FACTORS INFLUENCING THE CONTRIBUTION OF SME CONSTRUCTION FIRMS TO THE ECONOMIC GROWTH: EVIDENCE FROM EASTERN CAPE

Lubabalo Flepisi
Durban University of Technology

Anna Johanna Catharina Womack
Durban University of Technology

Lawrence Mpele Lekhanya
Durban University of Technology

ABSTRACT

The purpose of this study was to identify factors influencing the contribution of construction sector SMEs to economic growth in the Eastern Cape province, South Africa. The study adopted mixed methods approach. Data was collected from construction SMEs' business owners/managers in the Eastern Cape. The sample consisted of 303 respondents for quantitative phase and 12 participants for qualitative phase.
The study revealed factors influencing the contribution of SME construction firms to the economic growth. These factors were divided into internal and external factors. Internal factors included, education and training, business managerial skills, entrepreneurial leadership, shortage of skills. External factors identified included lack of government support, high prices of required materials, financial barriers, access to market, delays in payments, networking resources, competition in construction sector. It is recommended that construction SMEs need to develop their management skills through formal business training and development that will enhance skills as a catalyst for business growth and development. Furthermore, construction SMEs and large entities need to collaborate to develop business incubation programmes that will entrench skills sharing. Government needs to support construction SMEs through business funding and eliminate regulatory factors impacting the contribution of these firms. As contributions to the improvement of the contemporary field of management, the study aimed at positioning South African construction SMEs as a beacon of hope in creating employment and facilitating economic transformation and development by contributing fully to the country's economic growth.

Keywords: Construction SMEs, Economic Growth, Eastern Cape, South Africa.

1. INTRODUCTION

Construction companies globally play a pivotal role in creating jobs and boosting the economy of the country. According to Tlapana and Mngeni (2021), the construction sector plays an important role in contributing significantly towards sustainable economic development, which results in stimulating the country's economy. Amoah and Amoah (2018) state that small and medium sized enterprises (SMEs) play a crucial role in socio-economic growth and development of countries, wherein SMEs are recognised as vehicles for innovation, economic growth, employment, and social mobility. As a strategic initiative, the Coega Development Corporation (CDC) (2020) recognises it makes economic sense for small businesses to be a channel for employment creation and wealth distribution, since small businesses are known to employ many staff members, where employment is maximised, and people have a fair chance to contribute to the development of the economy. It is agreed that SMEs contribute a bigger proportion to Gross Domestic Product (GDP) and employment, which propels economic growth (Msomi and Olarewaju, 2021; Dlamini and Schutte, 2020).

Alaloul, et al. (2021) highlight that the construction sector contributes between 5-10 percent of GDP, with string total impacts on the national economy through infrastructure development, while it also attracts foreign direct investment (FDI). For example, in Nigeria, the construction industry contributes approximately 60 percent of GDP, where construction SMEs hold the greatest percentage (Alaloul et al., 2021). This unparallel contribution of construction SMEs to the economic growth is attributed to their performance. However, SME growth and performance have been of great concern to different stakeholders in South Africa (SA), which include economists, governments, financial institutions, and entrepreneurs (Msomi and Olarewaju, 2021). This concern is caused by the lack of economic stability and high business failure of South African SME businesses. This is due to the unique challenges SMEs face, such as a small local market, difficult business conditions comprising complicated procedures and regulations, poor infrastructure, and lack of financial systems (Nqala, 2019). Consequently, the factors faced by construction SMEs threaten the survival and sustainability of these businesses ultimately their contribution to economic growth (Wentzel et al., 2022). Flepisi, Womack and Lekhanya (2023) argue that government and the private sector need to develop mechanisms and policies that will cushion and enable construction SMEs to perform as expected. Therefore, the study sought to identify factors influencing the contribution of SME construction firms to the economic growth and provide potential solutions that will cultivate and ignite the opportunities for greater contribution.

2. LITERATURE REVIEW

2.1 Definition of small and medium enterprises (SMEs)

In an attempt to define SMEs, it is crucial to begin by outlining the difference between the terms SMME and SME, as these two terms are typically used in SA when referring to small businesses (Moise et al., 2020). According to Irikefe and Opusunju (2021), the term SME refers to the broad range of businesses starting from small- and medium-sized established companies, to self-employed owners of micro-enterprises. As explained by Liberto (2020), SMEs are companies that maintain revenues, assets or a number of staff below a certain threshold and nations differ in defining these SMEs. Zuofa et al. (2023) argue the definition of SMEs differs among countries and between various industries. In South Africa, as stated in the National Small Business Act of 1996, amended in 2003, the South African government defines a SME as "…a separate distinct entity including cooperative enterprises and non-governmental organisations managed by one owner or more, including branches or subsidiaries if any is predominantly carried out in any sector or sub-sector of the economy mentioned in schedule of size standards and can be classified as SME by satisfying the criteria mentioned in the schedule of size standards" (Van Scheers, 2018:166).

2.2 Definition of construction SMEs

Pheng and Hou (2019) describe construction as a systematic process of producing and maintaining the built environment, which incorporates all planned activities that contribute to the development of a certain kind of object. Moreover, construction is regarded as a complex sector of the economy, since it integrates different activities, which include manufacturing, energy, finance, and labour, as well as equipment, amongst others (Tlapana and Mngeni, 2021). The Construction Industry Development Board (CIDB) defines a construction SME as a firm that has a restricted tendering capacity based on its grading (CIDB, 2021). Therefore, construction SMEs are specialised businesses with limited capacity to execute construction projects.

