Cape Peninsula
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A CORPORATE SOCIAL RESPONSIBILITY MODEL TO ACHIEVE SUSTAINABLE BUSINESS PERFORMANCE OF SMEs IN THE SOUTH AFRICAN CONSTRUCTION INDUSTRY

by

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DECLARATION

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ABSTRACT

Although studies related to redirecting the unsustainable trajectory of SMEs in the South African construction industry have been extensively conducted, current statistics illustrate that 70%-80% of construction SMEs in the South African construction industry fail within their first five years, raising concerns regarding their sustainability. This study attempts to address this negative trajectory by exploring the concept of corporate social responsibility (CSR) and developing a CSR model to guide SMEs towards the achievement of sustainable business performance.

A conceptual model was developed through an extensive review of literature across the following areas (research constructs): the perception of SMEs pertaining to the relationship between the integration of CSR and sustainable business performance; CSR drivers influencing CSR practices of SMEs; CSR implementation challenges that SMEs experience; and CSR activities that must be considered by SMEs to achieve sustainable business performance. Theories linked to CSR – including instrumental theory, legitimacy theory, stakeholder theory and perception theory – were also reviewed, with stakeholder theory and perception theory being justified to underpin the conceptual model. A mixed method approach through an explanatory sequential design was adopted, with both descriptive and inferential statistical techniques utilised for data analysis. Quantitative data was collected via a web-based questionnaire that was emailed nationally to general building (GB) and civil engineering (CE) contractors registered on the cidb register of contractors between Grades 1 and 6. The findings obtained during the quantitative phase were used to develop an interview guide for the qualitative phase that involved four structured face-to-face interviews, conducted with four contractors who participated in the initial quantitative phase.

The significant findings emanating from the two data collection phases were integrated for the purpose of developing a CSR model utilising Partial Least Square Structural Equation Modelling (PLS-SEM). Findings revealed that several constructs – the perception of SMEs pertaining to the relationship between the integration of CSR and sustainable business performance; the CSR drivers influencing the CSR practices of SMEs; and the CSR implementation challenges that SMEs experience – have substantial predictive capabilities to influence CSR activities that need to be considered by SMEs to achieve sustainable business performance, thus providing SMEs in the South African construction industry with specific pioneering CSR indicators for the achievement of sustainable business performance.

Keywords: corporate social responsibility, CSR activities, CSR drivers, CSR implementation challenges, perception, South Africa, sustainable business performance

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DEDICATION

This thesis is dedicated to my amazing wife, Mrs Norma-Rae Wentzel, who has supported me spiritually and physically throughout my doctoral journey. Thank you so much for your continuous love and support and for your sacrifices.

This piece of work is also dedicated to my daughter, Ms Kylie Wentzel, who continuously inspires me by her curiosity and free imagination. Daddy honours the daughterly love, support and respect you continue to show me.

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DEFINITION OF TERMS

Corporate social responsibility: A concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with stakeholders on a voluntary basis.

CSR implementation challenges: Challenges impacting the social integration and environmental concerns of companies within their operations and their interaction with stakeholders on a voluntary basis.

CSR drivers: Factors influencing the practice of CSR.

Perceptions: A sensory experience of the world, involving both the recognition of environmental stimuli and actions in response to these stimuli.

Small and medium enterprises (SMEs): A cluster of enterprises specifically registered on the construction industry development board (cidb) register of contractors between Grades 1 to 6, and whose current upper limit of tender value ranges between less than R1 million to R20 million.

Sustainable business performance: A phenomenon maintaining a set of attributes at a productive level or rate, focusing on stakeholder satisfaction, provided in a culture that motivates the business owner to coordinate resources and activities.

