making SMEs an important and indispensable sector of the Nigerian economy.

### *1.1 Problem Statement*

Most SMEs operators and managers in Nigeria do not have the requisite entrepreneurial training, risk-taking abilities and are not innovative which are requirements for business competitiveness. As a result, most SMEs are not able to develop and perform better. Because most SMEs are not innovative and not able to take the risk due to lack of training, little is documented of SMEs innovations in Nigeria. So, this study aims to unravel the influence of training, innovation and risk-taking ability on SMEs development in Abuja, Nigeria.

Entrepreneurial training, risk-taking, and innovativeness are complicated issues vis-a-vis SME development. For the reason of their size, and financial capacity SMEs often have less skills; while their risk-taking and innovative abilities are also limited, thus making them unable to contend with big organizations. Couple with the dissenting views of researchers on the influence of these variables on SMEs development, this research attempts to study the influence of these variables (entrepreneurial training, risk-taking and innovativeness) on SMEs development in Nigeria.

### *1.2 Objective of the Study*

The study was guided by the objectives below;

- To examine the influence of entrepreneurial training on SMEs development in Abuja, Nigeria.
- To assess the influence of risk-taking on SMEs development in Abuja.
- To examine the influence of innovativeness on SMEs development in Abuja

### *1.3 Research Hypotheses*

The study tested the following hypothesis

H<sub>1</sub>: Entrepreneurial training, has significance influence on small and medium-sized enterprise development and performance in Abuja.

H<sub>2</sub>: Risk-taking has significance influence on small and medium-sized enterprise development and performance in Abuja.

H<sub>3</sub>: Innovativeness has significance influence on small and medium-sized enterprise development and performance in Abuja.

## **2. Literature Review**

### *2.1 Concept of SMEs Development*

Small and medium-sized enterprises (SMEs) are viewed widely as the bedrock of economic development according to Robson, Haugh and Obeng (2009). Because of the role SMEs play in national economic development of any nation, countries have been searching for ways to stimulate their economic growth through more and better SMEs development (Oly Ndubisi & Iftikhar (2012).

Small and medium-sized enterprises were considered to be the driving force in economic development because of their contribution to job creation and technological innovations (Kumar and Subrahmanya 2010). While according to Mbugua, Mbugua, Wangoi, Ogada and Kariuki (2013) and Kirby and Kaiser (2003), a nation's economy depends largely on the number of SMEs operators. In their views, a large number are employed in the SMEs sector than in public sector.

Also, according to Ebiringa (2011), SMEs perform a major function in economic development of several countries in the world. He, therefore, said that SMEs contribute immensely to the achievement of general economic development, which most times lead to GDP growth, improvement in the standard of living and generate employment; thereby reducing unemployment (Abdul, 2018; Syed, Ahmadani, Shaikh & Shaikh 2012).

SMEs were seen as the connecting link between the community and the larger global economy (Oke, Burke & Myers 2007; Thurik, 2009; Carree & Thurik, 2005). They also serve as a source of job creation, technological growth, and innovation (Kusumawardhani, McCarthy & Perera, 2009). According to Aigboduwa and Oisamoje (2013) and Oyelaran-Oyeyinka and McCormick, (2007), in Nigeria SMEs have great growth potentials and will contribute a very significant part of the country's GDP in time to come. While Owusu-Frimpong and Nwankwo (2012) opined that 50% of Nigeria's employment is provided by SMEs and SMEs also contribute 50% of the nation's industrial output. SMEs serve as a path to attaining national economic objectives such as poverty reduction. They enhance indigenous technologies, thereby improving entrepreneurial capabilities.

According to Oyelaran-Oyeyinka, Adelaja and Abiola (2007); Kadiri (2012); and Asenge, Diaka and Soom (2018), SMEs stimulate economic activities, enhance standard of living, lead to increase in technological advancement, creation of new products and service and lead to new and or improved ideas and ways of doing things. According to these researchers, SMEs are the building block and cornerstone for economic growth and social development, it improves the lives of rural dwellers and leads to an increase in revenue generation. For instance, 99% of the factory workers in Japan are employed in the SMEs sector, while 74% of the Korean workforce is employed in the SMEs sector. These two nations are very industrialized, this implies that the majority of technologies that emanate from these countries come from the SMEs sector of their economy. In the United State of America, 87% of the workforce is employed in the SMEs sector; while the SMEs sector in Germany employs 72% of the country's workforce. In view of these, we see that SMEs have the prospect of employing more labour and increasing production, if properly harnessed; thereby increasing the nation's GDP and reducing unemployment.

## 2.2 Concept of Entrepreneurial Training

Different writers have defined training in different ways (e.g. Dipboye, 2018; Bell, Tannenbaum, Ford, Noe & Kraiger 2017). While some definitions lay emphasis on current knowledge, skill and ability needs; others concentrating on impending needs. Training, however, can be defined as consisting of both 'training and development' with training concentrated on knowledge, skills and abilities (KSAs) required for the current job role and development aiming at KSAs required for a future role (Garavan, 1995; Kraiger, Passmore, dos Santos & Malvezzi, 2014). Therefore the future component is conceptualized as development.

The importance of training has been emphasised by numerous researchers. Cases in point are (Aguinis & Kraiger, 2009; Kim & Ployhart, 2014; Noe, Clark & Klein 2014) who contended that training improves organisational performance comprising productivity, innovation, customer service quality and financial performance.

There have been reported cases of high failure rates of SMEs, as many of the small and medium-sized businesses do not survive the first 3 years of operation, hence dying at infant. One of the reasons that have been alluded to this death of SMEs has been lack of or inadequate entrepreneurial training (Bowen, Morara & Mureithi 2009).

According to Nduta, (2016) a key ingredient to SMEs growth and development is entrepreneurial training. She opined that the outcomes of entrepreneurial training in SMEs development include a better and a more robust business management technique, adoption of new technologies and business linkages. Entrepreneurial training is said to be on the increase around the world according to Kirby (2004).

According to Lindh and Thorgren (2016), entrepreneurial training opens the door to opportunity recognition, improves the creative abilities of the entrepreneur, increases business growth and making him/her think critically. While Long and Chrisman (2014), saw entrepreneurial training as a way of increasing entrepreneurial skills such as creativity, determination, decision making, resourcefulness, cognitive reasoning and leadership abilities. Namusonge (2006), argued that entrepreneurial training stimulates entrepreneurship and business growth. He is of the view that SMEs that adopt entrepreneurial training has 9% more survival rate than those without training programs.