2.3 Challenges faced by construction SMEs in South Africa

Globally, SMEs play a major role in contributing to economic development in both developed and developing countries (Ofori-Kuragu et al., 2016). Regrettably, even though construction SMEs contribute significantly to the country's GDP, 70 to 80 percent of construction SME entrepreneurs who start-up a new business fail within the first year (Wentzel et al., 2022), 60 percent in their second year and 90 percent by the

tenth year (Rungani and Potgieter, 2018). This is because of challenges faced by construction SMEs that limit and impede their performance, and thus the development and growth of the South African construction sector (Bikitsha and Amoah, 2022). It is vitally important for countries to be aware these challenges to come with interventions to cushion construction SMEs from them to enable their full contribution to economic growth. Recent research conducted by Nyakala et al. (2022) identified critical factors that affect the success of construction SMEs in South Africa, namely, lack of consistent measurement of quality assurance process, lack of planning and management control, inadequate training in quality improvement techniques and tools, as well as lack of government support, and unskilled employees.

2.4 Internal factors influencing construction SMEs

2.4.1 Skills shortage affects construction SMEs

The South African construction sector is not absolved to the challenge of skills shortages, since one of the major limitations is the lack of competent skilled labour for many construction SMEs (Aigbavboa and Thwala, 2014). Hence, Silva et al. (2018) are of the view that the low skills level among construction industry employees is one of the major constraints that results in poor contractor performance. Dithebe et al. (2018) established the lack of key critical skills is one the factors influencing construction sector performance in SA. Therefore, skills deficiency is a challenge experienced by construction firms that required urgent intervention in the construction industry.

2.4.2 Lack of business managerial skills

According to Nqala (2019), in SA, managerial experience is an integral component in the success of construction SMEs and without managerial experience, these SMEs fail. Therefore, lack of business managerial skills is a key constraint faced by construction SMEs. A study by Olarewaju and Msomi (2021) assessed accounting skills and SME sustainability in SA and found SME owners lack financial skills, including bookkeeping. Therefore, important intervention must be taken to change by both government and construction SMEs to change this narrative.

2.5 External factors influencing construction SMEs

2.5.1 Lack of access to finance

Oyelana and Fiseha (2014) state that many construction SMEs are incapable to grow their contribution to socio-economic development due to their lack of access to finance. Aigbavboa and Thwala (2014) highlight that although the South African government has made initiatives such as the introduction of government agencies, including Small Enterprise Development Agency (SEDA), to increase access to finance, there is a deficiency in the promotional programmes used to conduct awareness by these agencies. National Credit Regulator's (NCR) report on literature concerning SME access to credit and support in SA, discovered major constraints that hinder SMEs in all sectors of the economy because of lack access to finance. These include lack of business managerial skills, lack of information on available products, lack of financial literacy, poor business plans and external factors (NCR, 2011).

2.5.2 Delays in payment

Delays in payment is a major concern to business in SA. According to the Public Service Commission report, from the start of June 2022 to the end of September 2022, the number of SMEs' invoices unpaid by government department, increased from 959 to 2 454 (Chabalala, 2022). Namaiwa (2022) point out that late payment of finished works by construction SMEs is often due to government delays in implementing approved budgets. Furthermore, one of the contributing factors of delay in payments is that small construction firms do

not know how to prepare documents for timely payment, thus affecting their cash flow (Aigbavboa and Thwala, 2014).

2.5.3 Regulatory factors

Lekhanya (2015) state that SME owners/managers in SA, in dealing with bureaucratic licencing procedures, face a major challenge. Ngibe (2020) found that regulatory requirements for construction SMEs, such as compliance with income tax registration, VAT, UIF, COID, and Pay As You Earn (PAYE), are a huge financial and administrative challenge for businesses, including those in the construction industry. Windapo et al. (2020) argue some of these regulations are not important but attract unnecessary administrative costs that are a burden to construction SMEs. Therefore, regulatory factors can be a hindrance to the success of construction SMEs.

3. RESEARCH DESIGN AND METHODOLOGY

3.1 Research approach and strategy

This study has adopted a mixed-methods research methodology (Creswell, 2014,) using an explanatory sequential mixed-methods approach, with integrated quantitative and qualitative data collection (Almalki, 2016). Almalki (2016) claims that the mixed-methods approach is the most suitable approach, since it captures trends and details of the study being undertaken. Sekaran and Bougie (2016) state that mixed-methods research answers research questions that cannot be answered by using only one method, either quantitative or qualitative, but rather a combination of both is required.

3.2 Study population

A list comprises 1 320 formal construction SMEs that conduct business primarily in the Eastern Cape province was obtained from CIDB as a target population for the study (CIDB, 2021). The study focused on registered construction SMEs only. The business participants representing businesses in the construction sector are SME owners or managers, who were invited to participate in the study.

3.3 Sample size and sampling techniques

For this study non-probability sampling and random sampling were used for the selection of the survey respondents (Kumar, 2011). The sample for the quantitative aspect of the study comprised of 303 SME owners or managers representing construction companies. This was deemed sufficient and appropriate according to Conroy (2021) to achieve a margin of error of five percent for the size of population greater than 1 000 and less than 2 500. In total, 12 semi-structured interviews were held with eight construction owners, and four construction SME managers.

3.4 Data collection

In any study, selection of the data collection instrument is a vital element that requires proper attention. For quantitative phase, primary data were collected using a survey to question respondents via online google forms, email, in person or through a self-administered questionnaire. The survey questionnaire was administered by the researcher on the construction SMEs. For qualitative phase, a schedule of interview questions was formulated, based on the findings from the quantitative phase of this study and the literature reviewed.

3.5 Data analysis

The Statistical Package for Social Sciences (SPSS) version 27.0 was used to capture and analyse primary quantitative data for this study. Thematic analysis was used to analyse the qualitative data.

4. FINDINGS AND DISCUSSION

The following section discusses study findings where quantitative findings are discussed first followed by qualitative findings.

4.1 Quantitative findings

In this study, reliability testing was done using Cronbach's alpha (Table 1). Reliability is measured using a reliability coefficient, calculated by taking several measurements on the same subjects.

