

Comparative Study of Factors Affecting the Performance of Small and Medium Sized Construction Firms in Gombe State, Nigeria

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Abstract

Small and medium sized construction firms (SMSCFs) constitute more than 50% globally, yet they faced many challenges that led them not to perform well. The study aimed at comparing the factors affecting the performance of SMSCFs in Gombe through the following objectives: to determine the factors affecting the performance of small and medium sized construction firms in Gombe State, to compare the severity of the effects on the performance of the small and medium sized construction firms in Gombe State, and to determine the mitigating measures affecting the performance of small and medium sized construction firms in Gombe State. Literature was extensively reviewed to extract factors affecting performance of SMSCFs. Quantitative research design was adopted for the study with building construction professionals as the population of the study. Questionnaire instrument was designed and used to extract the primary data from the building construction professionals. The instrument was validated using a construct validity test, and the reliability of the instrument was measured to be consistency using a test-retest reliability test found to be 0.95. The

data collected was analysed descriptively using SPSS as a tool for the analysis. The results revealed that: high interest rate, high transaction cost, limited access to funds from finance institutions, absence of research and development (R&D), inadequate management skills, organizational structure, inadequate training and continuous professional development, low level of educational and technical knowledge, limited capacity to market products abroad, lack of access to global market, inadequate management of infrastructure, competitive strategies, limited access to policies, firm's ownership status, poor cooperation between the construction firms, and fixed cost of complying with regulations are the factors affecting the performance of small and medium sized construction firms in Gombe State. Absence of research and development (R&D), lack of access to global market, poor cooperation between the construction firms found to affects the performance of the small and medium sized construction firms in Gombe State severely and moderately. Government to strengthen the firms through Bank of Industry (BOI) and other financing windows, implementation of high level of

educational and technical knowledge, and available access to policies are the most mitigating measures affecting the performance of small and medium sized construction firms in Gombe State. The study recommends that: an urgent attention is needed by both the SMSCFs in order to counteract these disasters for effective performance and boosting economy activities in the host community. Management of SMSCFs should engaged in rigorous research and development and device a means on how to penetrate into global market by enhancing cooperation to ensure the necessary skills required for effective delivery of construction business is derived. Government as the major client to construction industry and all the relevant stakeholders should put hands on deck to effectively review any policy and regulations that can ensure enabling environment for SMSCFs to triumph and deliver projects on time, within quality and cost.

Keywords:

Construction Industry, Small and Medium Sized Construction Firms (SMSCFs), Contribution of Small and Medium Sized Construction Firms (SMSCFs) in Nigeria, Factors Affecting the Performance of Small and Medium Sized Construction Firms (SMSCFs).

Introduction

Construction industry globally faces challenges and problems of all kind and that there is a perception that the industry is lagging behind in terms of technological advancement, development of operational processes and keeping up to date with prevailing business trends (Ofori 2009). Construction industry is a highly dynamic sector as well as an important player in the development of any nation (Memon, Rahaman & Azis, 2012). The industry is important and plays a vital

role in the socio-economic growth of a country as well as improving the quality of life for the people by providing the necessary infrastructure such as hospitals, schools, roads and other basic facilities (Nnadi & Obasi, 2018). The African construction industry in 2017 was marked by significant growth and investment, driven by government initiatives and infrastructure development. The Government-led projects by African governments continued to drive construction projects, with 73% of projects funded by governments; Chinese involvement with their companies executed 28% of construction projects in Africa, solidifying China's position as a major player in the continent's construction landscape. However, according to Bamidele and Iyagba (2015), Nigeria as a nation is still at the infancy stage of infrastructural development where lots of construction activities are being carried out across the nation by the federal, state and local governments as the major clients of construction activities in Nigeria. Numerous researchers have highlighted the construction industry's poor production levels and assert that it lags behind other industries in terms of efficiency improvements (Bankvall *et al.*, 2010).

The construction industry converts a range of resources into social, economic and environmental infrastructure. According to Fulford and Standing (2014), when a construction project commences available subcontractors with the requisite skills are assigned. It was found that the majority of these organisations are SMEs and that they often employ local subcontractors for trade skills and physical labour (Benjaoran, 2009). Firms in the construction industry have been grouped such that Small and Medium Firms (SMFs) were found to be the majority (Ofori, 2009; Abdullah, Bilau, Enebuma, Ajagbe & Ali, 2012; Thwala, Ajagbe, Enebuma, Bilau & Long, 2012). Some of

these construction firms were reported to exhibit low commitment to production resulting from their poor performance in both physical and service delivery output (Bilau, Musibau, Bustani & Tolani, 2015); as the construction industry is dominated by small- and medium-scale contractors (SMCs) who face an emerging trend of unique challenges in the implementation of projects (Kulemek, Kululanga & Morton, 2015). Wibowo (2009) opine that the construction industry being a significant contributor to the development of both developed and developing nations provides necessary public utilities and private physical structures.

However, majority of these firms have the potential of developing into a technically better business, since they have dedicated leadership with great commitment towards better service delivery of product and services, as they have concern for continuous performance improvement in order for them to gain competitive advantage (Ajagbe & Ismail, 2014; Bilau, 2011). Small and medium-sized construction firms have the potential to enhance any nation's growth and development, because they contribute to wealth creation, value re-orientation, job creation, and poverty eradication (Ilori, 2017). Ofori (2009) went further and argued that small and medium firms (SMFs) play a vital role in the industry accounting for about 80% of the total number of construction firms, its high percentage of employment production and its being a major beneficiary of government contract in the industry. The main purpose of this developmental plan is to provide shelter, basic amenities and services such as road, water, electricity, and so on as essential needs of man to Nigeria populace and all these construction activities are carried out by contracting firms either local or international whose structure at times affect the level of construction output

(Odediran, Adeyinka, Opatunji & Morakinyo, 2012).

Statement of the Problem

In Nigeria, small and medium enterprises (SMEs) are also perceived as the key to Nigeria's economic growth, poverty alleviation and employment generation. Small building contractors are not left as they are also part of the small and medium scale enterprises (SMEs) sector (Bamidele and Iyagba, 2015). Gombe State is not left behind as it was observed that the Government has engaged the small and medium sized construction firms (SMCFs) mostly indigenous firms carrying out construction projects from across the State living all the 11 local Governments with developmental project, thus, creating jobs opportunities for the teaming youths, alleviating poverty among the citizens of the State.

Shittu (1997) summarized that the combination of the small and medium size construction firms makes up 90% of the total registered contractors in Nigeria; and these indigenous contractors are characterized by under-capitalization, under capacity utilization, understaffing, and are generally managerially handicapped. Furthermore, the small and medium sized construction firms (SMCFs) are expected to grow and flourish as a result of the support and incentive programmes given to them but the rate of business failure continues to increase because of the obstacles affecting business performance which include: lack of financial resources, lack of management experience, poor location, laws and regulations, general economic conditions, as well as critical factors such as poor infrastructure, corruption, low demand for products and services, and poverty (Akabueze, 2002). In addition, it is observed that shortage of raw materials, handicap in obtaining finance, inadequate competent

personnel, inability to control costs and problems of dumping of cheap foreign products and others. Over the years, the poor performance of this category of contractors has been a source of concern and worry particularly when compared with their foreign counterparts. Most of these small and medium sized construction firms (SMCFs) were reported to exhibit low commitment to production as a result of their poor performance in both physical and service delivery output (Ofori, 2009; Abdullah, Bilau, Enegbuma, Ajagbe, and Ali, 2012; Thwala, Ajagbe, Enegbuma, Bilau, and Long, 2012). Judging by the record of high number of bankruptcies in this group, poor quality work, mismanagement, diversion and embezzlement of project fund, and the general economic depression, the survival and growth of indigenous contractors may be difficult, particularly in view of inflationary trends, high cost of construction materials, high cost of borrowing capital, government policy change in favour of deregulation, and the current wave of global economic meltdown (Husseini, 1991). Akintunde (2003) and Ogunlana (2010) pronounced that for this reason, the Nigerian government still lacks confidence in its Construction sector.

It is in view of these aforementioned attributes; the research looked into the Factors affecting the Performance of Small and Medium Size Construction Firms in Gombe State, Nigeria with a means to compare these factors and their severity effect as well as determining the mitigating measures against these factors with a view to improving the performances of small and medium size construction firms in the study area.

Aim and Objectives of the Study

The research is aimed at comparing the Factors Affecting the Performance of Small and Medium Sized Construction

Firms in Gombe State with a view to proffer ways of improving the performance of both small and medium sized construction firms (SMSCFs); through the following objectives as follows:

- i. To determine the factors affecting the performance of small and medium sized construction firms in Gombe State.
- ii. To compare the severity of the effects on the performance of the small and medium sized construction firms in Gombe State.
- iii. To determine the mitigating measures affecting the performance of small and medium sized construction firms in Gombe State.

Literature Review

Construction Industry

Construction is defined by Eccles (1981) as the erection, maintenance, and repair of immobile structures, the demolition of existing structures, and land development. The market of the construction company is mostly local and highly volatile (Segerstedt & Olofsson, 2010) with subcontractors supplying 90% of labour and materials (Hartmann & Caerteling, 2010). Increasing complexity and competition in the industry mean that a construction company can no longer be managed as a separate entity (Zou, 2009). Bankvall *et al.* (2010) advocate a holistic view that recognises the interdependence of the components.