### 2.2.1 Apprenticeship as a type of entrepreneurial training

Apprenticeship is a method in which trainees learn a trade or craft through hands-on experience while working with a skilled worker in that profession. It is further defined as an arrangement in which someone learns a job, an art or a trade under another person who is experienced in the chosen field (Mohrenweiser & Backes-Gellner 2010; Ogundele, Akingbade & Akinlabi 2012). While an apprentice is that person who has embarked on the process of learning from an experienced worker (Sterelny 2012).

Gambin and Hogarth (2016), argued that apprenticeship is a cost-effective and efficient method through which workers are impacted with the right and exact skills needed for them of their duties and for a particular line business. Before now, there has a general misconception that apprenticeship is needed only in the manufacturing sector; but in the true sense of it, it is needed in every field of human endeavor. For instance, in today's world, a young accountant would have to undergo training under an experienced accountant. The same is applicable to those in the medical profession. But unfortunately, according to Bilau, Ajagbe, Kigbu, and Sholanke, (2015) and Ogundele, et al. (2012), even with its numerous benefits, apprenticeship is not considered as a path to career by schools.

Apprenticeship inculcates entrepreneurial skills and knowledge which is a key requirement for SMEs development and facilitates easy entry into self-employment. According to Mungai (2012), apprenticeship equips and provides the entrepreneur and or artisan with on-the-job training, thus giving him/her the required skill for the job at hand. He also argued that the training duration is dependent on the nature of business or trade the apprentice intends to embark on. Mungai (2012) further opined that apprenticeship training bridges the skill gap in the SMEs sector.

### 2.3 *Concept of Innovativeness*

Gherghina, Botezatu, Hosszu and Simionescu (2020) describe innovation to epitomise the process of assigning a certain product on the market (goods or services), a new one or a significantly enhanced one. Innovation centres on the collaboration between research and industry, due to the need for concluding the research through hands-on results associated with the technical and technological developments (Gherghina, Botezatu, Hosszu & Simionescu 2020).

Innovation is defined as coming up with ideas or ways of doing things, therefore everyone can actually innovate. Hence, when innovation is brought into a business, it saves time and money and give competitive edge to such business in the marketplace (Sosna, Trevinyo-Rodríguez & Velamuri 2010). It has also been defined as changing or creating more effective processes, ideas and or products (Trimi & Berbegal-Mirabent 2012). When applied to SMEs, it could refer to implementing new ideas, improving existing processes, businesses or products (Havlíček, Thalassinou & Berezkinova 2013); it is also viewed as a catalyst to business growth and successes.

Rosenbusch, Brinckmann and Bausch (2011) posit that people often mistake invention to innovation. In his view, while innovation deals with changing business model and adapting to deliver better and superior products and services, invention refers to creation of a new their thing or novelty entirely. He ended up my saying that innovation must be an integral part of a business to wants to succeed in today's business environment.

Innovation increases the likelihood of a business to succeed. Businesses that innovate create an efficient and better processes to work, better performance and much more productive than those that do not innovate (Trimi & Berbegal-Mirabent 2012; Sosna et al. 2010).

The process of making something new or doing something in new way was viewed as being innovative by Rhee, Park and Lee (2010). To them it is just about making something new or differently, but making something better which leads to business improvement. It is said to involve developing or improving existing processes, technologies and designs; to increase efficiency, solve problems and increase profit. The following were mentioned as procedures that could lead to businesses innovativeness; conducting market trend analysis, consultation with customers and employees to improve ideas and processes, seek advice from experts, open-mindedness to new ideas, strategy development, responsive plan, training and finally exploitation of new ideas (Rhee, et al 2010; Trimi & Berbegal-Mirabent 2012).

According to Wiengarten, Fynes, Cheng and Chavez (2013), importance of innovativeness to businesses include improve productivity, cost reduction, competitive edge, brand value, improve relationships and partnerships, and improve profitability. While the dangers of a business not being innovative include market loss, low productivity, loss of key staff, reduced profit margin and ultimately business failure (going out of business).

### 2.4 *Concept of Risk-Taking*

Risk-taking is central to all current societal issues (Rasborg 2012). There have been several contradictions about the dynamics and complexities of risk taking.

Today's world is characterized by risks; risk is seen as being part of everyday normal life (Rasborg, 2012). In today's world, risk-taking is seen to be central to understanding people's perceptions and changes in the environment. According to Zinn (2016), the present-day risk-taking concept consists of two notions: prevention or minimization of risk and the notion that some advantages are only achievable through risk-taking.

Risk-taking foresees sometime a possible negative outcome. By implication, not only positive outcomes but negative outcomes also must be considered by the decision-maker when taking a risk.

According to Lyng (2014) and Lupton (2006), risk-taking can be classified into voluntary and non-voluntary risks. Voluntary risks are risks taken deliberately by an individual with the full knowledge (consciousness) that the

venture or enterprise being embarked upon is risky. It also called risk-taking by choice. Such risk-taking has some degree of control and the person who embarks on such risk is a decision making, thus deciding when to proceed and when to call it to quit. Conversely, Zinn (2015) viewed the argument of voluntary notion as questionable; saying that risk-taking is often shaped by societal conditions.

Risk-taking on its own is backed by different intent and motives. Sometimes it might be aiming for a material gain, developing an identity for oneself or in pursuit of a new idea. Hayenhjelm (2006), suggested that people take risks sometimes due to unfavourable and unbearable situations such as material, physical and emotional. He further said that some risks are taken under pressure where the decision-maker does not have the resources or willpower to resist that situation. According to him in faced with condition, risk-taking is no longer voluntary as it becomes desperate response to existential suffering. An example may suffice, such migrants and refugees who pay smugglers to embark on a high-risk journey.

Risk-taking is major attribute of entrepreneurship, thus a major part of small and medium-sized businesses. According to Keh, Nguyen and Ng (2007), "the higher the risk-taking orientation, the higher business profitability and growth".

Another way of referring risk-taking in SMEs is the uncertainties that result from entrepreneurial behaviour (Tajeddini, 2014). It involves in embarking on calculated and manageable risks aimed at obtaining benefits (Dess & Lumpkin 2005; Morris, Kuratko, and Covin 2010). It also refers to SMEs willingness to commit large resources to opportunities which has reasonable chance of failure and also a willingness to deviate from established norm and tried path delving into the unknown (Naldi, Nordqvist, Sjöberg & Wiklund 2007; Okpara 2009).