Table 1. Cronbach's alpha reliability test

		N of items	Cronbach's Alpha
B11	Education and training affect the performance of construction SMEs	3	0.7266
B12	Government support affects the construction SMEs contribution to economic growth	6	0.919
B13	Business managerial skills affect the performance of construction SMEs	9	0.938
B14	Entrepreneurial leadership affects the performance of construction SMEs	7	0.912
B15	Shortage of skills affect the construction SME contribution to economic growth	4	0.863
B16	Financial barriers affect construction SMEs contribution to economic growth	4	0.940
B17	Technology infrastructure affects construction SMEs contribution to economic growth	4	0.908
B18	Organisational support affect construction SMEs contribution to economic growth	8	0.950
B19	Access to market affects construction SMEs contribution to economic growth	9	0.965
B20	Delays in payments affect construction SMEs contribution to economic growth	5	0.878
B21	Networking resources affect construction SMEs contribution to economic growth	5	0.839
B22	Social barriers affect construction SMEs performance	7	0.907
B23	Government institutions affect the contribution of construction SMEs to economic growth	3	0.917
B24	Regulatory factors affect the contribution of construction SMEs to economic growth	6	0.967

Source: Own compilation

The acceptable value for the reliability coefficient is 0.70 or higher, with a reliability coefficient closer to 1.0 considered better. The Cronbach's alpha for this research was found to be in a range of 0.727 to 0.967 as shown in (Table 1, which surpasses the recommended Cronbach's alpha value. This proves a degree of adequate, reliable scoring for these sections of the study. A detailed analysis is provided (Table 1) of the Cronbach's alpha score for all the variables from each objective as per the question. Reliability analysis was performed in all statements, where questions were categorically organised according to research themes aligned to the research aim.

4.1.2 Factor Analysis

In this study, factor analysis was used to ensure construct validity of statements and Table 2 present the results.

Table 2. KMO and Bartlett's test

		Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
			Approx. Chi-Square	df	Sig.
B11	Education and training affect the performance of construction SMEs	0.691	233.195	3	0
B12	Government support affect the construction SMEs contribution to economic growth	0,922	1652.458	36	0
B13	Business managerial skills affect the performance of construction SMEs	0.944	2012.422	36	0
B14	Entrepreneurial leadership affect the performance of construction SMEs	0.927	1214.895	21	0
B15	Shortage of skills affect the construction SMEs contribution to economic growth	0.825	548.826	6	0
B16	Financial barriers affect construction SMEs contribution to economic growth	0.869	1066.665	6	0
B17	Technology infrastructure affect construction SMEs contribution to economic growth	0.846	789.975	6	0
B18	Organisational support affect construction SMEs contribution to economic growth	0.953	2082.913	28	0
B19	Access to the market affect construction SMEs contribution to economic growth	0.957	2881.107	36	0
B20	Delays in payments affect construction SMEs contribution to economic growth	0.864	769.177	10	0
B21	Networking resources affect construction SMEs contribution to economic growth	0.836	551.898	10	0
B22	Social barriers affect construction SMEs performance	0.874	1308.206	21	0
B23	Government institutions affect the contribution of construction SMEs to economic growth	0.754	652.758	3	0
B24	Regulatory factors affect the contribution of construction SMEs to economic growth	0.963	2700.172	28	0

Source: Own compilation

The above results in table 2 show sampling and all variables in the categorised theme are sufficient and do measure the same thing. For example, the tests prove a 0.963 KMO measure of sampling adequacy, indicating that government institutions have an acceptable factor extraction (0.000) on the contribution of construction SMEs to economic growth and thus, their contribution to economic growth.

4.1.3 Influence of education and training on performance of construction SMEs

Table 3 shows the study results on the influence of education and training

Table 3. Education and training

	Agree		Nuetral		Disagree	
	Count	**Percent**	**Count**	**Percent**	**Count**	**Percent**
Level of education improves leadership skills of construction SMEs	219	72.3%	50	16.5%	34	11.3%
Entrepreneurial training will improve leadership skills of construction SME entrepreneurs	206	69.4%	59	19.5%	34	11.2%
Level of education will improve ability of construction SME entrepreneurs to be innovative	214	70.7%	57	18.8%	32	10.6%

Source: Own compilation

Level of education improves leadership skills of construction SMEs

A total of 72.3% of respondents in Table 3 agreed with the statement that level of education influences construction SME leadership skills. These findings are supported by the Chi-square test results (X2 = 195.135; df = 4; P < 0,001) for this variable, showing that education is a critical component of leadership (Nqala, 2019).

Entrepreneurial training will improve leadership skills of construction SME entrepreneurs

Results in Tabe 3 indicate that 69.4% of respondents agree that entrepreneurial training will improve the leadership skills of construction SME entrepreneurs. These findings are supported by the Chi-square test results (X2 = 132.759; df = 4; P < 0,001) for this variable, showing entrepreneurial training is a major contributor to the SME owner/manager, which enables the success of construction SMEs (Vasilska, 2020).

Level of education will improve ability of construction SME entrepreneurs to be innovative

Table 3 shows that 70.7% of the respondents agreed that that level of education is critical, as it will improve the ability of construction SME entrepreneurs to be innovative. These findings are in line with literature, as Wei et al. (2019: 1) and Almeida et al. (2018: 473) perceive level of education to be a recipe for innovative talents, thereby forming a string atmosphere for innovation and entrepreneurship, resulting in sustainable growth of revenues/profits, increased product quality and increased market share. Hence, the Chi-square test results for this variable (X2 = 144.343; df = 4; P < 0,001) confirmed the results.

4.1.4 Influence of government support affects construction SMEs' contribution to economic growth

Table 4 shows the study results on the influence of government support.