The construction industry converts a range of resources into social, economic and environmental infrastructure. It is one of the most influential sectors both globally and in individual countries. The construction sector contributes significantly to the gross domestic product (GDP) of all countries. It is also a major employer. It is estimated that it provides on average 7% of total global employment or some 220 million people (ILO, 2019). The construction industry involves a large range of participants. The key players are the contractors, the

consultants, the government agencies and the private investors. In addition, there are significant backward linkages like material and equipment suppliers, accountants, lawyers and insurers and also those benefitting from incomes earned and infrastructure provided (forward linkages such as retailers, transporters and exporters). According Marichova (2016), nowadays construction firms work in conditions of increasing globalization, increasing scarcity and cost of resources, geographical isolation, the result of localization of the company and insufficient capacity to adapt to ever smaller, fragmented markets. This practically means that the traditional sources of competitive advantage by differentiation based on costs resulting from realized economies of scale or scope of activities have increasingly limited influence. New economic realities, however, create new opportunities and new sources of competitive advantage. They are related to the growing importance of intangible assets, ownership, effective management and use. In Nigeria, there are over 17.2 million small and medium enterprises that represent approximately 96% of all the businesses that contribute not less than 75% of the national employment (Ilori, 2017). In the construction sector, small and medium-sized construction firms are often not considered by all categories of clients for projects of higher complexities and profitability, for fear of their abilities to meet these parameters. According to Mitrofanova, Russkova, Batmanova & Shkarupa (2015), it is the usual practice that ‘white elephant projects’ are awarded to big/large construction firms that are mostly owned by

foreign investors. This scenario has not enabled the potential of small and medium-sized construction firms to be explored in terms of global competitiveness. Besides, there is still a lack of empirical evidence on the possible correlation of construction firm size to project performance that could enable the apportionment of performance criticism of the construction industry to small and medium-sized firms (Abosede, Opawole, Olubola, Ojo & KajimoShakantu, 2019). Successful construction firm operates in an efficient, monopolistic competition with increasing market share as a result of its strong specialization in the market of building construction. The company has built lean organizational structure that includes project managers, structures associated with the development of new products, technical managers and other specialized units (Marichova, 2016). All employees, officers, managers have personal involvement in achieving strategic corporate goals. In successful firm introduced integrated management system that includes quality management, environmental management and ensure healthy and safe working conditions. Qualifications and professionalism of each employee is a guarantee for the quality of the finished sites. The company uses appropriate methods and monetary and non-monetary measures and incentives to increase staff motivation for participation in all processes related to achieving the goals of the organization with the main task is investing in staff by providing and ensuring appropriate opportunities for training and development, and objectively evaluate the work of staff (Marichova, 2016).

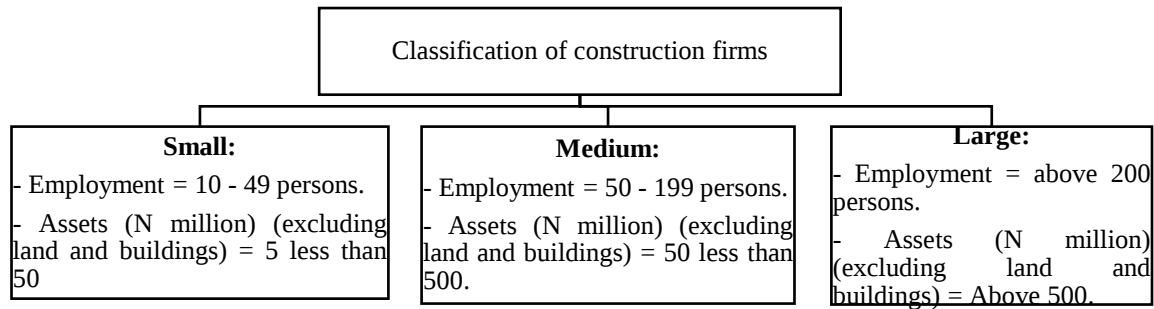


Figure 1: Classification of construction firms

Source: SMEDAN and NBS (2013);

Odediran *et al.* (2012); SMEDAN (2009).

Micro enterprises also exist with less than 10 people employment and less than 5 million assets (N million excluding land and buildings) (SMEDAN, 2009). Contracting organisations are generally classified as small, medium and large firms, on account of a number of criteria that influence the type of works they undertake (Odediran *et al.*, 2012). According to Ihua and Siyanbola (2012); Idoro and AkandeSubar (2008); Muazu and Bustani (2004), the criteria that have been adopted in the classification include scope of operation (local, regional, national, and multinational); specialisation (building and engineering); size and category of contracts (small, medium, and large), and the nationality (foreign and indigenous) of the company's owner(s). Kayanula and Quarterly (2000) highlighted that, firms differ in their levels of capitalisation, sales and employment; hence, definitions that employ measures of size (number of employees, turnover, profitability, net worth, and so on), when applied to one sector, could lead to all firms being classified as small, while the same size definition, when applied to a different sector, could lead to a different result. It was contended that the definitions of small and medium-scale enterprises vary according to contexts, authors and countries, which are defined by differences in capital requirements and levels of industrial

development (Ayyagari, Beck & Demircug-Kunt (2003). In countries such as Japan, Peru and Canada, small-scale business is defined in terms of annual turnover and the number of paid employees (Ayyagari *et al.*, 2003). Shakantu, Kajimo-Shakantu, Saidi & Mainga (2006) and Chilipunde (2007) observe that a small and medium contracting firm is a typical sole proprietorship firm, or in many cases, a family-owned business with few foremen who are mostly casual labour.

However, this current study focused on small and medium sized construction firms only. As Ametepey, Jnr and Cobbina (2022) stated that, the construction industry in most developing economies is dominated heavily by small and medium scale enterprises. Kozak (2007) and Idoro & Akande-Subar (2008) define small and medium-sized construction firms as companies with metric (usually number of employees or annual turnover) that fall below certain thresholds. Basil (2005: 44) observes that, while the number of employees and rate of turnover are good indicators, the number of employees and the total amount of turnover for defining small and medium-scale firms in different countries are certainly not similar. The Nigerian National Policy on Micro, Small and Medium Enterprises (NPMSMEs) (2007) considered the classification of firms on the basis of size, sector, organisation, technology, location, employment, turnover, assets, and paid-up capital, with the view to understanding the nature, characteristics, performance,

problems and challenges of business enterprises and for the purpose of a coherent national policy in Nigeria. In view of this, the NPMSMEs (2007) adopted classifications and definitions based on the criteria of employment and assets (excluding land and buildings), as shown in figure 1 above.

Small and Medium Sized Construction Firms (SMSCFs)

Firms practically always begin as very small entities, with low amounts of capital drawn from the savings of the owner or borrowings from friends and relatives; initial levels of employment are low, typically less than a dozen, though the figure varies with the nature of the business; the social and occupational backgrounds of the owners vary greatly; and the firms that expand into medium or large-scale activities do so continually or in steps. Expansion can be very fast for some firms, though the growth rates appear as broadly distributed as their final sizes. Small and Medium sized Construction Firms (SMSCFs) play a vital role in the industry accounting for about 80% of the total number of construction enterprise, its high percentage of employment production and its being a major beneficiary of government contract (Bilau, 2011; Ofori, 2009). The specifics of construction determine the first-place competitive advantages as a function of the established specific organizational structure as a system of strategic actions, decisions in which an important place occupied vertical links, development of human resources, specialization in specific projects and managerial skills for managing these projects (Marichova, 2016).

Apart from the numerous goods and services produced by SMFs, they provide a veritable means of large-scale employment, as they are usually labour intensive. As put forward by Abdullah, Bilau, Enebuma, Ajagbe and

Ali (2011), the Small and medium sized firms (SMSCFs) are also a source of economic development through its vast creation of employment, wealth creation and innovation by introducing competitive strategies which set them apart from other firms. They also provide training grounds. For entrepreneurs even as they rely on the use of local raw materials. Effective management of the SMEs can gradually transform into giant corporations and multinationals of the future. These contributions thus explain why government and international agencies mobilize efforts towards the realization of sustainable industrial growth and the creation of mass employment through the rapid growth and development of the small and medium enterprises (Nnanna, 2003) as cited in Musa and Danjuma (2007). These include their ability to re-engineer products and service delivery to meet clients' demand by putting in place innovative techniques or development of new strategies.

Yang and Yu (2011) recognized that the employment opportunities they create improve the livelihood of a large percentage of citizens of any nation. The importance of SMSCFs is often being overlooked by commentators (Halil & Selim, 2007), whereas most economies that drive towards industrial development is dependent on the growth of small and medium sized firms considering its large numbers and structure which under adequate conditions gives them the flexibility and ability to stand adverse economic situations. According to Marichova (2016), during production, firm ensures a reliable and efficient integrated solutions in construction, offering flexible solutions to each individual problem. It focused on quality control and customer feedback. The scope of its production includes all activities such as supply of raw materials, design and construction of objects in the market of building construction.

SMSCFs are also considered by many to be an integral part of any healthy economy considering the role they play in the creation of jobs and the fostering of innovation. Nevertheless, in the long run their importance as a provider of employment is evident and, for this reason alone, SMSCFs are necessarily of interest to those concerned with employment relations and considered to be critical to organizational (Greasly, 2005) and performance improvement in order for them to gain competitive advantage (Ofori, 2009). In practice, implementing new efficient technologies, materials and innovations allowing transformation of knowledge, intangible assets in the final result - a complex and specific construction sites performs firm as the firm achieved rapidly and quality performance of the objects in harmony with the environment (Marichova, 2016). Adherence to normative regulations is the foundation of all business strategies and plans.

Contracting firm's performance is an important element in project success and a firm's competitiveness has often been explained by the characteristics that define its ability to deliver a project within the parameters of completion time, estimated cost, and quality satisfaction (Aliyu, Haruna, Ali & Ibrahim, 2015). The success of any construction firm is related to reporting and adaptation to specific national, institutional factors in the country and the specific corporate resources that together define their value and uniqueness. The biggest problem, according to most analysts in construction is related to education, quality of the workforce and the lack of effective corporate organization. Growing requirements of investors, consumers, technology development and the creation of new materials, have a very strong impact on the company and impose the need for accelerated development and incorporation

of intangible resources in the company's organization (Marichova, 2016).

According to Marichova (2016), successful construction firm has a long history and its mission is quality, honesty, efficiency, full satisfaction of customers at ensuring safe, healthy working conditions and protection of the environment. The firm performs a wide range of activities in the construction market, has significant personnel with subsidiaries and sites in different parts of the country, which it creates highly specialized product with high quality, which is differentiated and focused on the client's wishes. The main objective of the activity is sustainable development in all its aspects, and the customers of the successful company are big investors and customers, households (Marichova, 2016). The firm focuses on the wishes of its customers and builds with them partnership.