LIST OF ABBREVIATIONS

AIDS: Acquired Immunodeficiency Syndrome

ANOVA: Analysis of Variance

AVE: Average Variance Extracted

BBBEE: Broad-Based Black Economic Empowerment

CB-SEM: Covariance-Based Structural Equation Model

CE: Civil Engineering

CFP: Corporate Financial Performance

CG: Corporate Governance

CIC: Corporate social responsibility implementation challenges

CIBOK: Construction Industry Body of Knowledge

CIDB: Construction Industry Development Board

COVID-19: Coronavirus Disease 2019

CSR: Corporate social responsibility

DTI: Department of Trade and Industry

EB: Electrical Engineering Works – Building

EBSCO: Elton B. Stephens Company

EP: Electrical Engineering Works – Infrastructure

FA: Factor analysis

FTSE: Financial Times Stock Exchange

GB: General Building

GDP: Gross Domestic Product

GoF: Goodness of Fit

GRI: Global reporting initiative

HIV: Human Immunodeficiency Virus

IBLF: International Business Leaders Forum

ICT: Information and Communications Technology

IRC: Integrated Reporting Committee

ISEAL: International Social and Environmental Accreditation and Labelling

ISO: International Organisations for Standardisation

JSE: Johannesburg Stock Exchange

KMO: Kaiser-Meyer-Olkin

KPMG: Klynveld Peat Marwick Goerdeler

ME: Mechanical Engineering

MEs: Medium enterprises

MSs: Mean scores

NGO: Non-governmental organisation

OECD: Organisation for Economic Co-operation and Development

OHS: Occupational Health and Safety

PA: Parallel analysis

PCA: Principal component analysis

PLS-SEM: Partial Least Square Structural Equation Model

RII: Responsible investment index

R-square: Coefficient of determination

SBP: Sustainable business performance

SDGs: Sustainable development goals

SE: Demolition and blasting

SEM: Structural equation modelling

SEs: Small enterprises

SMEs: Small-medium enterprises

SPSS: Statistical Package for Social Sciences

SRI: Socially responsible investment

SRPI: Socially responsible property investing

TB: Tuberculosis

TEA: Total early-stage entrepreneurial activity

t-statistic: Hypothesis test statistic

UK: United Kingdom

USA: United States of America

WoS: Web of Science

ZAR: South African Rand

CHAPTER 1
THE PROBLEM AND ITS SETTING

1.1 Introduction

A thriving economy depends primarily on the capacity to establish an excellent business environment for small and medium enterprises (SMEs) that supplies quality services and competitive products at affordable costs and in quantities that are market related (Robu, 2013:86). Thus it is important for SMEs to acclimatise to fluctuating conditions of competition and innovation through the process of globalisation (Keskin, Senturk, Sungur & Kiris, 2010:183; Robu, 2013:86). In South Africa, SMEs have been identified by government as a source of job creation to boost the economy. The role of SMEs in the South African construction industry should therefore be considered equally important to the economy as the role of SMEs in general. Shakantu (2012:256, cited by Wentzel, Smallwood & Emuze, 2016:1479) and Aigbavboa and Thwala (2014:772) therefore assert that construction SMEs are critical drivers of economies locally and globally.

Vallie (2018:1) reports that 70-80% of SMEs in the South African construction industry illustrate signs of unsustainable business performance in the first year of existence, which predominantly leads to business failure. To overcome this problem, authors such as Ramukumba (2014:24); Mofokeng (2012:206); Eke, Aigbavboa and Thwala (2015:4-6); Aigbavboa, Ok, and Kakanyo (2016:348), and Aigbavboa and Thwala (2014:776) have suggested that the major contributor threatening the sustainable business performance (SBP) of SMEs in the South African construction industry relates primarily to the lack of management competencies regarding the owner-managers of these SMEs. These studies, however, have not placed emphasis on corporate social responsibility (CSR) as a driver to the sustainable business performance of SMEs in the South African construction industry. Hence, this present study attempts to identify CSR factors that must be considered by SMEs in the South African construction industry to achieve sustainable business performance, and in so doing a CSR model to guide SMEs in the South African construction industry towards sustainable business performance can be achieved.

1.2 Background of the study

The construction industry of a country, including that of a developing country, contributes significantly towards sustainable economic development, evidenced by noteworthy gross domestic product (GDP) contributions and employment generation (Habitat, 1996:142; Lopes, 2012:49-50). In addition, the construction industry in most countries, if not all, is an isolated sector, such as the sectors for agriculture, manufacturing and services, which make their own, unique contributions towards sustainable economic growth (Habitat, 1996:142). The

construction industry also plays a significant role in satisfying a wide range of environmental, economic and social needs, and contributes expressively to the accomplishment of several major national goals, driving sustainable development. Thus, the magnitude of the industry, the nature of its operations and its manifestation in every developmental activity make it an attractive area for the transfer and development of technologies consistent with the developmental goals of developing nations (Lopes, 2012:49). Hence, the significant debate and actions pertaining to transformation of the South African construction industry.

According to Phakathi (2017:1) transformation of the South African construction industry has started in earnest and is steadily gaining momentum. One major reason for this stems from the need to address the effects of apartheid that constrained the South African construction industry by sanctions and racial policies, curbing the growth of the industry (Martin, 2010:13; Cottle, 2014:139). However, since 1994, South Africa has been reintegrated into the international market and has been positioning itself to realise the high expectations of its populace regarding a successful transition towards a more democratic society (Berry, von Blottnitz, Cassiem, Kesper, Rajaratnam & van Seventer, 2002:1). Berry *et al.* (2002:1) and Jones (2016:1) contend that to realise the objectives and goals of economic growth, employment generation and income redistribution, it is critical that the South African government promote sustainable performing SMEs. However, to do so, the configuration and significance of SMEs across all sectors – including the construction industry – should be adequately understood.