Table 4. Government support

	Agree		Nuetral		Disagree	
	Count	Percent	Count	Percent	Count	Percent

Lack of expertise among government officials affects construction SMEs' contribution to economic growth						
	236	77.90 %	30	9.90%	37	12.20 %
Lack of government policy support for construction SMEs affects their contribution to economic growth						
	230	75.90 %	35	11.60 %	38	12.60 %
Lack of government political will to support construction SMEs affects their contribution to economic growth						
	232	76.50 %	35	11.60 %	36	11.90 %
Lack of government day-to-day guidelines for construction SMEs affects their contribution to economic growth						
	230	75.60 %	36	11.90 %	37	12.20 %
Lack of technical skills workshops or training provided by government institutions affects construction SMEs' contribution to economic growth						
	225	74.20 %	37	12.20 %	41	13.50 %
Lack of government financial assistance for construction SMEs affects their contribution to economic growth						
	223	73.60 %	36	11.90 %	44	14.50 %

Source: Own compilation

Lack of expertise among government officials affects construction SMEs' contribution to economic growth

The majority of the respondents agreed that lack of expertise among government officials affects construction SMEs' contribution to economic growth. These findings are supported by the Chi-square test results ($X2 = 198.865$; $df = 4$; $P < 0,001$) for this variable, show that although government has many agencies to support SMEs, lack of informed accredited officials is a major constraint to the government support of these SMEs (NCR, 2011).

Lack of government policy support for construction SMEs affects their contribution to economic growth

Table 4 reveals that 75.9% of the respondents agreed lack of government policy support for construction SMEs affects their contribution to economic growth. Results from the Chi-square test shows ($X2 = 170.119$; $df = 4$; $P < 0,001$) for this variable, indicating lack of government policy support is a major constraint to the success of construction SMEs (Lekan et al., 2021).

Lack of government political will to support construction SMEs affects their contribution to economic growth

The majority of respondents in Table 4 at 76.5% agreed that lack of government political will to support construction SMEs affects their contribution to economic growth. These results are supported by the Chi-square test results ($X2 = 173.122$; $df = 4$; $P < 0,001$) for this variable, showing government political support offers limited support to SMEs (Wentzel et al., 2022).

Lack of government day-to-day guidelines for construction SMEs affects their contribution to economic growth

A total of 75.6% of the respondents in Table 4 indicates that lack of government day-to-day guidelines for construction SMEs affects their contribution to economic growth. A Chi-square test was conducted for this

variable and the results (X2 = 167.974; df = 4; P < 0.001) showing that failure of construction SMEs to contribute to the South African economy can be attributed to poor policies and guidelines (Hosken, 2019).

Lack of technical skills workshops or training provided by government institutions affects construction SMEs' contribution to economic growth

Results in Table 4 shows that 74.2% of respondents agreed lack of technical skills workshops or training provided by government institutions affects construction SMEs' contribution to economic growth. The results are supported by the Chi-square test results (X2 = 178.370; df = 4; P < 0.001) for this variable, which reflect technical skills remain a challenge for construction SMEs (Nyakala, 2022).

Lack of government financial assistance for construction SMEs affects construction SMEs' contribution to economic growth

As depicted in Table 4, majority at 73.6% of respondents agreed lack of government financial assistance for construction SMEs affects their contribution to economic growth. These findings are supported by the Chi-square test results (X2 = 180.053; df = 4; P < 0,001) for this variable, showing the lack of access to government finance remains a common challenge for construction SMEs in South Africa (Wentzel et al., 2016).

4.1.5 Influence of shortage of skills on the construction SMEs' contribution to economic growth

Table 5 shows the study results on the influence of shortage of skills on the construction SMEs.

Table 5. Shortage of skills

	Agree		Nuetral		Disagree	
	Count	**Percent**	**Count**	**Percent**	**Count**	**Percent**
There is a discrepancy between skills needed by the construction sector with what is available in the labour market	269	88.8%	16	5.3%	18	6%
Construction SMEs struggle to recruit people with relevant expertise	265	87.5%	16	5.3%	22	7.2%
Skills shortages in the construction sector affect the contribution of construction SMEs to economic growth	267	88.1%	14	4.6%	22	7.3%

Source: Own compilation

There is a discrepancy between skills needed by the construction sector with what is available in the labour market

Table 5 reveals that 88.8% of the respondents agreed there is a discrepancy between the skills needed by the construction sector with what is available in the labour market. The findings are supported by the Chi-square test results (X2 = 301.142; df = 4; P < 0.001) for this variable, which show challenge of a skills gap results in the construction SMEs recruiting employees who do not have technical skills (Windapo et al., 2020).

Construction SMEs struggle to recruit people with relevant expertise

A total of 87.5% of respondents in Table 5 agreed that construction SMEs struggle to recruit people with relevant expertise. A Chi-square was conducted to confirm the findings and the results (X2 = 286.488; df = 4; P < 0.001) for this variable show companies struggle to recruit workers due to insufficient skills (Lawani et al., 2022).

Skills shortages in the construction sector affect the contribution of construction SMEs to economic growth

An overwhelming majority of 88.1% of respondents agreed skills shortages in the construction sector impact the contribution of construction SMEs to economic growth. A Chi-square test was conducted and the results (X2 = 296.191; df = 4; P < 0.001) for this variable reveal skills shortages in the construction sector have a significant influence on the contribution of construction SMEs to economic growth (Silva et al., 2018).

4.1.6 Influence of government institutions on the contribution of construction SMEs to economic growth

Table 6 shows the study results on the influence of government institutions.

Table 6. Government institutions

	Agree		Nuetral		Disagree	
	Count	**Percent**	**Count**	**Percent**	**Count**	**Percent**
Unethical practises by government officials resulting in wasted tender expenses for construction SMEs affect their contribution to economic growth	253	83.5%	17	5.6%	33	10.9%
Demands for bribes by government officials affect the contribution of construction SMEs to economic growth	255	84.2%	15	5%	33	10.9%
Favouritism by government officials in the adjudication of construction projects affects the contribution of construction SMEs to economic growth	253	83.5%	17	5.6%	33	10.9

Source: Own compilation

Unethical practises by government officials resulting in wasted tender expenses for construction SMEs affect their contribution to economic growth

Table 6 reveals that a vast majority of 83.5% of respondents agreed unethical practises by government officials result in wasted tender expenses for construction SMEs. A Chi-square test was conducted and the results (X2 = 245.828; df = 4; P < 0.001) for this variable prove that corruption result in wasted tender expenses, tender uncertainty, increased project costs and reputation risks for construction SMEs.