## *2.5 Theoretical Framework*

The purpose of any theory is to provide the framework for the understanding, analysis and prediction of behaviours. Theoretical frameworks therefore give meaning to the observations of the researcher. From theory comes hypotheses, which on testing affords the researcher the opportunity to explain current phenomenon and behaviours and predict likely future occurrences and behaviours. Theory is a research paradigm which does not only include assumptions and hypotheses, but includes the appropriate analysis tools, and defines the research questions (Teschendoeff, Sollich & Kuehn 2014).

The theoretical framework for this study is found in the work of Vroom (1964) as referenced by Hyland (1988). The theory dealt with interaction between people's motivation and the work they perform, such as the factors that influence their work performance. According to Hyland (1988), performance has to do with multiplicative function of an individual's motivation and abilities. With this theory, Pretorius, Nieman and Van Vuuren (2005), developed a model.

In the model, Van Vuuren and Nieman (1999) assert that SMEs performance depends on entrepreneurial training and innovation which according to them was called creativity and risk-taking abilities of the managers of the business. In their view, this model should guide curriculum development for entrepreneurship training. It is upon this model that this study is based.

## *2.6 Hypotheses Development*

### *2.6.1 Entrepreneurial Training and SMEs Development*

Several studies found positive relationship between entrepreneurial training and SMEs performance such as Chowdhury, Alam and Arif (2013); Arisi-Nwugballa, Elom and Onyeizugbe (2016). However, Hughes, Hughes and Morgan (2007), have questioned this assertion. This has brought about lack of consensus on the impact of entrepreneurial training on SMEs performance among researchers.

Entrepreneurial training aids the SMEs operator, manager or owner to devise means of survival in today's business environment. It also introduces the SMEs operator/manager to the challenges that the business environment poses and the evolving methods of surmounting those challenges (Zainol, Daud, Shamsu, Abubakar & Halim 2018).

A study in Malaysia on the impact of entrepreneurial training on SMEs development also found a positive relation (Munene 2013). The study suggested that most SMEs operators still require more training in the areas of innovation, business accounting and selling skills. They concluded that entrepreneurial training increases knowledge, experience and skills required for better SMEs performance.

According to a study carried out by Bowen et al. (2009) in Nairobi, Kenya, 45% of those who received one form of entrepreneurial training or another reported a much better business growth.

Entrepreneurial training has been adjudged to be of great importance to SMEs growth. Hassan and Mugambi (2013), argued that training significantly impacted participants' final outcome. It also helps SMEs operators plan and manage modern day business challenges (Kessy & Temu 2010). In studying the effect of training on microfinance institution and their clients, Karlan and Valdivia (2011), found a positive improved business process on both microfinance institutions and their SMEs clients that have undergone training. Based on the above discussions, this study hypothesized that:

H1: Entrepreneurial Training has a significant influence on SMEs Development in Abuja, Nigeria.

#### 2.6.2 Risk-taking and SMEs Development

Kim and Vonortas (2014), studied the influence of risk-taking on Korean firms and discovered a positive association between the both. Xu (2015) was consistent with this view, when said that risk-taking statistically and economically has a positive on firms' growth and performance. And concluded that risk-taking is positively related to corporate growth and performance especially during credit crisis.

Using large panel data from manufacturing firms in Japan from 2002 – 2012, Zhu, Yuan and Zhang (2018), studied the effects of risk-taking on small and medium-sized business. They equally discovered a positive interaction between risk-taking and SMEs growth. They further argued that an enterprise is less likely to exit business decline if such firm does not take a timely and calculated risk.

Theoretical discussions on the influence of risk-taking on SMEs performance suggested positive correlation between the two variables. The abilities and willingness of SMEs to engage in high risk-taking behaviours enable SMEs operators to seize profitable opportunities even in the face of uncertainties (Smit & Watkins 2012).

According to Arshad, Rasli, Arshad and Zain (2014); Zhu et al. (2018)); Ahimbisibwe and Abaho, (2013) risk-taking empirically enables firms to hold off superior growth and long-term profitability when compared to firms that avoid risk. This study, therefore, formulates the following hypothesis:

H2: Risk-taking has significant influence on SMEs Development in Abuja, Nigeria.

#### 2.6.3 Innovativeness and SMEs Development

A study on the effect of innovation on SMEs performance conducted by Ukpabio, and Siyanbola, (2017), in Gwagwalada, Abuja, Nigeria with data from 348 SMEs operators over a 5-year period (2010 – 2015) revealed that innovation had a positive effect on SMEs performance in the Gwagwalada area. The analysis of the data derived was done using the ordinary least square (OLS) method of regression technique. But the study further revealed that, though innovation was a major determinant factor to SMEs performance, most SMEs in Gwagwalada were not innovative.

The findings of Terziovski (2010), which investigated the influence of innovation on SMEs performance on the wooden furniture manufacturing sector of the Indonesian economy was consistent with the observations of Zwingina, Opusunji and Akyuz (2017); as it also affirms a positive correlation these two variables.

According to Gnyawali and Park (2009), entrepreneurial training, risk-taking and innovativeness exert a positive influence on performance among SMEs especially those involved in e-business activities. This study was conducted using 339 small and medium-sized businesses (SMEs) drawn from Spain, Norway and Finland. They argued these variables (training, innovativeness and risk-taking) explain the variations in e-business competencies and performances.

In attempting to discover the mediating effect of innovation on the growth of SMEs, Rhee, Park and Lee (2010) sent 700 questionnaires to small and medium-sized businesses in Taiwan. On the analysis of the responses from the returned questionnaires, they discovered that innovation significantly had a positive effect on the growth of SMEs in Taiwan.

Demirbas, Hussain and Matlay (2011), also investigated the influence of innovation on the Turkish automotive supply industry. The research involved 117 respondents which cut across R&D department, marketing department and production department. The research found that SMEs development and innovativeness are positively related. The study thus hypothesized the following hypothesis:

H3: Innovativeness has significant influence on SMEs Development in Abuja, Nigeria.