Contributions of Small and Medium Sized Construction Firms (SMSCFs) in Nigeria

It was reported that the importance of Small and Medium Sized Construction Firms (SMSCFs) is more than the longer-term economic stability it creates due to their size and structure and other factors which grants them the flexibility and ability to weather adverse economic conditions (Ofori, 2009). The author argued that they are more labor-intensive than larger firms as a result of which they have lower capital costs associated with employment creation. Abdullah *et al.* (2012) opine that SMSCFs play an important role in the construction industry by fostering income stability, growth in the industry and also the provision of infrastructure for the economy. Christian (2010) posit that they have been a source of economic development through their vast employment and wealth creation and innovation by introducing competitive strategies which set them apart from other

firms. These include their ability to re-engineer products and service delivery to meet clients' demand by putting in place innovative techniques or development of new strategies.

Ajagbe *et al.* (2012) mentioned some of the characteristics that have distinguished small firms from larger firms. They added that large firms often times have direct access to international and local capital markets. Whereas SMSCFs do not oftentimes have such global connections due to the high-cost intermediation for smaller projects. Additionally, the fixed costs of complying with regulations, a limited capacity to market products abroad, and limited access to policy makers weigh against the SMSCFs more than the larger firm. Ismail *et al.* (2012) added that small enterprises largely operate at a threshold which falls below the regulatory and institutional constraints that inhibit other SMSCFs. Furthermore, in some cases, would expand if the barriers to their operations were removed, and because high transaction cost is among the most important barriers, their reduction will promote the creation and expansion of SMFs and, in particular, encourage micro enterprises to expand. This clearly shows that given necessary support, SMEs could play an important role in the development processes of the Nigerian economy, because, it has proved to be one of the most viable sectors with economic growth potential. Ogundele (2009) reported that the contributions of small and medium firms contribute to national development in the following ways:

- a. Smallscaleindustriestogenerateemployment for the citizens.
- b. Through the establishment of manpower development support schemes, and their involvement in the training and retraining of entrepreneurs. SMEs have provided a pool of potential entrepreneurs and business people who are well equipped to

start and successfully manage industries whether small or large.

- c. Small scale industries have stimulated rural development and the achievement of a meaningful level of broad economic and rural development.
- d. It has upgraded the social status of youths by showcasing them as very successful entrepreneurs and operators of small-scale industries.

A survey report on Micro, Small and Medium Enterprises (MSMEs) in Nigeria carried out as a collaboration between National Bureau of Statistics and the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN & NBS, 2010) revealed the activities in the Building and Construction sector which classified into two distinct groups; building such as residential and non-residential and other construction which includes roads, bridges, dams, airport, etc. In every aspect of this sector in Nigeria MSMEs can be found either at the local government, state or national level. Activities in this sector are more on the building of residential and non-residential houses by both the private and public sector which most of the activities in this regard are carried out at MSME level. However, a large chunk of activities in this sector is carried out in construction activities which are usually high-valued government financed projects executed by the various tiers of government in the country.

Factors Affecting the Performance of Small and Medium Sized Construction in Nigeria

Small and medium sized construction enterprises need to thrive in an extremely competitive business environment but their performance mostly is troubled with an overabundance of barriers that inhibit and threaten their growth and survival (Ametepey, Jnr & Cobbina, 2022). Ajagbe *et al.* (2012) suggested that for rapid growth

and development, firms must adopt a functional structure that would encourage the involvement of personnel in decision making for rapid organizational growth. Ismail *et al.* (2012) added that other challenges facing SMCFs includes limited access to funds from finance institutions and high interest rate, poor cooperation and/or linkages between SMCFs. In addition, Abdullah *et al.* (2011) maintained that larger firms doing better and cooperation with research institutions to gather knowledge for innovation, inadequate managerial skill due to inadequate employment of skilled labor. In addition to this, the absence of research and development (R&D), inadequate training and continuous professional development for firm's personnel, low level educational and technical knowledge, inadequate management of infrastructures among other factors, all constitute to the challenges of SMCFs in Nigeria.

According to Ali, Awad and Abdulsalam (2020), the problem of poor performance of the SMEs sub sector, including small-scale construction firms have been of great concern to the government, management of construction firms, construction clients and users. The governments at federal, state and local levels through budgetary allocations, policies and pronouncements have signified interest and acknowledgement of the crucial role of the SME sub-sector of the economy and hence made policies for energizing the same. However, there is no improvement in the performance of construction SMEs (Bilau, Ajagbe, Bustani & Sholanke, 2015; Agwu & Emeti, 2014; Hauptfleisch, Lazarus, Knoetze & Liebenberg, 2009). C. I. D. B. (2018); Olayeni and Omuh (2018); Kulemeka, Kululanga and Morton (2015); Agwu and Emeti (2014) had stressed the importance of implementation of remedial measures that could help construction firms to overcome various challenges affecting their performance and development. Brink,

Cant and Ligthelm (2003) conducted a survey of 300 SME businesses in which they identified so many factors among were: a lack of skilled labour, poor business location and a lack of marketing as factors that cause of SME failure in Soweto. Abor and Quartey (2010) studied the issues in SME development in Ghana and South Africa, where they used primary data through questionnaires and secondary data and they also did a literature review of results of other authors. Their findings were that a lack of appropriate technologies like computers and also regulatory constraints contribute to SME failure in Ghana and South Africa. Olawale and Garwe (2010) studied the obstacles to growth of SMEs in South Africa also used primary data collected using questionnaires and their findings were that a lack of managerial skills, lack of appropriate technologies, economic environment, lack of financial resources, crime and corruption, lack of skilled labour and a lack of supporting infrastructure such as water and electricity contribute to SME failure in South Africa.

Despite the wide-ranging economic reforms instituted in the Africa region, SMEs face a variety of constraints owing to the difficulty of absorbing large fixed costs, the absence of economies of scale and scope in key factors of production, and the higher unit costs of providing services to smaller firms (Tagoe, Nyarko & Anuwa-Amarh, 2005). During the current study, the research explored factors hindering the performance of small and medium sized construction firms (SMSCFs) in the study area, and is discuss below:

1.Limited Access to Policies

Policy inconsistencies and bureaucracy as sometimes there is delay by corporate affairs commission (CAC), too many government agencies at the ports, and midway policy reversals by government, and so on.

Moreover, there is a matter of government policy concerning SME's, the policies are there but they aren't really benefiting the majority in developing countries. The case of Nigerian government has discovered the importance of small and medium firms in boosting the economy and therefore it has an SME reform policy. In this policy the main aim is to provide government support promoting growth to SMEs in the form of loans at subsidized interest rates, free or subsidized information and advice, ensuring smaller firms get shares of government contracts and so on and so forth. Many organizations have been established to ensure these activities run smoothly for example; the National Economic Reconstruction Fund (NERFUND), the National Association of Small Scale Industries (NASSI), the National Association of Small and Medium Enterprises (NASME), the Central Bank of Nigeria (CBN), Small and Medium Enterprises Development Agency of Nigeria (SMEDAN) and the Small and Medium Industry Equity Investment Scheme (SMIEIS) as well; but the major problem remains that many small owners are not made aware of these services and surprising enough the minority ones benefiting from these schemes or services are the large scale businessmen, and it is not yet clear how government policies boost growth of small firms' theoretical wise since there aren't so many researches done on the area, but the fact remains that if these schemes and policies are put into use for the benefit of the majority, positive results will be achieved.

2.High Transaction Cost

In construction business, low transaction cost is what highly favour performance (Florian and Grigor, 2015), as transaction costs take various forms and yet there is not a universally wide-accepted theoretical definition. Three (3) aspects of identifying

transaction costs can be: The cost of participating in the market where the "price mechanism" plays a role in the firm's "make" or "buy" decisions; Internal managing costs of corporate governance, focusing on the principal-agent problem and property rights (Allen, 2000); and the cost of interaction with Public Institutions, that the costs that the firm has to bear in order to fulfill the Public Institution obligations. Ihua and Siyanbola (2012) posit that the cost of doing business in Nigeria is tremendously high though depending on the nature of business, and in addition, fluctuations in the country's currency, ~~Naira~~ on the high side, impacts upon the costs of raw materials and the general operating costs.

3.Organizational Structure

Gushibet (2011) mentioned that an important feature of SMSCFs in Nigeria have to do with the organizational structure, due to its ownership status circling around a family which resulted to either running it as a sole enterprise or partnership. Owing to this, most of the firm's organizational structure is pyramidal which in turn affects decision making and information dissemination in the firm. This has been a big challenge as decision that affect the growth of the firms are in most cases unilaterally taken by the owners of the firm. Ajagbe *et al.* (2012) suggested that for rapid growth and development, firms must adopt a functional structure that would encourage the involvement of personnel in decision making for rapid organizational growth. Organizational commitment to employees defines organization's actions and treatment of its employees for prompt employee well-being and satisfaction, providing a fair rewards system, investing in training and development, and offering competitive compensation (Eisenberger, Fasolo and Davis-LaMastro, 1990; Organ, 1990).

4.Firm's Ownership Status

There is a positive relation between SME leverage and the type of organizational structure (Coleman & Cohn, 2000). This is in line with Abor (2008) who identified the form of business as one of the factors explaining the capital structure decisions of Ghanaian SMEs. In addition, ownership structure and the type of firm were found to have a significant impact on the use of bootstrap financing. Van Auken and Neeley (1996) state that: "Owners launching firms organized as either a sole proprietorship or non-construction/manufacturing firms should be prepared to use more bootstrap financing than other firms. Owners of these types of firms should be prepared to develop a financial plan that incorporates the use of greater variety of financing alternatives than owners of firms organized other than a sole proprietorship nonconstruction/manufacturing firms. As such, a sole proprietorship of non-construction/manufacturing firms should recognize the potential for the associated greater number of constraints and difficulties in raising start-up capital".