Demands for bribes by government officials affect the contribution of construction SMEs to economic growth

The results in Table 6 show a vast majority of 84.2% respondents agreed demands for bribes by government officials affect the contribution of construction SMEs to economic growth. The findings are supported by the Chi-square test results (X2 = 261.538; df = 4; P < 0.001) for this variable, which show SA is struggling with high levels of fraud and corruption, where businesses pay bribes to be awarded tenders, which negatively affect the business environment in the country (Ofori-Kuragu et al., 2016).

Favouritism by government officials in the adjudication of construction projects affects the contribution of construction SMEs to economic growth

Table 6 show a vast majority of 83.5% of respondents agreed favouritism by government officials in the adjudication of construction projects affects the contribution of construction SMEs to economic growth. The results (X2 = 250.185; df = 4; P < 0.001) for this variable, show factors affecting the contribution of the construction sector to include corruption from officials in the construction sector and political influence by government officials on tender awards influenced by favouritism (Ofori-Kuragu et al., 2016).

4.1.7 Influence of regulatory factors on the contribution of construction SMEs to economic growth

Table 7 shows the study results on the influence of regulatory factors.

Table 7. Regulatory factors

	Agree		Nuetral		Disagree	
	Count	**Percent**	**Count**	**Percent**	**Count**	**Percent**
Lack of government policy support affects the contribution of construction SMEs to economic growth	268	88.5%	12	4%	23	7.6%
Business registration costs affect the contribution of construction SMEs to economic growth	268	88.4%	12	4%	23	7.6%
Business licencing costs affect the contribution of construction SMEs in not obtaining government SME projects	268	88.4%	11	3.6%	24%	7.9%
High SARS monthly tariffs affect the contribution of construction SMEs to economic growth	268	88.5%	11	3.6%	24	7.9%
Lack of clarity on tax policies affects the contribution of construction SMEs to economic growth	268	88.5%	12	4%	23	7.6%
Public procurement regulations affect construction SMEs' contribution to economic growth	268	88.5%	13	4.3%	22	7.3%

Source: Own compilation

Lack of government policy support affects the contribution of construction SMEs to economic growth

Table 7 shows that an overwhelming majority of 88.5% of respondents agreed lack of government policy support affects the contribution of construction SMEs to economic growth. The findings are supported by the Chi-square test results ($X2 = 300.746$; $df = 4$; $P < 0.001$) for this variable, which show lack of policy support by government for entrepreneurship, particularly in the rural areas, is a major constraint to the contribution of SMEs to economic growth in the Eastern Cape (Oyelana and Fiseha, 2014).

Business registration costs affect the contribution of construction SMEs to economic growth

As shown Table 7 an overwhelming majority of 88.4% of respondents agreed that business registration costs affect the contribution of construction SMEs to economic growth. The results indicate that ($X2 = 305.003$; $df = 4$; $P < 0.001$) for this variable, which show business registration processes are a bottleneck for small firms during start-up phase (Ngibe, 2020).

Business licencing costs affect the contribution of construction SMEs in not obtaining government SME projects

Table 7 reveals that an overwhelming majority of 88.4% of respondents agreed business licencing costs affect the contribution of construction SMEs in not obtaining government SME projects. A Chi-square test was conducted and the results ($X2 = 299.690$; $df = 4$; $P < 0.001$) for this variable confirm the contribution of construction SMEs to economic growth is influenced by business licencing costs preventing construction SMEs from obtaining government SME projects (Suliantoro et al., 2019).

High SARS monthly tariffs affect the contribution of construction SMEs to economic growth

The results in Table 7 show that an overwhelming majority of 88.5% of respondents agreed high SARS monthly tariffs affect the contribution of construction SMEs to economic growth. To confirm these findings, a

Chi-square test was conducted and the results (X2 = 296.422; df = 4; P < 0.001) for this variable which proved that high tax rates is the biggest factor that affects the growth of SME businesses (Ngibe, 2020).

Lack of clarity on tax policies affects the contribution of construction SMEs to economic growth

Lack of clarity on tax policies affects the contribution of construction SMEs to economic growth Table 7 reflects that an overwhelming majority of 88.6% of respondents agreed lack of clarity on tax policies affects the contribution of construction SMEs to economic growth. A Chi-square test was conducted and the results (X2 = 307.248; df = 4; P = 0.000) for this variable show the contribution of construction SMEs to economic growth is affected by lack of clarity on tax policies.

Public procurement regulations affect construction SMEs' contribution to economic growth

The results in Table 7 reveal that an overwhelming majority of 88.5% of the respondents agreed public procurement regulations affect construction SMEs' contribution to economic growth. The results are supported by the Chi-square test results (X2 = 299.030; df = 4; P = 0.000) for this variable, which show public procurement government regulations are an obstacle to the growth of SME businesses (Suliantoro et al., 2019).

4.2 Qualitative findings

To ensure anonymity, names of participants are not published in the study. However, Table 8 indicates how participants were referred to in the study.

Table 8. Description of key participants

P1	
P2	Construction SME Managers
P7	
P3	
P4	
P5	
P6	
P8	Construction SME Owners
P9	
P10	
P11	
P12	

Source: Own compilation

The following section outlines the presentation and discussion of the qualitative findings.

4.2.1 Factors influencing the contribution of construction SMEs to economic growth

Regarding the factors that impact business performance which eventually influence the contribution of construction SMEs, the interviewees indicated the following:

Lack of skills

According to Silva et al. (2018), the South African construction industry has become unravelled by low skills levels. As an enablement of business sustainability for construction SMEs, productivity performance is linked to the skills and experience of employees (Demirkan et al., 2022). Notably, most interviewees expressed

strong views on how their businesses rely on experience and skills of their employees to achieve business performance. This is reflected in a statement made by a construction SME owner:

"Our business performance, in terms of project execution is measured by time, cost and quality. For us to achieve this, proper quality concerning to skills, experience and knowledge of employees is very important. This is one of the characterises of our business". (P3)

Echoing similar sentiments, another construction SME owner claimed when you have skilled employees, business operations are streamlined:

"When you have skilled and experienced employees, operations run smoother and faster. Hence, we pride ourselves in taking our employees through formal training". (P1)

In support of skills as a performance enabler, a construction SME manager added skills are a cutting edge to the sustainability of the business.