### **3. Research Methods**

#### *3.1 Research Design*

The term research design deals with the method adopted for collection, measurement and analysis of data. This outlines procedures the researcher intends to take from hypotheses to the final analysis of data; the design adopted for this research is descriptive study. The reason behind the choice of descriptive research is because it seeks to provide accurate description of observations of phenomena (Cooper & Schindler 2014; Hakim, 2012).

The focus of this study is on the influence of entrepreneurial training, risk-taking and innovativeness on small and medium-sized enterprises (SMEs) development, with particular reference to Abuja, Nigeria. The research adopted a quantitative approach, this is because quantitative method of research measures and uses numerical data to explain observed phenomenon (Saunders, Lewis & Thornhill 2009 p.151).

Quantitative approach often makes use of questionnaire for the purpose data collection. There was also issue of localization

#### *3.2 Research Population*

Mugenda and Mugenda (2003) assert that research population is the population to which the researcher intends to generalize the study's results. Similarly, population in research refers to the group of people who are meant to be subject to a piece of research (Denscombe, 2014; Ritchie, Lewis, Nicholls & Ormston 2013). The target population in this study are the owners, managers, operators and employees of some registered small and medium sized enterprises in Abuja, with particular reference to those in Abuja Municipal Area Council (AMAC). This is because the research intends to measure the influence of risk-taking, innovativeness and entrepreneurial training on growth and development of SMEs; and majority of the registered SMEs are located in this Area Council. The research population, therefore, is 2825 SME owners operating within Abuja FCT.

#### *3.3 Sample Size*

Denscombe (2014) stated how sample size allows the researcher reduces the total quantity data by focusing on a subset of the population rather than the entire population. In the course of this research, SMEs were randomly selected from diverse types and sectors of business in Abuja Municipal Area Council, Abuja, Nigeria.

With the difficulty of obtaining accurate data on the population of SMEs in the Area Council, therefore the sample size was calculated using the Raosoft sample size calculator ([www.raosoft.com](http://www.raosoft.com)). A sample size of 339 was drawn from a population of 2825.

### 3.4 Measurement Model

As a quantitative research, the study embraces numerical manipulation and representation of observations with actual aim of explaining and or describing the characteristics of the manifested observations. The 5-point Likert scale used were represented by numeral figures where 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree and 5 = strongly agree. The items measuring risk-taking followed the approach adopted by Wabungu, Gichira, Wanjau, & Mungatu, (2015) as used by Lawal, Adegbuyi, Iyiola, Ayoade and Taiwo (2018), though with some modifications. SMEs development and performance were a modification of the SMEs performance approach adopted by Khan and Khalique (2014).

### 3.5 Model Specification

Regression model was used in the analysis of the data derived from the questionnaire. The regression equation had three explanatory variables and one dependent variable. In order to regress the explanatories against the dependent, a model had to be followed. Below is the assumed model

$$\text{SMEs\_Dev} = \beta_0 + \beta_1T + \beta_2R + \beta_3I + \epsilon_i$$

Where:

SMEs\_Dev = SMEs Development and Performance

T = Entrepreneurial training

R = Risk-taking

I = Innovativeness

$\beta_1$  = Coefficient of Entrepreneurial training

$\beta_2$  = Coefficient of Risk-taking

$\beta_3$  = Coefficient of Innovativeness

$\epsilon_i$  = Error term

## 4. Data Presentation, Analysis and Discussion of Findings

This section focuses on presentation and analysis of data collected through surveying (questionnaires) various stakeholders on their views on the influence of training, innovation and risk-taking on small and medium business performance. The ordinary least square (OLS) regression method was adopted for the analyses, this is done using SPSS statistical software. Both the demographic and regression analyses were done in this section to help us unravel the spread and the influence of the explanatory variables on the dependent variable. The section ended with the interpretation of the findings in relation to the research questions and the hypotheses formulated.

### 4.1 Questionnaire Return Rate

A total of three hundred and thirty-nine (339) questionnaires were administered and one hundred and forty-seven were returned duly completed, representing 43% response rate.

Table 4.1: Questionnaire Return Rate

Response Rate	Frequency	Percentage
Response	147	43
Non-Response	192	57
<b>Total</b>	<b>339</b>	<b>100</b>

Sekaran (2003) recommends a 30 percent response rate as appropriate for a survey research. Accordingly, the response rate in this study was appropriate representation of the target population that can be reliable for data analysis.

#### 4.2 Interpretations

Having ascertained the validity and reliability of the data; we needed to also verify its suitability for regression analysis. On this wise, some linear regression assumptions were tested. Figure 4.1 showed the normality test output. This result indicated that majority of the points fall within the accepted region of the normal probability plot, thus, showing that the data were normally distributed.

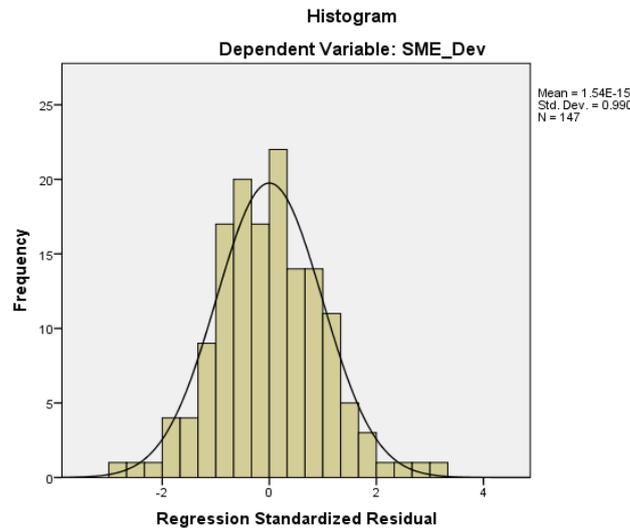


Figure 4.1: Normality Histogram

Furthermore, Figure 4.2, showed the linearity graph; it is observed from the chart that data points were clustered along the regression line (line of best fit) with no outlier; hence, the linearity condition is satisfied. Lastly, on checking for the assumption of no multicollinearity; we discovered from the Durbin-Watson (Table 4.3) value of 2.266, which is an indication of no multicollinearity. Having tested and satisfied the assumptions for linear regression, we then proceeded to test the influence of the independent variables on the dependent.