From the financier's point of view, as SMEs are by nature characterized by concentrated ownership and control in the same owner-manager, which leads to maximizing the information asymmetry problem, the reluctance in lending to SMEs and the extensive use of collateral are understandable and justified (Hutchinson, 1999). Consistent with this, Petty and Bygrave (1993) inferred that the lack of separation between the firm and the owner affect the financing preferences of the firm. The personal characteristics of the owner-manager also make a difference to the firm's ability and likelihood of accessing external finance (Irwin & Scott, 2010; Cassar, 2004). The reason is that the owner-manager in SME has the dominant position in the firm in their role as the primary decision maker. For instance, Berggren, Olofsson and Silver

(2000) reasoned that most owner-managers in SMEs do not prefer to finance firm operations using external finance, particularly as it entails changes in ownership structure whereby such financing may lead to control aversion. In the same vein, it has been shown that SME owner-managers themselves exert a noticeable influence on their firms' financing decisions and subsequently performance and growth (Coleman, 2007; Vos, Yeh, Carter & Tagg, 2007).

5.Inadequate Management Skills

An insufficient supply of skilled workers can limit the specialization opportunities, raise costs, and reduce flexibility in managing operations. Olawale and Garwe (2010) defined managerial skills as "sets of knowledge, skills, behaviours and attitudes that contribute to personal effectiveness", and they further mentioned that a synthesis of the skills is required for the survival, development and growth of SMSCFs. It is very obvious that when the management lack managerial skills mentioned above it results in reducing the management capacity, low levels of innovations and the firm will be at a high risk of failure.

This is the inability of the management that relates to poor leadership, family interference, no training, no succession plan, no strategic plan, no management meeting, record keeping, power concentration, no empowerment, lack of entrepreneurial skills, poorly educated workforce, lack of motivated staff, no business plan, etc. Olawale and Garwe (2010) stated that SMSCFs attract motivated managers but they cannot compete with larger enterprises. Skilled managers then tend to work for larger companies that are not SMSCFs for reasons such as higher incomes and job security. Most developing nations have limited managerial talent who often opt to

work for larger firms. The high per unit costs of support services hamper SMEs' efforts to improve the skills of their managers. Most consulting firms are not equipped with the appropriate cost management solutions for SMEs. Various institutions provide training and advisory services to fill the skills gap but many SMEs cannot afford the costs whilst others due to complacency do not see the need to upgrade their skills (Olawale & Garwe, 2010).

6.Absence of Research and Development (R&D)

Small and Medium Sized Construction Firms (SMSCFs) must focus on the exploitation of research results as generated by in – house researchers, University scientists, and large firm's inventions, and newly generated knowledge by University scientists forms an important research input to firm's innovative output (Bilau *et al.*, 2015). Cohen and Levinthal (1990) described the two faces of research and development (R&D) with reference to the dual benefits gained by organizations research, in which they mentioned that the knowledge gained is useful for innovation as an internal research and development (R&D) which brings about new innovations, improvement, and thus development on the firm's internal expertise. In addition, the scientific expertise developed resulting from the processes of research and development (R&D) allows the firm's researchers to identify potentially new external knowledge. They concluded that they can also acquire and incorporate it into the firm's research and thereby exploit the external knowledge for the benefit of the firm.

Investment in research and development (R&D) will help to equip the firm in seeking and acquiring potentially new and valuable information and/or knowledge that when integrated into the firm would enhance the firm's performance in process and product

development (Bilau *et al.*, 2015); as this could also lead to helping the firm sustain competitive edge over others in the industry. The research and development (R&D) will help as suggested earlier by Cohen & Levinthal (1990) that a better equipped organization could help to absorb external research and development (R&D) output.

7.Inadequate Training and Continuous Professional Development

Even though small and medium sized construction firms (SMSCFs) tend to attract motivated managers, they can hardly compete with larger sized construction firms (LCFs), and the scarcity of management talent, prevalent in most countries of the region, has a magnified impact on SMCFs. The lack of support services or their relatively higher unit cost can hinder SMSCF efforts to improve their management because consulting firms often are not equipped with appropriate cost-effective management solutions for the scale of SMEs. Furthermore, the scarce awareness, absence of information and/or time to take advantage of existing services results in weak demand for them.

According to one of the findings by Bilau *et al.* (2015), it was reported that 80.5% of the total respondents agreed that it is important that small and medium sized construction firms employ highly educated personnel, and also 87.5% of the total respondents agreed on the encouragement for further training of the personnel. This knowledge is needed to achieve a set of system that is innovative in its process and product development. The results acknowledge Nika and Igor (2009) proposition that for firms to effectively absorb capacity, it is pertinent on them to engage the services of highly educated personnel and also invest continuously on professional development through training of its personnel to the benefit of the firms. Bilau *et al.* (2015) also

reported that training and development of firm's employees should be more focused on organizational needs, as this will help the firm to successfully be able to absorb capacity that will be of benefit to the firm's specific needs.

8.Inadequate Management of Infrastructure

Infrastructure relates to poor or non-existence of access road, water, electric power, low voltage, load shedding, epileptic or irregular power supply, etc. Olawale and Garwe (2010) posited that in many developing countries suffer from deficient and deplorable infrastructure, infrastructure such as electricity, water, sanitation, transport, energy and telecommunications. The demand for energy in South Africa is greater than the supply and results in load shedding as has been experienced in recent years in South Africa. Load shedding and power cuts affect SMEs' production capacity and leads to lower turnovers giving rise to a low growth rate amongst SMES.

9.Low Level of Educational and Technical Knowledge

Modern technologies drive all aspects of innovative economic activities, for optimum efficiency and greater productivity, so is human capital a critical driver of all strong national economic organizations (Eniola *et al.*, 2015). In area of Information and Technology, SMSCFs have difficulties in gaining access to appropriate technologies and information on available techniques. This limits innovation and SME competitiveness. At the same time, other constraints on capital, and labor, as well as uncertainty surrounding new technologies, restrict incentives to innovation. Technology sophistication in terms of innovation can give SMEs a better opportunity to compete in the markets and soon this will be a competitive necessity for survival in all

organizations. At the moment lack of Nigerian government policies that support technology adoption and integration in SMEs appear to be under performing and less competitive due to electricity and financial constraints among others (Musawa & Wahab, 2012; Adenikinju, 2005). Folorunso, Olusegun, Gabriel, Awe, Sharma, Sushil, and Zhang (2006) acknowledged education, cost of implementation of the technology and the rest. Kuteyi (2009) as cited in Musawa and Wahab (2012) identified lack of funding and non-utilization of Technology as one of the major policy factors that affect the developments of Nigerian SMES.

10.Limited Access to Funds from Finance Institutions

This is another serious barrier that covers lack of support by banks, no collateral, no money to pay for feasibility study, high interest rate, banks involvement in management of SME, non-availability of long-term capital, no financial plan, etc. Finance is regarded as the binding force that holds together all aspects of a construction. SMEs, however, have limited access to adequate financial resources. Surveys conducted by the financial resources are important for any enterprise because it is through them that a company can meet its operational and investment needs. Most financial institutions have products that meet and serve the needs of large corporations. This is so because it is perceived that serving the SME market is less profitable as compared to serving their larger counterparts (FinScope, 2010).

11.High Interest Rate

High interest rate in construction activities help in making the firm to under-perform. When interest rates are high, the cost of bank loan payments goes higher, the cost of financing business increases; the cost of

buying whatever construction materials on credit increases; and when interest rates are low, bank loan payments decline, businesses can afford to expand because the cost of their capital is low (Ismail *et al.*, 2012).

12.Poor Cooperation between the Construction Firms

The lack of cohesiveness and the wide range of small and medium sized construction firms (SMSCFs) interests for each other limit their capacity to defend their collective interests and their effective participation in civil society. Associations providing a voice for the interests of SMSCFs in the policy-making process have had a limited role compared to those of larger firms (Enterprise Development Strategy). Many of the entrepreneur's associations have yet to complete the transition of their goals from protectionism to competitiveness; and additionally, the potential economies of collaborative arrangements in production and sale among SMEs have not been adequately explored. Building close relationships is another manner by which SMSCFs could improve its potential effect of acquiring potential information and tacit knowledge through the development of closer ties with larger construction firms that are doing well (Bilau *et al.*, 2015). This confirms existing literature which states that a firm that develops closer relationship with one of the main actors will do better in comparison with those that do not (Vinding, 2006).

13.Competitive Strategies

According to the resource-based view, competitiveness is defined by the productivity with which a nation utilizes its human capital and natural resources. Macroeconomic viewpoints acknowledge human capital as the driver of national economic activity, competitiveness and prosperity (OECD, 1996).

14.Lack of Access to Global Market

The growth of the international construction market in the last decades (Zhao *et al.*, 2017) has generated new opportunities for contractors (Lee *et al.*, 2016). The 21st century context, characterized by advanced technology, rapid communication and transport, integrated markets, and commercial liberalization, has fueled this expansion (Ye *et al.*, 2009). Likewise, the key role of sustainability in today's society, the priority of advanced economies to improve infrastructures in developing countries (Diaz Sarachaga *et al.*, 2017; Sierra *et al.*, 2017) as well as the rise in the next decades of urbanization levels in the main areas of development (Diaz-Sarachaga *et al.*, 2016) are factors that also contribute to the increase of the international construction activity.

To benefit from these opportunities' contractors, have to acquire knowledge of the variables that influence international activity, being competitive advantages and barriers two of the key variables involved (Lozano-Torró, García-Segura, Montalbán-Domingo & Pellicer, 2020). Competitiveness is related to success because it is an attribute of a construction company that allows it to achieve success and long-term growth in a competitive environment (Zich, 2014). Likewise, international contractors have to offer certain competitive advantages to adapt to unknown and distant environments with a shortage of skilled human resources as well as multicultural teams with language differences and power-distance (Mosley & Bubshait, 2016) that can affect the cost or term of projects or generate misunderstandings (Lee *et al.*, 2011).