"…having skilled and experience people to perform work for your business is good because you know that your business is in good hands". (P2)

In summary, both construction owners and managers agree that skills of employees are what enables construction SMEs to achieve business performance. This is consistent with Demirkan et al. (2022), who observe high skilled and well-trained staff are critical for business performance through innovation.

Government regulations

Kent (2013) has discovered that there to many regulations who are destroying small businesses. In elaborating the influence of regulation on the performance of construction SMEs, a construction SME owner stated that:

"The are many red tapes associated with tendering, there are many requirements like letter of good standing, business certificates. When I started doing business it was easy. I have been in business for 25 years but now it is not easy" (P4).

While another construction SME owner reflected the following:

"There are a lot of documents required when putting a tender. Some tenders require performance bonds and guarantees which we do not have as SMEs". (P10)

The above findings are in line with Windapo's et al. (2020) study which found that regulatory barriers are a huge risk to the growth and sustainability of construction SMEs.

Proper equipment

As emphasised by Msomi and Olarewaju (2021), equipment is one the key aspects that enables construction SMEs to achieve competitive advantage. This suggests it is imperative for construction businesses to acquire appropriate equipment. This view is depicted in a statement by another construction SME owner that:

"Good equipment helps to run projects efficiently. Over the past 25 years since I started construction business, I have been ensuring that we utilise equipment. That is why we have been completed our project on time and able to generate profits". (P5)

On the contrary, one of the construction SME owners indicated there is no need to have equipment in the business, as these come with high maintenance costs. According to this business owner, hiring of equipment, rather than buying, is the best solution:

"In my company we do not buy equipment we hire as and when we require for the project. There are costs associated with buying the equipment like maintenance, hiring of operators. When you hire you are able to minimise the running costs especially when there are no projects to execute. SMEs like my size do not need to buy big equipment". (P8)

However, lack of equipment, according to Sityata (2019), has been identified as one of the factors that affect the performance of construction SMEs.

Summary of findings

The respondents recognised education and training as a critical variable influencing leadership skills of construction SMEs. Literature also alluded to education and training being associated with increased quality products that lead to increased revenue and profit margins. Thus, as pillars of business success, education and entrepreneurial training cannot be isolated as an influence on business performance. The study further found that lack of government support influences the contribution of construction SMEs to economic growth. The study findings revealed access to finance is very important for business success and performance where government agencies and the private sector, which include banks, are potential avenues for access finance. Consequently, the study discovered lack of access to finance from financial institutions hinders construction SMEs' business growth and affects their contribution to economic growth. Furthermore, high interest rates charged on loans by creditors are the greatest threat to the survival of construction SMEs and affects their contribution to economic growth. The empirical results of the study further identified business managerial skills as an enabler of the smooth running and business growth of construction SMEs. Thus, business managerial skills, as an internal factor, are crucial for contribution of construction SMEs to economic growth. Lastly, the study verified that skills shortage greatly influences the performance of construction SMEs and their contribution to economic growth. Additionally, organisational support, as an internal factor, has a far greater influence on the contribution of construction SMEs to economic growth.

6. CONCLUSION AND RECOMMENDATION

The findings of the study revealed that there are key internal and external factors influencing the contribution of construction SMEs. The internal factors identified by the study include education and training, business managerial skills, entrepreneurial leadership, shortage of skills and organisational support. While the external factors identified by the study are lack of government support, high prices of materials, financial barriers, access to market, delays in payments, networking resources, social barriers, technology infrastructure, competition in construction sector and regulatory factors. Therefore, for countries to take full advantage of construction SMEs' contribution to economic growth through job creation and economic development, interventions must be formulated to address these factors. Hence, it is recommended construction SMEs should invest in educating and training their own employees to equip and empower these individuals with knowledge and skills they require to facilitate innovation in their businesses. It is further recommended construction SMEs provide appropriate training and development for their employees, aligned to business requirement in terms of scarce skills. In addressing external factors, the study recommends that government must provide tangible support aimed at providing tenders that will target small businesses. Government must provide financial support dedicated to SME businesses that will attract less interest. Moreover, government must not only find ways to protect small firms from procurement regulations, as these laws turn to favour large firms by removing red tape on tendering and reduce compliance requirements. Government officials and policy makers who develop policies for SMEs must also have relevant experience and involve all stakeholders, particularly SMEs when developing policies. Furthermore, this study proposes an integrated prototype model discussed below.

Overall, for construction SMEs owners/managers to achieve business growth, it is recommended that stakeholders like government, policy makers and construction SMEs need to thoroughly study the above integrated model which shows factors that influence business growth. This will enable these stakeholders to take remedial steps and make informed decision which strategically align to business grown of construction SMEs.