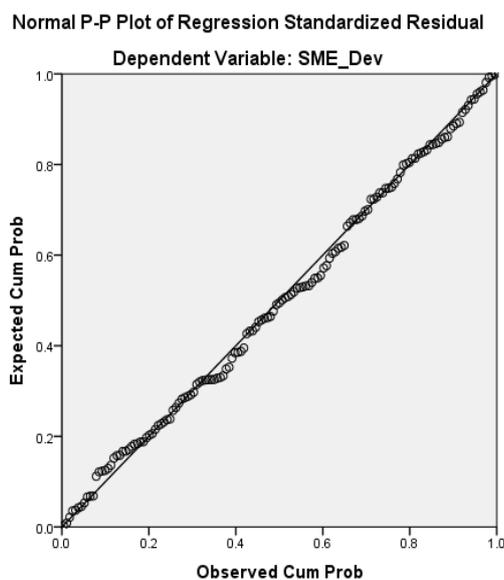


Figure 4.2: Linearity P-P Plot

In the bid to arrive at our research objectives, the data were analyzed as shown by the outputs.

Table 4.2 showed the reliability statistics. This analysis tested for the reliability and validity of the research data (research instrument). The Cronbach's alpha indicated a value of 0.710, this implies that the data are reliable and valid for the research as it shows 71.0 percent reliable. Reliabilities less than 0.6 are considered to be poor, those in the range of 0.7 are considered acceptable while those within 0.8 and above are considered good (Cronbach 1951; Sekaran and Bougie 2010).

Table 4.2: Reliability Statistics

Cronbach's Alpha	N of Items
.710	4

Table 4.3 showed that .558 of the variability of SME development and performance (dependent variable) is explained by entrepreneurial training, innovativeness and risk-taking (independent variables). This discovery suggests that 55.8% of small and medium businesses performing well are those that have been in some of training, innovation and able to take risks.

Table 4.3: Model Summary<sup>b</sup>

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin Watson
1	.747 <sup>a</sup>	.558	.548	2.297	2.266	

a. Predictors: (Constant), Innovativeness, Risk\_Taking, Ent\_Training

b. Dependent Variable: SME\_Dev

On testing for the significance of the influence of independent variables on the dependent variable; the ANOVA (Table 4.4) showed that  $p < 0.05$ . This suggests that at any rate, one of the three independent variables (training, risk-taking and innovativeness) statistically affect SMEs development and performance with a p-value of 0.000.

Table 4.4: ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	951.019	3	317.006	60.101	.000 <sup>b</sup>
	Residual	754.260	143	5.275		
	Total	1705.279	146			

a. Dependent Variable: SME\_Dev

b. Predictors: (Constant), Innovativeness, Risk\_Taking, Ent\_Training

On revealing that entrepreneurial training and innovativeness (independent variables) were indeed significant in influencing SMEs development and performance, we then ascertained the actual contribution of each of these variables to SMEs development and performance based on the responses of the respondents. This further led to the discovery that most of the risks taking by majority of the respondents have negative effects on their business, which resulted in a negative coefficient for risk-taking. In terms of individual contribution, it was established that Ent\_Training contributed .491 or 49.1 percent to SME\_Dev, while Innovativeness contributed .201 or 20.1 percent to SME\_Dev. These actual contributions led to the construction of the actual model, derived from the assumed model. The model is presented thus;

$$\text{SMEs\_Dev} = \beta_0 + \beta_1T + \beta_2R + \beta_3I + \epsilon$$

$$\text{SMEs\_Dev} = 8.497 + .491\text{Ent\_Training} + .201\text{Innovativeness}$$

This above model explains that entrepreneurial training, and innovativeness influence SME development.

Table 4.5: Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	8.497	1.974		4.305	.000
	Ent_Training	.491	.049	.634	10.021	.000
	Risk_Taking	-.033	.078	-.024	-.418	.676
	Innovativeness	.201	.055	.224	3.678	.000

a. Dependent Variable: SME\_Dev

## 5. Discussion on Findings

The findings of this study give high prominence to entrepreneurial training in complementing the other element in developing the entrepreneurship programme in Abuja Nigeria. It is worthy of note that the literature review underscores the importance and role of training in the activity of entrepreneurship project. Consequently, the outcome of this study has re-echoed the thoughts and findings of prior scholarly works of Zainol, Daud, Shamsu, Abubakar and Halim 2018 and Chowdhury, Alam and Arif (2013); Arisi-Nwugballa, Elom and Onyeizugbe (2016). Additionally, the findings reiterate the affirmative role of innovativeness in the cause of developing SME in Abuja Nigeria. The outcome of this extant research suggests that entrepreneurial innovativeness has a significant relationship with SMEs development and performance in Abuja, Nigeria. The results provide support for the view that Innovativeness has significant influence on SME development and performance in Abuja. This finding is consistent with Ukpabio and Siyanbola, (2017).

## 6. Conclusion and Recommendation

On the basis of the findings of the empirical study, the researcher made several recommendations to guide business owners in Abuja, Nigeria. The results of this study show that both entrepreneurial training and innovativeness are significant to SME development and performance. Therefore, entrepreneurial training should be taken seriously by SMEs operators as the business world experience is much more than academic exercise. Furthermore, SMEs operators should find a way to innovate if they must survive the harsh and competitive business environment. Finally, as much as it lies within the power of the SME operator, the owner should avoid uncalculated risk, as not all risks are worth taking.

## References

- Abdul, O. E. (2018). Entrepreneurial skills and growth of Small and Medium Enterprise (SMEs): A comparative analysis of Nigerian entrepreneurs and Minority entrepreneurs in the UK. *International Journal of Academic Research in Business and Social Sciences*, 8(5), 27-46.
- Aguinis, H., & Kraiger, K. (2009). Benefits of Training and Development for Individuals and Teams, *Organizations and Society. Annual Review of Psychology*, 60, 451-474.
- Ahimbisibwe, Godwin M., & Abaho, E. (2013). Export entrepreneurial orientation and export performance of SMEs in Uganda. *Global Advanced Research Journal of Management and Business Studies*, 2(1), 056-062.
- Aigboduwa, J. E., & Oisamoje, M. D. (2013). Promoting small and medium enterprises in the Nigerian oil and gas industry. *European Scientific Journal*, ESJ, 9(1).
- Arisi-Nwugballa, E. A., Elom, M. E., & Onyeizugbe, C. U. (2016). Evaluating the relevance of entrepreneurial orientation to the performance of micro, small and medium enterprises in Ebonyi State, Nigeria. *International Journal of Academic Research in Accounting, Finance and Management Science*, 6(3), 222-234.
- Arshad, A. S., Rasli, A., Arshad, A. A., & Zain, Z. M. (2014). The impact of entrepreneurial orientation on business performance: A study of technology-based SMEs in Malaysia. *Procedia-Social and Behavioral Sciences*, 130, 46-53.
- Asenge, E. L., Diaka, H. S., & Soom, A. T. (2018). Entrepreneurial mind-set and performance of small and medium scale enterprises in Makurdi Metropolis, Benue State-Nigeria. *International Journal of Innovation: IJI Journal*, 6(2), 124-146.