15.Limited Capacity to Market Products Abroad

Hindrances to have a good chance of survival as a result to inability of a firm to

play big, a small and medium business firm need to answer the basic strategic questions: “what markets are we targeting, with what products?” A common weakness in the SME owner/ managers lies in their failure to understand key marketing issues (Stokes & Wilson, 2006). Stokes and Wilson (2006) believed that product or service concepts and standards often reflect only the perceptions of the owner, which may not be mirrored in the market place. They further stated that, minor fluctuations in markets can topple a newly established small/micro business firms, particularly where it is reliant on a small number of customers. Previously insulated from international competition, many SMEs are now faced with greater external competition and the need to expand market share. Limited international marketing experience, poor quality control and product standardization and little access to international partners, however, impede expansion into international markets. SMEs have limited access to capital markets, locally and internationally, in part because of the perception of higher risk, informational barriers, and the higher costs of intermediation for smaller firms. As a result, SMEs often cannot obtain long-term finance in the form of term debt and equity.

16.Fixed Cost of Complying with Regulations

Although wide ranging structural reforms have improved prospects for enterprise development, many issues remain to be addressed at the firm level (Musah, Daniel & Joseph, 2015). Provision of regulatory frameworks and measures, standards and quality functions (such as product quality tests) and provision of incentives to develop new products and services; some structural reforms could have led to improvements in SME development and some aspects, however, fixed cost of complying with this

regulation hamper the development of SMSCFs. Costs of licensing, registration and settling legal claims are a burden to majority of SMSCFs. In the World Banks Doing Business Report (2006), there are 18 procedures in licensing and registering a business and it takes 176 days to deal with licensing procedures in these developing countries such as South Africa. On one hand the lack of antitrust legislation favours larger companies whilst on the other hand, the lack of protection for SME property rights exposes them to foreign technologies. SMEs are exposed to international competition from international companies operating domestically. This makes it difficult for SMEs to expand their market share. Limited access to foreign partners and investors makes it difficult for SMEs to gain access to foreign markets (Abor & Quartey, 2010).

Research Methodology

Gombe State of Nigeria is the study area: located between latitude 9°30' and 12°30'N and longitudes 8°45' and 11°45'E of the Greenwich Meridian within the North-East geo-political zone with an estimated total population of 2,797,692 people by 2011; estimated total GDP (PPP) of \$2.50 billion, and a per-capita of \$1,036 by 2007 (Abubakar, 2013). Farming is the major socio-economic activity of the study area; they produce both food and cash crops, and among its food crops are Cassava, millet, sweet potatoes, Maize, Rice, etc. the cash crops include Beans, Tomato, Groundnut, cotton, etc. These products provide raw material for agro-based industries like the Tomato Company, cotton ginnery, and groundnut oil mill in the state. Other tribes include Hausa, Tangale, Waja, Cham, Bolewa, Tera, Kare-Kare and other minor tribes. The choice of Gombe State comes as a result of the numerous constructions works that are going on, engaged by both small and medium sized construction firms including

large firms; and the high concentration of firms in the State capital.

The research work used a quantitative research design which used a field survey. The target population for the study comprised the small and medium sized construction firms (SMSCFs) in the study area with its construction team (i.e., the construction professionals: Architects, Builders, Engineers, Estate Surveyors/Valuers, Land Surveyors, Quantity Surveyors, Planners, and so on) based in Gombe State – Nigeria. Therefore, the research adopted a number of the target population as one hundred and twenty-five (125) used in a collaborative survey of some selected findings carried out by Small and Medium Enterprises Development Agency of Nigeria and National Bureau of Statistics (SMEDAN & NBS, 2013). Because finding the exact number of small and medium sized construction firms (SMSCFs) in the study area became a very big contest to this research due to the fact that most of these firms are just existing in the air but in a real sense of existence they used their political will to risk into construction for the purpose of making cool and easy money by selling their contracts to active contractors to execute (Idoro, 2014; Inuwa, 2014; Jinadu, 2007; Muazu & Bustani, 2004; Achuen et al., 2000).

For the reason of not determining the exact target population, the sample size of this research was determined using a formula from Ayoub and McCuen (2000) cited in Enshassi, Al-Hallaq and Mohamed (2006) and recently by Inuwa (2014) to ensure full representation of the target population by the chosen sample.

$$SS = \frac{Z^2 \times P(1 - P)}{C^2} \times 100\%$$

Where:

SS = Sample Size.

Z = Z value (e.g., 1.96 for 95% confidence level).

P = Percentage picking a choice, expressed as decimal (0.5 used for sample size needed).

C = Confidence interval (0.5).

Therefore;

$$SS = \frac{Z^2 \times P(1 - P)}{C^2} = \frac{1.96^2 \times 0.5(1 - 0.5)}{0.5^2} = \frac{3.8416 \times 0.5 \times 0.5}{0.5^2} = 384.2 \approx \underline{384}$$

0.5 x 0.5

Therefore, using the earlier by Ayoub and McCuen (2000) formula cited in Enshassi, Al-Hallaq and Mohamed (2006) and recently in Inuwa (2014) correction for limited population will be:

$$\text{New SS} = \frac{\text{Old SS}}{1 + \frac{\text{Old SS} - 1}{\text{Pop}}} = 94.50 \approx \underline{95}$$

Where: **New SS** = New Sample Size; **Old SS** = Old Sample Size = 384; **Pop** = population size = 125.

However, as asserted by Crafford (2007) and Ibrahim (2011) in Inuwa (2014) in harmony with the endorsement of two researchers (Guthrie, 2010; Sambo, 2008) that the larger sample size you have given better representation of the population due to the poor response rate usually recorded in the construction industry studies. Therefore, the sample size was increased to 100.

The respondents of this study were the construction team members including the: Architects, Builders, Engineers, Estate Surveyors/Valuers, Land Surveyors, Quantity Surveyors, Planners, and so on in the small and medium sized construction firms in Gombe State the study area. This study used a probabilistic technique (random sampling technique) because of its statistical preference to any type of sampling; due to its significance in generating samples free from unfairness (Sambo, 2008).

A questionnaire which is a collection of items expected to be responded by the

respondents was designed by the researcher as the tool for data collection and information from the construction professionals in the study area was collected; the choice of the instrument (questionnaire) was necessary because of the population literacy and the flexibility of the questionnaire in collecting a lot of information within a short period of time (McNabb, 2009). The researcher and two other research assistants administered the tool (questionnaire) which was designed systematically with closed ended questions structured to avoid the respondents from deviating away from the subject matter in accordance with the research questions and based on the identified factors hindering the performance of small and medium sized construction firms conducted in order to assess the perceptions of the construction team members about the degree of severity effects of the factors hindering the performance of small and medium sized construction firms.

The questionnaire was divided into four (4) major sections A, B, C and D.

Section 'A' was on the General Information about the respondents;

Section 'B' was on the questions related to the factors affecting the performance of small and medium size construction firms in the area of study.

Section 'C' was on the questions related to the severe effect of the factors affecting the performance of small and medium size construction firms in the area of study (subjected to a five points Severity Index Likert-Scale: from 1 – Not Severe to 5 – Extremely Severe).

Section 'D' was on the questions related to the mitigating measures to the identified factors hindering the performance of small and medium sized construction firms in the area of study (subjected to a five points Severity Index Likert-Scale: from 1 – One of the Worst to 5 – One of the Best).

The validity of a scale (research instrument) refers to the degree to which it measures what it is supposed to measure (Pallant, 2001); and a construct validity test was used to test the instrument in that regard, which was concerned with a variable measurement measuring particularly that which it is intended to measure; and it is tested by administering the same set of questionnaires to two different set of respondents, and the correlation of their responses were computed to be 0.97; this is said to satisfy construct validity. Reliability of a scale (research instrument) measure the consistency of a scale in replicating result, it is also using in dictating the level of a scale random error (Pallant, 2001); and a test-retest reliability of a scale was used to test the instrument in that regard, which was assessed by administering the research instrument to the same set of people at one week interval and the correlation was calculated to be 0.95; hence the satisfaction of the reliability of the instrument.

The findings collected from the field survey research via questionnaire subjected to a five (5) Likert-scales was analyzed using the descriptive method of statistical analyses with a tool called statistical package for social sciences (SPSS) version 20 used because of the features over the lower versions earlier available. Descriptive statistics (frequency count (F), percentages (%), mean scores (X), and Standard deviation (SD)). Therefore, non-parametric statistical tool was considered most suitable for the statistical analysis of such data as opined by (Udofia, 2011; Pallant, 2007).

Mean Score (X) was obtained by dividing the total product of the sum of scores by the number of respondents for each factor, with a rule line of $MS = 3.0$ used to determine the significance of the effect of the factors hindering the performance of small and medium sized construction firms; factors having Mean Score (X) equal to or greater

than 3.0 was considered as having significant effect while factors with Mean Score (X) less than 3.0 as having insignificant effect. This is consistent with the approach adopted in related previous studies (Odesola, Oтали & Ikediashi, 2013; Durdyev & Mbachu, 2011).

Result and Discussion

Data Analysis for the

General Information of Respondents

This section conveyed information regarding the general information of the respondents which covers: academic qualification, profession, years of

experience, professional qualification, type of project, role played during the said project, the respondents' awareness of the existence of small and medium sized construction firms in the study area, and if they (respondents) think there are factors affecting the performance of small and medium sized construction firms. This by implication ensures that the respondents used for a study are appropriate sample for the intended universe or domain of content (Pallant, 2001).

Table 1: Demographic Information of the Respondents

SN	Variables	Frequency (F)	Percentage (%)
1	Academic Qualification		1.5
	ND/NCE	1	75.0
	B. TECH/HND	51	22.1
	M. TECH/PGD	15	1.5
	Ph. D	1	1.5
	Total	68	100.0
2	Profession Category		
	Architecture	10	14.7
	Building	21	30.9
	Engineering	18	26.5
	Quantity Surveying	15	22.1
	Others (Estate/Land Surveyors/Planners)	4	5.9
	Total	68	100.0
3	Years of experience		
	Below 5yrs	8	11.8
	6 – 10yrs	22	32.4
	11 – 15yrs	11	16.2
	16 – 20yrs	13	19.1
	Above 21yrs	14	20.6
	Total	68	100.0
4	Professional Qualification		

	Pqgmniob	11	16.2
	Pqgmniqs	8	11.8
	Pqgmnia	8	11.8
	Pqgmcoren	11	16.2
	Pqgmnothr (Estate/Land Surveyors/Planners)	1	1.5
	Pqcmniob	9	13.2
	Pqcmniqs	7	10.3
	Pqcmnia	2	2.9
	Pqcmcoren	7	10.3
	Pqcmnothr (Estate/Land Surveyors/Planners)	3	4.4
	Pqfmniob	1	1.5
	Total	68	100.0
5	Type of Projects		
	Housing	28	41.2
	Health	3	4.4
	Market	2	2.9
	Roads/Bridges/etc.	9	13.2
	School	20	29.4
	Others (Religious, etc.)	6	8.8
	Total	68	100.0
6	Role during the Project		
	Client	20	29.4
	Contractor/Consultant	48	70.6
	Total	68	100.0
7	Awareness of SMSCFs existence in Gombe State		

	Yes	67	98.5
	No	1	1.5
	Total	68	100.0
8	Opinion whether there are factors affecting performance of SMSCFs		
	Yes	64	94.1
	No	4	5.9
	Total	68	100.0

Source: Researcher (2017).