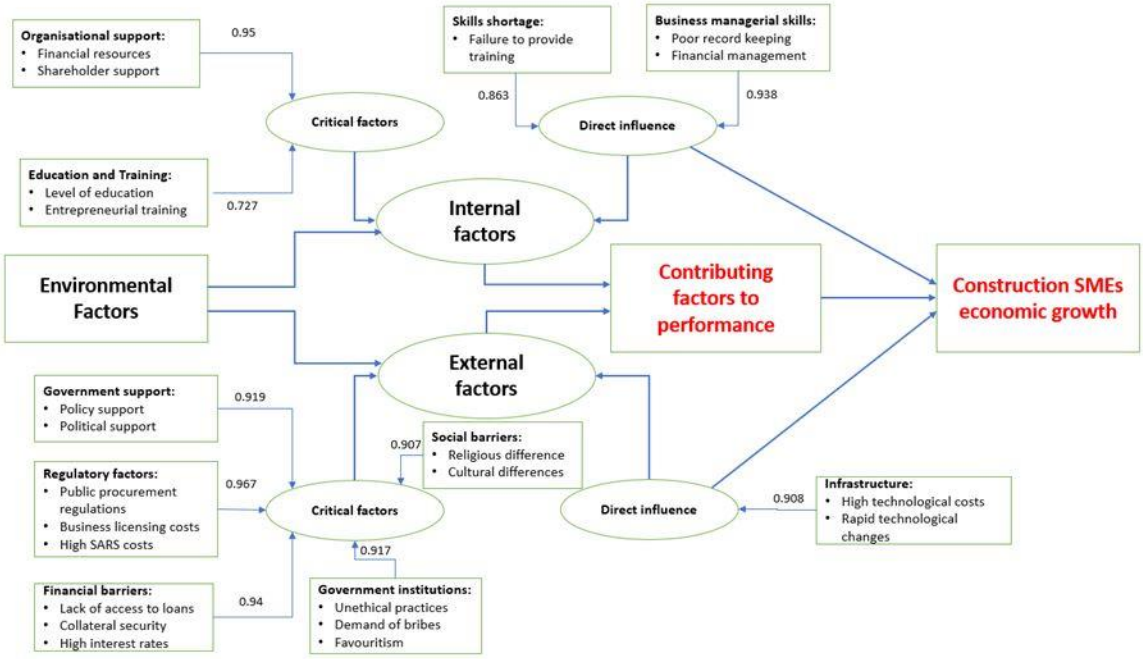

FIGURE 1
PROPOSED INTEGRATED MODEL

Source: Developed by the researchers

The development of the proposed integrated model was accomplished through a critical analysis of empirical findings and literature reviewed of the study. The empirical findings of the study were achieved through testing of wide range of variables identified in the literature. The variables identified in the prototype model are those which respondents (construction SME owners/managers) deemed to have a significant influence on business growth.

REFERENCES

1. Aigbavboa, C. O. (2014). Challenges Facing Black Owned Small and Medium Construction Companies: A Case Study of Nelspruit â€“Mbombela Municipality, South Africa. *Journal of economics and behavioral studies*, *6*(10), 771-778.
2. Alaloul, W. S., Musarat, M. A., Rabbani, M. B. A., Iqbal, Q., Maqsoom, A., & Farooq, W. (2021). Construction sector contribution to economic stability: Malaysian GDP distribution. *Sustainability*, *13*(9), 5012.
3. Almalki, S. (2016). Integrating Quantitative and Qualitative Data in Mixed Methods Research--Challenges and Benefits. *Journal of education and learning*, *5*(3), 288-296.
4. Amoah, S. K., & Amoah, A. K. (2018). The role of small and medium enterprises (SMEs) to employment in Ghana. *International Journal of Business and Economics Research*, *7*(5), 151-157.
5. Babbie, E. R. (2020). *The practice of social research*. Cengage Au.
6. Bikitsha, L., & Amoah, C. (2022). Assessment of challenges and risk factors influencing the operation of emerging contractors in the Gauteng Province, South Africa. *International Journal of Construction Management*, *22*(11), 2027-2036.
7. Berisha, G., & Pula, J. S. (2015). Defining Small and Medium Enterprises: a critical review. *Academic Journal of Business, Administration, Law and Social Sciences*, *1*(1), 17-28.
8. Chabalala, J. 2022. Departments' failure to pay invoices on time shows 'little care' for survival of small businesses.
9. Construction Industry Development Board (CIDB). 2021. Construction Monitor: Transformation
10. Conroy, R. M. (2016). The RCSI Sample size handbook. *A rough guide*, 59-61.
11. Coega Development Corporation (CDC). 2020. Integrated annual report 2019/20.

12. Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
13. Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage publications.
14. Demirkan, I., Srinivasan, R., & Nand, A. (2022). Innovation in SMEs: the role of employee training in German SMEs. *Journal of Small Business and Enterprise Development*, *29*(3), 421-440.
15. Dithebe, K., Aigbavboa, C., Oke, A., & Muyambu, M. A. (2018, November). Factors influencing the performance of the South African construction industry: A case of Limpopo province. In *Proceedings of the International Conference on Industrial Engineering and Operations Management* (Vol. 2018, No. NOV, pp. 1185-1192).
16. Dlamini, B., & Schutte, D. P. (2020). An overview of the historical development of Small and Medium Enterprises in Zimbabwe. *Small Enterprise Research*, *27*(3), 306-322.
17. Fatoki, O. (2018). The impact of entrepreneurial resilience on the success of small and medium enterprises in South Africa. *Sustainability*, *10*(7), 2527.
18. Flepisi, L., Womack, A. J. C., & Lekhanya, L. M. (2023, May). Construction SMEs versus economic growth: the Eastern Cape perspective. In *Re-engineering Business Processes in the New Normal-The Business and Economic Development Post COVID-19 and the Restructuring of the Global Economy: Proceedings of the 8th International Conference on Business and Management Dynamics (Issue June). https://doi. org/10.9734/bpi/mono/978-81-19315-19-2/ch10*.
19. Hosken, G. 2019. Building firms close due to late payment. The Daily Dispatch, 6 May: 2019.
20. Irikefe, P. O., & Opusunju, M. I. (2021). Effect of financial literacy on the growth of micro, small and medium enterprises (MSMEs). *International Journal of Research Publications (IJRP. ORG)*, *384*.
21. Kent, P. 2013. SureSwipe MD: Laws kill small businesses.
22. Khamaksorn, A., Tah, J., & Kurul, E. (2020). Knowledge creation: A case study of international construction joint venture projects in Thailand. *International Journal of Innovation, Management and Technology*, *11*(1), 10-17.
23. Krüger, N., Dickason, Z., & Meyer, N. (2020). Factors affecting South African Small and Medium Enterprises risk identification and management. *Journal of Contemporary Management*, *17*(2), 347-368.
24. Kumar, R. (2018). Research methodology: A step-by-step guide for beginners.
25. Lawani, K., McKenzie-Govan, S., Hare, B., Sherratt, F., & Cameron, I. (2022). Skill shortage of bricklayers in Scotland. *Journal of Engineering, Design and Technology*, *20*(1), 321-338.
26. Lekan, A., Clinton, A., & Uduak, N. (2021). Corporate social responsibility, challenges, instigators and swot analysis of construction SMEs towards strategic development of sustainable enterprises. *Academy of Strategic Management Journal*, *20*, 1-20.
27. Lekhanya, L. M. (2015). Key internal factors affecting the small, medium and micro enterprises (SMMEs) marketing strategies in rural South Africa. *Problems and perspectives in management (Online)*.
28. Liberto, D. 2020. What is a Small and mid-size Enterprise (SME)?
29. Mafundu, R. H., & Mafini, C. (2019). Internal constraints to business performance in black-owned small to medium enterprises in the construction industry. *The Southern African Journal of Entrepreneurship and Small Business Management*, *11*(1), 1-10.
30. Moise, L. L., Khoase, R., & Ndayizigamiye, P. (2020). The influence of government support interventions on the growth of African foreign-owned SMMEs in South Africa. In *Analyzing the relationship between innovation, value creation, and entrepreneurship* (pp. 104-124). IGI Global.
31. Msomi, T., & Olarewaju, O. (2021). Evaluation of access to finance, market and viability of small and medium-sized enterprises in South Africa. *Problems and Perspectives in Management*, *19*(1), 281-289.
32. Namaiwa, B. M. 2022. Causes of Late Payment of Commercial Debt and Challenges of Working Capital to Small and Medium Enterprises (SMES) in the Construction Industry of Zamfara State, Nigeria. International Journal of Innovative Science and Research Technology, 7(1), 689-696.
33. CREDIT, M. E. A. T. (2011). LITERATURE REVIEW ON SMALL AND MEDIUM ENTERPRISES'ACCESS TO CREDIT AND SUPPORT IN SOUTH AFRICA.
34. Ngibe, M. (2020). *A proposed integrated model for innovative business leadership for the attainment of sustainable growth in small and medium manufacturing enterprises in KwaZulu-Natal* (Doctoral dissertation).
35. Nqala, L., Campus, B. C., & Collage, B. INTERNAL CONTROLS SYSTEMS, SMES AND ECONOMY OF DEVELOPING COUNTRIES: CASE OF SOUTH AFRICA.
36. Nyakala, K. S., Vermeulen, A., & Pretorius, J. H. (2022, June). Construction Sustainability: Empirical Evidence on SME Development and Delivery Challenges of Road Infrastructure in South Africa. In *Construction in 5D: Deconstruction,*

Digitalization, Disruption, Disaster, Development: Proceedings of the 15th Built Environment Conference (pp. 375-388). Cham: Springer International Publishing.

37. Ofori-Kuragu, J. K., Owusu-Manu, D. G., & Ayarkwa, J. (2016). The case for a construction industry council in Ghana. *Journal of Construction in developing Countries*, *21*(2), 131.
38. Oyelana, A. A., & Fiseha, G. G. (2014). An investigation into the effect of small and medium enterprises (SMEs) on the socio-economic development of Alice in Eastern Cape Province, South Africa. *Mediterranean Journal of Social Sciences*, *5*(23), 674-689.
39. Sui Pheng, L., Shing Hou, L., Pheng, L. S., & Hou, L. S. (2019). The economy and the construction industry. *Construction quality and the economy: A study at the firm level*, 21-54.
40. Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. john wiley & sons.
41. Silva, G. A. S. K., Warnakulasuriya, B. N. F., & Arachchige, B. J. H. (2018). A review of the skill shortage challenge in construction industry in Sri Lanka. *International Journal of Economics, Business and Management Research*, *2*(1), 75-89.
42. Suliantoro, H., Winarno, B. A., & Handayani, N. U. (2019, August). Analysing the success factors of SMEs on public procurement. In *IOP Conference Series: Materials Science and Engineering* (Vol. 598, No. 1, p. 012097). IOP Publishing.
43. Tlapana, T., & Mngeni, Z. (2021). THE challenges faced by African females in the construction industry. evidence from a selected metropolis of the Eastern Cape. *Modern Management Review*, *26*(4), 107-117.
44. Tsado, A., Alumbugu, P. O., & Archibong, I. M. (2019). Contract awards disparity among multinational and indigenous construction companies.
45. Scheers, L. V. (2018). Marketing challenges small and medium enterprises (SME) are facing in South Africa. *The journal of accounting and management*, *8*(1), 27-34.
46. Vasilska, M. 2020, June. Impact of entrepreneurs' management qualification on the competitive performance of their businesses. In Proceedings of the 10th International Conference: The Future of Education, 18-19.
47. Smallwood, J. J., Emuze, F. A., & Wentzel, L. (2016). Improving the business trajectory among small and medium size construction firms in South Africa. *Journal of Construction Project Management and Innovation*, *6*(2), 1477-1487.
48. Wentzel, L., Fapohunda, J. A., & Haldenwang, R. (2022). The relationship between the integration of CSR and sustainable business performance: Perceptions of SMEs in the South African construction industry. *Sustainability*, *14*(3), 1049.
49. Windapo, A. O., Olugboyega, O., & Odediran, S. (2020). Impacts of procurement strategies on construction SMEs' growth. *Journal of financial management of property and construction*, *25*(3), 423-446.
50. Zuofa, T., Ochieng, E. G., & Ode-Ichakpa, I. (2023). An evaluation of determinants influencing the adoption of circular economy principles in Nigerian construction SMEs. *Building Research & Information*, *51*(1), 69-84.