- Azudin, A. & Mansor, N. (2017). Management accounting practices of SMEs: The impact of organizational DNA, business potential and operational technology. *Asia Pacific Management Review*, 23(3), 222-226. <https://doi.org/10.1016/j.apmr.2017.07.014>
- Bilau, A. A., Ajagbe, A. M., Kigbu, H., & Sholanke, A. B. (2015). Review of shortage of skilled craftsmen in small and medium construction firms in Nigeria. *Journal of Environment and Earth Science*, 5(15).
- Bowen, M., Morara, M., & Mureithi, M. (2009). Management of business challenges among small and micro enterprises in Nairobi-Kenya. *KCA journal of business management*, 2(1).
- Carree, M. A., & Thurik, A. R. (2005). *Understanding the role of entrepreneurship for economic growth* (No. 1005). Papers on Entrepreneurship, Growth and Public Policy.
- Chowdhury, M. S., Alam, Z., & Arif, M. I. (2013). Success factors of entrepreneurs of small and medium sized enterprises: Evidence from Bangladesh. *Business and Economic Research*, 3(2), 38.
- Cooper, D. R., & Schindler, P. S. (2014). *Business Research Methods*. The McGraw– Hill Companies.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Demirbas, D., Hussain, J. G., & Matlay, H. (2011). Owner-managers' perceptions of barriers to innovation: empirical evidence from Turkish SMEs. *Journal of Small Business and Enterprise Development*, 18(4), 764-780.
- Denscombe, M. (2014). *The good research guide: for small-scale social research projects*. McGraw-Hill Education (UK).
- Dess, G. G., & Lumpkin, G. T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Perspectives*, 19(1), 147-156.
- Dipboye, R. L. (2018). Work Analysis. In *The Emerald Review of Industrial and Organizational Psychology*, 495-534. Emerald Publishing Limited.
- Dowling, M., O'Gorman, C., Puncheva, P., & Vanwalleghem, D. (2019). Trust and SME attitudes towards equity financing across Europe. *Journal of World Business*, 54(6), 101003.
- Ebiringa, O. T. (2011). Entrepreneurship venturing and Nigeria's economic development: The Manufacturing sector in focus. *International Journal of Business Management & Economic Research*, 2(6), 376-381
- Fassin, Y. (2008). SMEs and the fallacy of formalising CSR. *Business ethics: a European review*, 17(4), 364-378.
- Gambin, L., & Hogarth, T. (2016). The costs and benefits of apprenticeships to employers: policy, funding and training quality. In *Human resource management, innovation and performance* (pp. 80-94). Palgrave Macmillan, London.
- Gnyawali, D. R., & Park, B. J. (2009). Co-opetition and technological innovation in small and medium-sized enterprises: A multilevel conceptual model. *Journal of small business management*, 47(3), 308-330.
- Garavan, T. N. (1995). HRD stakeholders: Their philosophies, values, expectations and evaluation criteria. *Journal of European Industrial Training*, 19(10), 17-30.
- Gherghina, Ștefan Cristian, Botezatu Mihai Alexandru, Hosszu, Alexandra and Simionescu, Liliana Nicoleta (2020). "Small and Medium-Sized Enterprises (SMEs): The Engine of Economic Growth through Investments and Innovation." *Sustainability* 12, no. 1 (2020): 347.
- [http://smedan.gov.ng/images/NATIONAL SURVEY OF MICRO, SMALL & MEDIUM ENTERPRISES \(MSMES\).pdf](http://smedan.gov.ng/images/NATIONAL_SURVEY_OF_MICRO,_SMALL_&_MEDIUM_ENTERPRISES_(MSMES).pdf)
- Hakim, C. (2012). *Research Design: Successful Designs for Social Economics Research*. Routledge.
- Hassan, I. B., & Mugambi, F. (2013). Determinants of growth for women owned and operated micro enterprises: The case of Garissa, Kenya. *International Journal of Business and Commerce*, 2(7), 45-55.
- Havlíček, K., Thalassinou, I. E., & Berezkinova, L. (2013). Innovation Management and Controlling in SMEs. *European Research Studies Journal*, 16(4), 57-70.
- Hayenhjelm, M. (2006). Out of the ashes: hope and vulnerability as explanatory factors in individual risk taking. *Journal of Risk Research*, 9(03), 189-204.
- Hyland, M. E. (1988). Motivational control theory: An integrative framework. *Journal of Personality and Social Psychology*, 55(4), 642
- Iwu, C. G., & Opute, A. P. (2019). Eradicating Poverty and Unemployment: Narratives of Survivalist Entrepreneurs. *Journal of Reviews on Global Economics*, 8, 1438-1451.
- Kadiri, I. B. (2012). Small and medium scale enterprises and employment generation in Nigeria: the role of finance. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 33(845), 1-15.
- Karlan, D., & Valdivia, M. (2011). Teaching entrepreneurship: Impact of business training on microfinance clients and institutions. *Review of Economics and statistics*, 93(2), 510-527.
- Keh, H. T., Nguyen, T. T. M., & Ng, H. P. (2007). The effects of entrepreneurial orientation and marketing information on the performance of SMEs. *Journal of business venturing*, 22(4), 592-611.
- Kessy, S., & Temu, S. S. (2010). The impact of training on performance of micro and small enterprises served by microfinance institutions in Tanzania. *Research Journal of Business Management*, 4(2), 103-111.
- Khan, M. W. J., & Khalique, M. (2014). An overview of small and medium enterprises in Malaysia and Pakistan: past, present and future scenario. *Business and Management Horizons*, 2(2), 38-49.