Table 1 indicates the demographic information of the respondents such that: academic qualification of the respondents, where more than half of the respondents were B. TECH/HND holders with 51(75%) in the study area; M. TECH/PGD were 15(22.1%); while ND/NCE & Ph. D holders were 1(1.5%) each. This result confirmed that the respondents responded to this questionnaire got the academic qualification (knowledge) for the subject matter; therefore, they are competent enough for the study as this ensures content validity of the data collected during the study.

Professional category of the respondents in the study area. The table confirmed that 10 (14.7%) respondents were from architecture profession; 21 (30.9%) respondents were from Building profession; 18(26.5%) respondents were from Engineering profession; 15(22.1%) respondents were from Quantity Surveying profession; while 4(5.9%) respondents were from other sister profession. This result indicates that the respondents to the study were reliable as this ensures content validity for the data collected from the respondents.

Years of experience of the respondents of this study whereby, 8(11.8%) of the respondents have less than 5 years' working experience; 22(32.4%) of the respondents have 6–10 years working experience; 11(16.2%) of the respondents have 11–15 years working experience; 13 (19.1%) of the respondents have 16–20 years working experience; 14(20.6%) of the respondents have Above 21 years working experience. The results indicate that more than half (55.9%) of the respondents were acquainted with the subject matter, this shows the reliability of the data collected due to their wealth of working experience.

Professional qualification of the respondents in the study area indicates that, 11(16.2%) of the respondents were having Graduate Membership of NIOB (Pqgmniob); 8(11.8%) of the respondents have Graduate Membership of NIQS (Pqgmniqs) & NIA (Pqgmnia); 11(16.2%) of the respondents have Graduate Membership of COREN (Pqgmcoren); 1(1.5%) of the respondent was having Graduate Membership of other sister profession (Pqgmnothr: Estate/Land Surveyors/Planners); while, 9 (13.2%) of the respondents were Corporate Membership of NIOB (Pqcmniob); 7(10.3%) of the

respondents were Corporate Membership of NIQS (Pqcmniqs) & COREN (pqcmcoren) each; 2(2.9) of the respondents were having Corporate Membership of NIA (Pqcmnia); 3(4.4%) of the respondents were Corporate Membership of other sister profession (Pqcmothr:Estate/Land Surveyors/Planners); and 1 (1.5%) of the respondent was a Fellow Membership of NIOB (Pqgmniob). This result shows that all the respondents that responded for the questionnaire were registered with their respective professional bodies responsible for stimulating the professions concerned with the fundamental disciplines of building project in Nigeria; therefore, they (respondents) are competent and experienced to respond to this study. This assists to improve this study's content validity.

Type of construction projects undertook by these respondents in the study area revealed that Housing construction projects have the highest percentage among these construction project 28(41.2%); while Infrastructures such as Health & Market have the lowest percentage such as 3(4.4%) & 2(2.9%) respectively; Roads/Bridges/etc. have 9(13.2%) responses; School construction project have 20(29.4%); and Other (Religious, etc.) construction project have 6(8.8%) as responded by the respondents during the study. This result shows that the respondents were involved in so many construction projects, so they are acquainted with these factors hindering the performance of small and medium construction firms in the study area.

Role played during various types of construction projects by the respondents in the study area. It was discovered that majority of the respondents 48(70.6%) played "Contractors/Consultant role" during the projects; while 20(29.4%) played the role of "Client" during the construction projects in the study area. The respondents played a role from client to

contractors/consultant in various types of construction project in the study area, so these responsibilities helped them to be well knowledgeable in the subject matter.

The awareness of the respondents on the existence of small and medium sized construction firms in the study area; whereby, the respondents were in agreement that Yes with 67(98.5%) small and medium sized construction firms exists in the study area as against No with 1(1.5%).

Furthermore; 64 (94.1%) of the respondents reported Yes, that there are factors affecting the performance of these small and medium size construction firms that exists in the study area; while 4(5.9%) respondents disagreed that even though there are factors but are not affecting the performance of these small and medium sized construction firms in the study area. These results aid the study in extracting such factors hindering the performance of small and medium sized construction firms by comparing such factors with the view to assess the significant effect on their performance in the study area.

Objective 1: To determine the Factors affecting the performance of Small and Medium Size Construction Firms in Gombe State

From the thirty-four (34) factors affecting performance of small and medium sized construction firms identified during the literature reviewed (displayed in table 2). As a result of the pilot study, the same items were administered to both the small and medium sized construction firms, whereby, the outcome of the pilot survey for the study revealed sixteen (16) factors affecting the performance of Small and Medium Sized Construction firms (SMSCFs) were identified (table 3).

The study administered the instrument (questionnaire) to only professionals in the study area (Gombe State) in the Northern

geo-political zone of Nigeria with the view to collate their responses on the subject matter for drawing conclusions and recommendations for the study.

Table 2: Factors affecting performance of SMSCFs from literature reviewed

SN	Factors Affecting the Performance of Small and Medium Sized Construction Firms
1	Changing client's demand and expectation.
2	Market condition.
3	Rapid changes in the development of advanced technology.
4	Democratization of information.
5	Globalization.
6	Government pressure.
7	Lack of competencies and capabilities for sustenance in the face of increased competition.
8	Organizational structure
9	Limited access to funds from finance institutions and high interest rate.
10	Limited access to policy makers weighs against the small and medium sized construction firms.
11	Limited capacity to market products abroad.
12	Fixed cost of complying with regulations.
13	Poor cooperation and/ or linkages between SMCFs.
14	Inadequate managerial skill due to inadequate employment of skilled labour.
15	Absence of research and development (R & D)
16	Inadequate training and continuous professional development for firm's personnel.
17	Low level of education and technical knowledge.
18	Inadequate management of infrastructures.
19	High rate of employee turn-over.
20	Inadequate government policy on R & D.
21	A lack of skilled labour.
22	Poor business location.
23	Lack of marketing.
24	Lack of appropriate technologies e.g., computers, etc.
25	Lack of regulatory constraints.
26	Lack of managerial skills.
27	Lack of appropriate technologies.
28	Economic environment.
29	Lack of financial resources.
30	Crime and corruption.
31	Lack of skilled labour.
32	Lack of supporting infrastructures such as water and electricity.
33	Environmental factors.
34	Firm's ownership status.

Source: Different Authors.

The factors affecting the performance of SMSCFs identified from the literature reviewed from the result of the pilot study was analysed using descriptive tool such as frequency and percentage as shown below (equation i). Twenty (20) of the pilot survey questionnaires were purposely distributed to the construction professionals seeking for

their perceptions on the subject matter; which led to arrival of sixteen (16) factors affecting the performance of SMSCFs. This implied that more than half (18) of the other factors were discarded because it was found out that some of the factors were affecting either Small Sized Construction Firms (SSCFs) or Medium Sized Construction

Firms (MSCFs) and were below average (50%). Hence the factor was expressed as:

FACTOR = No. of Response by the Respondents x 100% (i)
20

Factor: means each item listed on the pilot survey instrument.

20: means 20 instruments distributed during the pilot survey.

The analysis was displayed in table 2 below of how sixteen (16) factors were arrived at:

Table 3: Factors affecting the Performance of SMSCFs in the Study Area

SN	Factors affecting the Performance of Small and Medium Sized Construction Firms (SMSCFs)	Responses		
		F	%	Rnkg
1	High interest rate.	19	95	1
2	High transaction cost.	19	95	1
3	Limited access to funds from finance institutions.	19	95	1
4	Absence of research and development (R & D).	18	90	2
5	Inadequate management skills.	18	90	2
6	Organizational structure.	17	85	3
7	Inadequate training and continuous professional development.	17	85	3
8	Low level of educational and technical knowledge.	16	80	4
9	Limited capacity to market products abroad.	15	75	5
10	Lack of access to global market.	14	70	6
11	Inadequate management of infrastructure.	13	65	7
12	Competitive strategies.	13	65	7
13	Limited access to policies.	12	60	8
14	Firm's ownership status.	11	55	9
15	Poor cooperation between the construction firms.	11	55	9
16	Fixed cost of complying with regulations.	11	55	9

Source: Researcher (2017).

Table 3 depicts the sixteen (16) most factors affecting the performances of both small and medium size construction firms (SMSCFs) in the study area; where the five (5) most factors are:

High interest rate; High transaction cost; and Limited access to funds from finance institutions were ranked 1st with a frequency and percentage of 19 (95%). Absence of research and development (R & D); and Inadequate management skills were ranked 2nd with a frequency and percentage of 18(90%). Inadequate training and continuous professional development; and Organizational structure were ranked 3rd with a frequency and percentage of 17 (85%). Low level of educational and

technical knowledge was ranked 4th with a frequency and percentage of 16 (80%). Limited capacity to market products abroad was ranked 5th with a frequency and percentage of 15 (75%).

Objective 2: To compare the severity of the effects on the performance of small and medium size construction firms (SMCFS) in Gombe State

Decision rule for Likert-Scale as adapted from Bilau *et al.* (2015):

1.00 ≤ 1.49 = Not Severe (NS); 1.50 ≤ 2.49 = Least Severe (LS); 2.50 ≤ 3.49 = Moderately Severe (MS); 3.50 ≤ 4.49 = Severe (S) & 4.50 ≤ 5.00 = Extremely Severe (ES).

This objective is analysed descriptively using mean score and ranking (Rnkg) with general decision as displayed by table 4. This comparison is to determine whether same factors exist that have severity effect on both small and medium sized construction firms (SMSCFs) in the study area.

Table 4: Combined Response relating to the Comparison of Severe effect (SE) and Ranking of Severe Effect on the Factors affecting performance Small and Medium Sized Construction Firms (SMSCFs) in Gombe State

	Small Sized Construction Firms (SSCFs)		Medium Sized Construction Firms (MSCFs)		
Severe effects of these factors on SMSCFs	Mean	Rnkg	Mean	Rnkg	GD
Inadequate management skills.	3.9412	1	3.6324	5	S
Absence of research and development (R & D).	3.8824	2	3.7353	2	S
Inadequate training and continuous professional development.	3.8824	2	3.8088	1	S
Limited access to funds from finance institutions.	3.8824	2	3.6765	4	S
Inadequate management of infrastructure.	3.8676	3	3.4853	8	MIX
Low level of educational and technical knowledge.	3.7206	4	3.7059	3	S
High transaction cost.	3.6912	5	3.5147	7	S
High interest rate.	3.5735	6	3.6324	5	S
Fixed cost of complying with regulations.	3.4706	7	3.3676	9	MS
Limited capacity to market products abroad.	3.3235	8	3.5441	6	MIX
Lack of access to global market.	3.3088	9	3.3676	9	MS
Poor cooperation between the construction firms.	3.2941	10	3.3235	10	MS
Firm's ownership status.	3.2500	11	3.1176	12	MS
Organizational structure.	3.2353	12	3.0882	13	MS
Limited access to policies.	3.0588	13	3.0588	14	MS
Competitive strategies.	3.0000	14	3.1765	11	MS

Source: Researcher (2017). GD = General Decision.

Table 4 depicts the combined response relating to the comparison of severity effect (SE) and ranking of severe effect on the factors affecting performance of small and medium sized construction firms (SMSCFs) in the study area.

The result reveal that; all the factors identified have their degree severity effect on small and medium sized construction firms (SMSCFs) in the study area. Based on the mean score, ranking (Rnkg) and general decision (GD). Inadequate management skills found to be severe affecting performance of SSCFs with X = 3.9412; Rankg = 1st while, X = 3.6324; Rnkg = 5th in MSCFs. Absence of research and development (R & D) found to be severe

affecting performance of SSCFs with X = 3.8824; Rankg = 2nd while, X = 3.7353; Rnkg = 2nd in MSCFs. Inadequate training and continuous professional development found to be severe affecting performance of SSCFs with X = 3.8824; Rankg = 2nd while, X = 3.8088; Rnkg = 1st in MSCFs. Limited access to funds from finance institutions found to be severe affecting performance of SSCFs with X = 3.8824; Rankg = 2nd while, X = 3.6765; Rnkg = 4th in MSCFs. Inadequate management of infrastructure found to be severe affecting performance of SSCFs with X = 3.8676; Rankg = 3rd while, moderate severe affecting performance of MSCFs with X = 3.4853; Rnkg = 8th. Low level of educational and technical knowledge found to be severe affecting performance of SSCFs with X = 3.7206;

Rankg = 4th while, X = 3.7059; Rnkg = 3rd in MSCFs. High transaction cost found to be severe affecting performance of SSCFs with X = 3.6912; Rankg = 5th while, X = 3.5147; Rnkg = 7th in MSCFs. High interest rate found to be severe affecting performance of SSCFs with X = 3.5735; Rankg = 6th while, X = 3.6324; Rnkg = 5th in MSCFs. Fixed cost of complying with regulations found to be moderately severe affecting performance of SSCFs with X = 3.4706; Rankg = 7th while, X = 3.3676; Rnkg = 9th in MSCFs. Limited capacity to market products abroad found to be moderately severe affecting performance of SSCFs with X = 3.3235; Rankg = 8th while, severe affecting performance of MSCFs with X = 3.5441; Rnkg = 6th. Lack of access to global market found to be moderately severe affecting performance of both SMSCFs with X = 3.3088; Rankg = 9th in SSCFs while, X = 3.3676; Rnkg = 9th in MSCFs. Poor cooperation between the construction firms found to be moderately severe affecting performance of both SMSCFs with X = 3.2941; Rankg = 10th in SSCFs while, X = 3.3235; Rnkg = 10th in MSCFs. Firm's ownership status found to be moderately severe affecting performance of SSCFs with X = 3.2500; Rankg = 10th while, X = 3.1176; Rnkg = 12th in MSCFs. Organizational structure found to be moderately severe affecting performance of SSCFs with X = 3.2353; Rankg = 12th while,

X = 3.0882; Rnkg = 13th in MSCFs. Limited access to policies found to be moderately severe affecting performance of SSCFs with X = 3.0588; Rankg = 13th while, X = 3.0588; Rnkg = 14th in MSCFs. Competitive strategies found to be moderately severe affecting performance of SSCFs with X = 3.000; Rankg = 14th while, X = 3.1765; Rnkg = 11th in MSCFs.

Objective 3: To determine the Mitigating measures affecting the Performance of Small and Medium Sized Construction Firms (SMSCFs) in Gombe State

This objective was to determine the mitigating measures against the factors affecting the performance of small and medium sized construction firms in Gombe State; the study worked on sixteen measures. The respondents were asked to rate each potential measure based on their professional judgment using the following scale:

During the data collection, sixty-eight (N = 68) respondents used for the study rate their opinion on 5 likert-scales on the mitigating measures against the factors affecting the performance of the firms in the study area and based on ranking using mean score, and standard deviation.

Table 5: Mitigating measures against the factors affecting performance of SMSCFs in Gombe State

Mitigating measures to the performance of SMSCFs	SSCFs			MSCFs		
	Mean	SD	Rnk g	Mean	SD	Rnk g
Available access to funds from finance institutions.	4.0000	.96196	1	4.1471	.93465	2
Employment of skilled labour.	3.9706	1.02171	2	4.0294	1.03622	3
Implementation of adequate training and continuous professional development.	3.9265	1.22555	3	3.8088	1.05459	13
Introduction of research and development (R & D).	3.9118	1.04718	4	3.8235	1.07816	10
Government to strengthen the firms through Bank of Industry (BOI) and other financing windows.	3.8971	1.00950	5	4.0000	.99251	5

Nigerians are called upon to patronize services by the firms.	3.897 1	1.1215 6	6	4.000 0	.96196	4
Provision of adequate management skills.	3.868 5	1.0495 8	7	3.970 6	1.0217 1	6
Good organizational structure.	3.867 6	1.0352 6	8	3.823 5	.99162	11
Implementation of high level of educational and technical knowledge.	3.750 0	1.0276 0	9	3.867 6	1.0637 1	9
Lowering of interest rates and other cost of funds.	3.721 6	1.0051 4	10	3.911 8	.94214	8
Implementation of adequate management of infrastructure.	3.720 6	.92793	11	3.500 0	1.0000 0	14
Government to harmonize taxes and levies to enhance conducive environment for doing business.	3.705 9	1.0083 1	12	3.955 9	.92129	7
Adoption of a functional structure to encourage the involvement of personnel in decision-making for rapid organizational growth.	3.647 1	1.1559 7	13	3.808 8	1.0258 9	12
Reduction in transaction cost.	3.588 2	1.0109 1	14	3.500 0	1.0438 2	15
Good cooperation between the construction firms.	3.426 5	1.0833 4	15	3.735 3	1.0017 5	1
Available access to policies.	3.235 3	1.1078 8	16	3.205 9	1.0156 8	16

Source: Researcher (2017).

Table 5 above depicts a combined response of the respondents' assessments for both SMSCFS on the mitigating measures against the identified factors affecting the performance of SMCFS in Gombe State. The mean score and standard deviation (SD) revealed the ranges of (3.2353 – 4.0000) and (0.92793 – 1.22555) by small sized construction firms; (3.2059 – 4.1765) and (0.92129 – 1.07816) by medium sized construction firms. This by implication all the weighted mean scores are above the score of 3.0 used for conclusion in the five Likert-scales which revealed that both the firms measured all the mitigating measures to the factors affecting performance of SMSCFS in the study area to be acceptable in helping greatly in overcoming the significant effects of these factors as all the mean scores are above the judgmental mean score of 3.0 on the five likert-scales; as there was high consistency in the degree of agreement by the respondents showing low

value of standard deviation throughout the study.