- Kim, Y. & Ployhart, R.E. (2014). The effects of staffing and training on firm productivity and profit growth before, during and after the Great Recession. *Journal of Applied Psychology*, 99(3), 361-389. DOI: 10.1037/a0035408361.
- Kim, Y., & Vonortas, N. S. (2014). Managing risk in the formative years: Evidence from young enterprises in Europe. *Technovation*, 34(8), 454-465
- Kirby, D. A., & Kaiser, S. (2003). Joint ventures as an internationalization strategy for SMEs. *Small Business Economics*, 21(3), 229-242.
- Kirby, D. A. (2004). Entrepreneurship education: can business schools meet the challenge? *Education+ training*, 46(8/9), 510-519.
- Kraiger, K., Passmore, J., Dos Santos, N. R., & Malvezzi, S. (Eds.). (2014). *The Wiley Blackwell handbook of the psychology of training, development, and performance improvement*. John Wiley & Sons.
- Kumar, R. S., & Subrahmanya, M. B. (2010). Influence of subcontracting on innovation and Economic performance of SMEs in Indian automobile industry. *Technovation*, 30(11-12), 558-569.
- Kusumawardhani, A., McCarthy, G., & Perera, N. (2009). Framework of entrepreneurial orientation and networking: a study of SMEs performance in a developing country.
- Lawal, F. A., Adegbuyi, O. A., Iyiola, O. O., Ayoade, E. O., & Taiwo, A. A. (2018). Nexus between Informal Networks and Risk-Taking: Implications for Improving the Performance of Small and Medium Enterprises (SMEs) in Nigeria. *Academy of Strategic Management Journal*, 17(2).
- Lindh, I., & Thorgren, S. (2016). Entrepreneurship education: the role of local business. *Entrepreneurship & Regional Development*, 28(5-6), 313-336.
- Long, R. G., & Chrisman, J. J. (2014). *Management succession in family business* (pp. 371-387). Sage Publications: London, UK.
- Luo, P.F.; Wang, H.M.; Yang, Z.J. Investment and financing for SMEs with a partial guarantee and jump risk. *European Journal of Operations Research*. 2016, 249, 1161–1168.
- Lupton, D. (2006). *Sociology and risk. Beyond the risk society: Critical reflections on risk and Human security*, 11-24.
- Lyng, S. (2014). Action and edgework: Risk taking and reflexivity in late modernity. *European Journal of Social Theory*, 17(4), 443-460.
- Mbugua, J. K., Mbugua, S. N., Wangoi, M., Ogada, J. O., & Kariuki, J. N. (2013). Factors affecting the growth of micro and small enterprises: A case of tailoring and dressmaking enterprises in Eldoret. *International Journal of Business and Social Science*, 4(5).
- Mohrenweiser, J., & Backes-Gellner, U. (2010). Apprenticeship training: for investment or substitution?. *International Journal of Manpower*, 31(5), 545-562.
- Morris, M. H., Kuratko, D. F., & Covin, J. G. (2010). *Corporate entrepreneurship & innovation*. Cengage Learning.
- Mugenda, O., & Mugenda, A. (2003). *Research methods: Quantitative and qualitative approaches*. 2nd Nairobi: Nairobi: Act press pp45-49.
- Munene, B. G. (2013). *Impact of entrepreneurial training on performance of micro, small and medium enterprises in Nakuru County* (doctoral dissertation, Kenyatta University).
- Mungai, B. (2012). *The Relationship between Business Management Training and Small and Medium-Sized Enterprises' Growth in Kenya*. Unpublished PhD Thesis, Kenyatta University.
- Musawa, M. S., & Wahab, E. (2012). The adoption of electronic data interchange (EDI) technology by Nigerian SMEs: A conceptual framework. *Journal of Business Management and Economics*, 3(2), 55-68
- Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial orientation, risk taking, and performance in family firms. *Family business review*, 20(1), 33-47.
- Namusonge, M. (2006). *The role of entrepreneurship, education and training in stimulating entrepreneurial careers*. In 3rd International Entrepreneurship Conference organized by United States International University (USIU), Nairobi.
- Ndiaye, N., Razak, L. A., Nagayev, R., & Ng, A. (2018). Demystifying small and medium enterprises' (SMEs) performance in emerging and developing economies. *Borsa Istanbul Review*, 18(4), 269-281.
- Nduta, K. M. (2016). *Influence of entrepreneurial training on business growth of small and medium enterprises among youth driven initiatives in Nairobi County, Kenya*.
- Noe, R.A., Clarke, A.D.M., & Klein, H.J. (2014). Learning in the twenty-first-century workplace. *Annual Review of Organizational Psychology and Organizational Behaviour*, 1, 245-275. DOI: 10.1146/annurev-orgpsych-031413-091321.
- Nwankwo, S., Akunuri, J., & Madichie, N. O. (2010). Supporting black businesses: narratives of support providers in London. *International Journal of Entrepreneurial Behaviour & Research*, 16(6), 561-580.
- Obi, J., Ibidunni, A. S., Tolulope, A., Olokundun, M. A., Amahian, A. B., Borishade, T. T., & Fred, P. (2018). Contribution of small and medium enterprises to economic development: Evidence from a transiting economy. *Data in brief*, 18, 835-839.