From table 5, it can be deduced that, available access to funds from finance institutions is a mitigating measure for SSCFs with $X = 4.0000$; $SD = 0.96196$; rank = 1st while, $X = 4.1471$; $SD = 0.93465$; rank = 2nd in MSCFs. Employment of skilled labour is a mitigating measure for SSCFs with $X = 3.9706$; $SD = 1.02171$; rank = 2nd while, $X = 4.0294$; $SD = 1.03622$; rank = 3rd in MSCFs. Implementation of adequate training and continuous professional development is a mitigating measure for SSCFs with $X = 3.9265$; $SD = 1.22555$; rank = 3rd while, $X = 3.8088$; $SD = 1.05459$; rank = 13th in MSCFs. Introduction of research and development (R & D) is a mitigating measure for SSCFs with $X = 3.9118$; $SD = 1.04718$; rank = 4th while, $X = 3.8235$; $SD = 1.07816$; rank = 10th in MSCFs. Government to strengthen the firms through Bank of Industry (BOI) and other financing windows is a mitigating measure for SSCFs with $X =$

3.8978; SD = 1.00950; rank = 5th while, X = 4.0100; SD = 0.99251; rank = 5th in MSCFs. Nigerians are called upon to patronize services by the firms is a mitigating measure for SSCFs with X = 3.8971; SD = 1.12156; rank = 6th while, X = 4.0000; SD = 0.96196; rank = 4th in MSCFs. Provision of adequate management skills is a mitigating measure for SSCFs with X = 3.8685; SD = 1.04958; rank = 7th while, X = 3.9706; SD = 1.02171; rank = 6th in MSCFs. Good organizational structure is a mitigating measure for SSCFs with X = 3.8676; SD = 1.03526; rank = 8th while, X = 3.8235; SD = 0.99162; rank = 11th in MSCFs. Implementation of high level of educational and technical knowledge is a mitigating measure for SSCFs with X = 3.7500; SD = 1.02760; rank = 9th while, X = 3.8676; SD = 1.06371; rank = 9th in MSCFs. Lowering of interest rates and other cost of funds is a mitigating measure for SSCFs with X = 3.7216; SD = 1.00514; rank = 10th while, X = 3.9118; SD = 0.94214; rank = 8th in MSCFs. Implementation of adequate management of infrastructure is a mitigating measure for SSCFs with X = 3.7206; SD = 0.92793; rank = 11th while, X = 3.5000; SD = 1.00000; rank = 14th in MSCFs. Government to harmonize taxes and levies to enhance conducive environment for doing business is a mitigating measure for SSCFs with X = 3.7059; SD = 1.00831; rank = 12th while, X = 3.9559; SD = 0.92129; rank = 7th in MSCFs. Adoption of a functional structure to encourage the involvement of personnel in decision-making for rapid organizational growth is a mitigating measure for SSCFs with X = 3.6471; SD = 1.15597; rank = 13th while, X = 3.8088; SD = 1.02589; rank = 12th in MSCFs. Reduction in transaction cost is a mitigating measure for SSCFs with X = 3.5882; SD = 1.01091; rank = 14th while, X = 3.5000; SD = 1.04382; rank = 15th in MSCFs. Good cooperation between the construction firms is a mitigating measure for SSCFs with X =

3.4265; SD = 1.08334; rank = 15th while, X = 3.7353; SD = 1.00175; rank = 1st in MSCFs. Available access to policies is a mitigating measure for SSCFs with X = 3.2353; SD = 1.10788; rank = 16th while, X = 3.2056; SD = 1.01568; rank = 16th in MSCFs.

Discussion of Findings

Objective1:FactorsAffectingthe Performances of SMCFS in the Study Area

Table 3 revealed the three (3) most factors affecting the performances of SMCFS in the study area to include the following: high interest rate, high transaction cost, and limited access to funds from finance institutions ranked 1st with 19(95%); absence of research and development (R & D), and inadequate management skills ranked 2nd with 18(90%); inadequate training and continuous professional development, and organizational structure ranked 3rd with 17(85%).

This objective finding was in accord with the result of Bilau *et al.* (2015); Florian and Grigor (2015); Ismail *et al.* (2012); Ajagbe *et al.* (2012); Ihua & Siyanbola, 2012); FinScope (2010); Olawale and Garwe (2010); and Thwala and Mvubu (2008); Chen (2007); Benham and Benham (2001); Allen (2000).

This by implication, it means that where there is record of high interest rate; high transaction cost in the activities of SMCFS with limited access to funds from finance institutions, this will greatly hinders their performances by performing below average in other word, these make SMCFS to underperform in the host community as low transaction costs attracts a good economic performance of a firm (Florian and Grigor, 2015); and is the same small and medium sized construction firms (SMSCFs) that are generally regarded as the engine of economic growth and equitable development

in developing economies (Agwu & Emeti, 2014). So, with all these aforesaid factors is certain no meaningful and equitable development will be recorded at the detriment of the firms to show case their business proposal appropriately before their client; this will in turn leads to the client look down on them with doubt whether they can perform or not.

Absence of research and development (R & D) and Inadequate management skills were ranked 2nd with a frequency and percentage of 18 (90%). This verdict is in harmony with result of another research such as: Cohen and Levinthal (1990); Abdullah *et al.* (2011); Bilau *et al.* (2015).

This by repercussion, it means that any construction firms (SMSCFs) that is not encouraging research and development it invite the wrath of under-performance which will leads to total collapse; SMSCFs nowadays is all about competition, the way and manner you package your firm will send a message that you are ready for business; no wonder in a research carried out by Bilau, Ajagbe, and Bustani (2015), about 87.5% of their respondents agreed that SMSCFs should invest in research and development (R & D) because when a firm invest in research and development (R & D) this aid in arming the firm seeking and gaining possibly new and valuable information or knowledge to enhance the firm's performance in process and product development when fully integrated into the firm. In construction business irrespective of the size of the firm, output matters a lot.

Inadequate training and continuous professional development; and organizational structure were ranked 3rd with a frequency and percentage of 17 (85%). This result conforms to the result of Bilau *et al.* (2015); Abdullah *et al.* (2011); Nika and Igor (2009); Ajagbe *et al.* (2012); Odediran, Adeyinka, Opatunji AND Morakinyo (2012); Gunshibet (2011); Ofori (2009).

This by consequence signifies that adequate training and continuous professional development of firm's personnel will equip them in terms of brazing up the new future challenges even as the construction industry is growing every day and in complex nature. All construction activities are carried out by contracting firms either small, medium, or large who's in one way or the other its organizational structure upset the level of construction output (Odediran, Adeyinka, Opatunji & Morakinyo, 2012), knowing fully well that construction output is very vital in the existence of construction itself. Therefore, Bilau *et al.* (2015) supports that training and development of firm's employees should be more focused on organizational needs as this will assist the firms absorb all challenges that can benefit the firms.

Objective 2: Compare the severity of the effects on the performance of SMSCFs in Gombe State

Table 4 revealed the common factors affecting both Small and Medium Sized Construction Firms (SMSCFs) with common general decision and ranking to be: absence of research and development (R & D) severely affecting performance (SSCFs with $X = 3.8824$; Rankg = 2nd; MSCFs with $X = 3.7353$; Rnkg = 2nd); lack of access to global market moderate severely affecting performance (SSCFs with $X = 3.3088$; Rankg = 9th; MSCFs with $X = 3.3676$; Rnkg = 9th); as well as, poor cooperation between the construction firms moderate severely affecting performance (SSCFs with $X = 3.2941$; Rankg = 10th; MSCFs with $X = 3.3235$; Rnkg = 10th).

These by implication; revealed the main reason why SMSCFs are not performing better beyond average as they are over shadowed with so many adverse factors. Hence, SMSCFs are considered to be an integral part of any healthy economy

considering the role they play in the creation of jobs and fostering of technology innovation (Ajagbe & Ismail, 2014). Also, they serve as engine to generate employment for the jobless; they are of interest to those concerned with employment relations and considered to be essential to organization success (Edoghogho, 2011).

No wonder, Longenecker, Petty, Moore, and Palich (2006) posited that inadequate experience in the constructions industry can seriously affects the manager adversely to make corrupt business decisions. Good management implies an awareness of all factors making up a successful business namely good strategy, marketing, pricing and financial control (Douglas, 1985). But SMCFs in the study area faced with limited access to Funds from Finance Institutions which affirm their inability to invest in Research and Development (R & D), however the knowledge expanded is useful for new innovations, improvement, and this allow the firm to explore new potentials regarding current external knowledge. Also faced with poor training of their personnel for continuous professional development, where there is poor investment on research and development deprived them from exploring their potentials in the construction business; as a result of limited access to funds, the SMSCFs engaged the services of personnel with low level of educational and technical knowledge reason because they are cheaper coupled with the fact that the construction industry nowadays has advance to ICT age. That is why SMSCFs are engaged by larger contractors choosing to utilize their services to assist in the completion of projects because they act as subcontractor within the supply chain (Abdullah *et al.*, 2012; Darren *et al.*, 2012) because of the reduction of costs.

Objective3: Mitigating measures affecting the Performance of SMSCFS in Gombe State

Table 5 revealed the three (3) most mitigating measures affecting the performance of SMSCFs to include: government to strengthen the firms through Bank of Industry (BOI) and other financing windows (SSCFs with $X = 3.8971$; $SD = 1.00950$; ranked 5th; MSCFs with $X = 4.0000$, $SD = 0.99251$, ranked 5th). Implementation of high level of educational and technical knowledge (SSCFs with $X = 3.7500$; $SD = 1.02760$; ranked 9th; MSCFs with $X = 3.8676$, $SD = 1.06371$, ranked 9th). Available access to policies (SSCFs with $X = 3.2353$; $SD = 1.10788$; ranked 16th; MSCFs with $X = 3.2059$, $SD = 1.01568$, ranked 16th).

Conclusion and Recommendations

Conclusion

This research work was aimed at “comparing the Factors Affecting the Performance of Small and Medium Sized Construction Firms in Gombe State” with a view to improving the performance of both small and medium sized construction firms (SMSCFS) to measure up to the expectation. The research concluded based on the findings:

- i. High interest rate, high transaction cost, limited access to funds from finance institutions, absence of research and development (R&D), inadequate management skills, organizational structure, inadequate training and continuous professional development, low level of educational and technical knowledge, limited capacity to market products abroad, lack of access to global market, inadequate management of infrastructure, competitive strategies, limited access to policies, firm’s ownership status, poor cooperation between the construction firms, and fixed cost of complying with regulations are the factors

affecting the performance of small and medium sized construction firms in Gombe State.

- ii. Absence of research and development (R&D), lack of access to global market, poor cooperation between the construction firms found to affects the performance of the small and medium sized construction firms in Gombe State severely and moderately.
- iii. Government to strengthen the firms through Bank of Industry (BOI) and other financing windows, implementation of high level of educational and technical knowledge, and available access to policies are the most mitigating measures affecting the performance of small and medium sized construction firms in Gombe State.

Recommendations

- i. Based on the factors identified to be affecting the performance of SMSCFs in the study area, an urgent attention is needed by both the SMSCFs in order to counteract these disasters for effective performance and boosting economy activities in the host community.
- ii. Management of SMSCFs should engaged in rigorous research and development and device a means on how to penetrate into global market by enhancing cooperation to ensure the necessary skills required for effective delivery of construction business is derived.
- iii. Government as the major client to construction industry and all the relevant stakeholders should put hands on deck to effectively review any policy and regulations that can ensure enabling environment for SMSCFs to triumph and deliver projects on time, within quality and cost.

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