- Ogundele, O. J. K., Akingbade, W. A., & Akinlabi, H. B. (2012). Entrepreneurship training and education as strategic tools for poverty alleviation in Nigeria. *American International Journal of Contemporary Research*, 2(1), 148-156.
- Oke, A., Burke, G., & Myers, A. (2007). Innovation types and performance in growing UK SMEs. *International Journal of Operations & Production Management*, 27(7), 735-753.
- Okpara, J. (2009). Entrepreneurial orientation and export performance: evidence from an emerging economy. *International Review of Business Research Papers*, 5(6), 195-211.
- Oly Ndubisi, N., & Iftikhar, K. (2012). Relationship between entrepreneurship, innovation and performance: Comparing small and medium-size enterprises. *Journal of Research in Marketing and entrepreneurship*, 14(2), 214-236.
- Opute, A. P. (forthcoming - 2019). Small and Medium Enterprises Marketing: Innovation and Sustainable Economic Growth Perspective, in *Entrepreneurship Marketing: Principles and practice of SME Marketing*. Routledge Publishers.
- Owusu-Frimpong, N., & Nwankwo, S. (2012). Service quality orientation: an approach to diffusing mindfulness in SMEs. *International Journal of Quality & Reliability Management*, 29(6), 681-698.
- Oyelaran-Oyeyinka, B., & McCormick, D. (2007). *Industrial clusters and innovation systems in Africa*. United Nations University Press.
- Oyelaran-Oyeyinka, B., Adelaja, M., & Abiola, B. (2007). *SMEs Clusters in Nigeria: Institutions, Policies and Support Systems*.
- Perez-Gomez, P.; Arbelo-Perez, M.; Arbelo, (2018). A. Profit efficiency and its determinants in small and medium-sized enterprises in Spain. *BRQ Bus. Res. Q.* 21, 238–250.
- Perrini, F. (2006). SMEs and CSR theory: Evidence and implications from an Italian perspective. *Journal of business ethics*, 67(3), 305-316.
- Pretorius, M., Nieman, G., & Van Vuuren, J. (2005). Critical evaluation of two models for entrepreneurial education: An improved model through integration. *International Journal of Educational Management*, 19(5), 413-427.
- Rasborg, K. (2012). ‘(World) risk society’ or ‘new rationalities of risk’? A critical discussion of Ulrich Beck’s theory of reflexive modernity. *Thesis eleven*, 108(1), 3-25.
- Rhee, J., Park, T., & Lee, D. H. (2010). Drivers of innovativeness and performance for innovative SMEs in South Korea: Mediation of learning orientation. *Technovation*, 30(1), 65-75.
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers*. Sage.
- Robson, P. J., Haugh, H. M., & Obeng, B. A. (2009). Entrepreneurship and innovation in Ghana: enterprising Africa. *Small Business Economics*, 32(3), 331-350.
- Rosenbusch, N., Brinckmann, J., & Bausch, A. (2011). Is innovation always beneficial? A meta-analysis of the relationship between innovation and performance in SMEs. *Journal of business Venturing*, 26(4), 441-457.
- Saunders, M., Lewis, P. and Thornhill, A. (2009). *Research Methods for Business Students*. (5th edition). Harlow: FT Prentice Hall.
- Sekaran, U. (2003). *Research Methods for Business: A Skill Building Approach*, 4<sup>th</sup> Edition, Wiley, Singapore.
- Sekaran, U., & Bougie, R. (2010). *Research Methods for Small Business. A Skill Building Approach*.
- Smit, Y., & Watkins, J. A. (2012). A literature review of small and medium enterprises (SME) risk management practices in South Africa. *African journal of business management*, 6(21), 6324.
- Sosna, M., Treviño-Rodríguez, R. N., & Velamuri, S. R. (2010). Business model innovation through trial-and-error learning: The Nature-house case. *Long range planning*, 43(2-3), 383-407.
- Sterelny, K. (2012). *The evolved apprentice*. MIT press.
- Syed, A. A. S. G., Ahmadani, M. M., Shaikh, N., & Shaikh, F. M. (2012). Impact analysis of SMEs sector in economic development of Pakistan: A case of Sindh. *Journal of Asian Business Strategy*, 2(2), 44-53.
- Tajeddini, K. (2014). The effect of organisational structure and hoteliers’ risk proclivity on innovativeness. *Asia-Pacific Journal of Management Research and Innovation*, 10(1), 1-12.
- Terziovski, M. (2010). Innovation practice and its performance implications in small and medium enterprises (SMEs) in the manufacturing sector: a resource-based view. *Strategic Management Journal*, 31(8), 892-902.
- Teschendorff, A. E., Sollich, P., & Kuehn, R. (2014). Signalling entropy: A novel network-theoretical framework for systems analysis and interpretation of functional omic data. *Methods*, 67(3), 282-293.
- Thurik, A. R. (2009). *Entrepreneurship: entrepreneurship, economic growth and policy*. Entrepreneurship, growth, and public policy, 219-249.
- Trimi, S., & Berbegal-Mirabent, J. (2012). Business model innovation in entrepreneurship. *International Entrepreneurship and Management Journal*, 8(4), 449-465.
- Ukpabio, M., & Siyanbola, W. O. (2017). Technological Innovation and Performance of Manufacturing Firms in Nigeria. *International Journal of Innovative Research and Advanced Studies*, 4(11), 10-19.

- Van Vuuren, J. J., & Nieman, G. H. (1999, June). Entrepreneurship education and training: A model for syllabi/curriculum development. In 44th ICSB World Conference Proceedings.
- Wambugu, A.K., Gichira, R., Wanjau, K.N. & Mungatu, J. (2015). The relationship between risk-taking and small and medium agro processing enterprises in Kenya. *International Journal of Economics, Commerce and Management*, 111(12), 441-455.
- Wiengarten, F., Fynes, B., Cheng, E. T., & Chavez, R. (2013). Taking an innovative approach to quality practices: exploring the importance of a company's innovativeness on the success of TQM practices. *International Journal of Production Research*, 51(10), 3055-3074.
- Winfred Agbeibor (2006) Pro-poor economic growth: Role of small and medium sized enterprises, *Journal of Asian Economics*, Volume 17, Issue 1, Pages 35-40, ISSN 1049-0078, <https://doi.org/10.1016/j.asieco.2006.01.005>.  
[www.raosoft.com/samplesize.html](http://www.raosoft.com/samplesize.html)
- Xu, P. (2015). Risk taking and firm growth. RIETI Discussion Paper 15-E-061.
- Yoshino, N., & Taghizadeh-Hesary, F. (2019). Optimal credit guarantee ratio for small and medium-sized enterprises' financing: Evidence from Asia. *Economic Analysis and Policy*, 62, 342-356.
- Zainol, F. A., Daud, W. N. W., Shamsu, L., Abubakar, H. S., & Halim, H. A. (2018). A linkage between entrepreneurial leadership and SMEs performance: An integrated review. *International Journal of Academic Research in Business and Social Sciences*, 8(4), 104-118.
- Zhu, X., Yuan, Q., & Zhang, W. (2018). Inventory leanness, risk taking, environmental complexity, and productivity: A mediated moderation model. *Journal of Manufacturing Technology Management*, 29(7), 1211-1232.
- Zinn, J. O. (2015). Towards a better understanding of risk-taking: Key concepts, dimensions and perspectives.
- Zinn, J. O. (2016). Risk taking. *Routledge Handbook of Risk Studies*, 344
- Zwingina, T. C., Opusunji, M.I. and Akyuz, M. (2017). Impact of Foreign Trade Policy on Manufacturing Sector Growth in Nigeria.