SMEs comprise of a broad range of firms, from sound traditional family businesses which employ over a hundred people (medium-sized enterprises), down to survivalist self-employed entrepreneurs from the underprivileged strata of the population (Berry *et al.*, 2002:1). According to Robu (2013: 85), there is no universally accepted definition for SMEs. Shakantu (2012:253) concurs that there are numerous challenges associated with defining SMEs. Robu (2013:85) adds that economic, cultural and social differences among various countries are reflected both in the definition as well as in the classification of SMEs, stating,

> *Over the years, each country has had different approaches when it comes to small and medium enterprise notion. There are typologies which are based on the number of employees, made turnover or the industrial branch of the company*.

Wentzel *et al.* (2016:1478) are of the opinion that the benchmark for delineating enterprises by size routinely includes one or more of the following factors: value of fixed assets; total number of employees; annual turnover; annual volume of physical production; and paid-up capital. The nature of activity determines the viable and normal economic operating size. Therefore, there

is no single definition. Shakantu (2012: 254) thus asserts that SMEs in the construction sector can be classified into distinguished groups:

- **Small enterprises:** These are businesses that employ 6-60 people and generate between R1.1 million and R12 million turnover per annum. Small enterprises are usually owner-managed and are more likely to operate from business or industrial properties, be registered for tax and meet other formal registration requirements. Small enterprises employ skilled personnel to carry out the work required.

- **Medium enterprises:** These are businesses that employ 61-300 people and generate between R12.1 million and R60 million turnover per annum. Medium enterprises are usually controlled by a manager or the owner. Similar to small enterprises, medium-sized enterprises employ skilled people.

Notwithstanding the above opinions pertaining to the definition and classification for SMEs in the construction sector, Windapo, Olugboyega and Odediran (2020:9) view SMEs in the South African construction industry as a cluster of enterprises who are specifically registered on the cidb register of contractors between Grades 1 to 6. Figure 1.1 depicts the make-up of SMEs in the South African construction industry, as described by the Construction Industry Development Board (cidb) (2020:1).
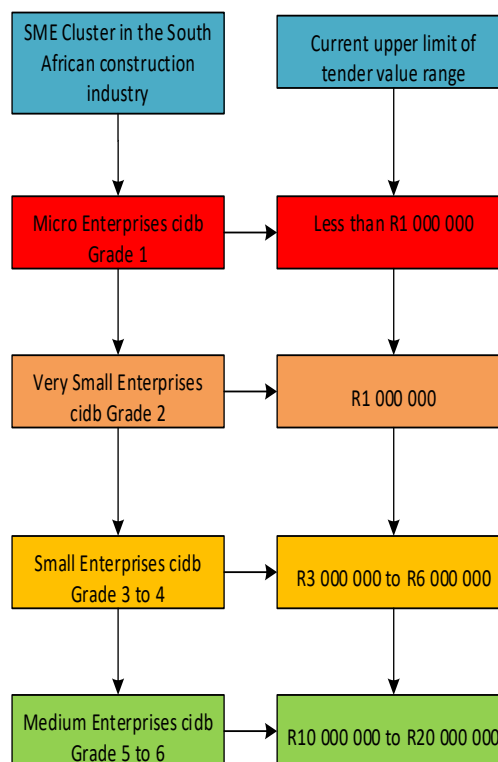
Figure 1.1 SME cluster in the South African construction industry
(Adapted from Windapo *et al.,* 2020; cidb, 2020:1)

1.3 Significance of SMEs

The Organisation for Economic Co-operation and Development (OECD) (2017:5) are of the opinion that globally and at all levels of development, SMEs are significant role players in the achievement of Sustainable Development Goals (SDGs). These goals are understood to promote inclusive and sustainable economic growth, providing employment for many individuals, and promoting sustainable industrialisation, fostering innovation, and reducing income inequalities while also encouraging an entrepreneurial culture. The OECD (2017:6) further highlights the significance of SMEs by claiming that SMEs are the main source of employment in most countries around the world, contributing up to 70% of total employment in high-income countries. SMEs also contribute to value creation, generating between 50% and 60% of value added on average (OECD, 2017:6). Moreover, according to the OECD (2017:6), SMEs contribute approximately 33% of the GDP and 45% of total employment in many low-income countries. Adding to the significance of SMEs is that they are needed to promote competitiveness and to bring new products or techniques to the market (Robu, 2013:86). This is concurred by the OECD (2017:6): the development of SMEs hold the potential to contribute to economic diversification and resilience. This is especially relevant for resource-rich countries which are vulnerable to commodity price fluctuation. Robu (2013:86) adds the following:

> *SMEs increase their productivity mostly through finance. Investments provide access to technologies and helps expand the business, thus ensuring the competitiveness of a company and, by extrapolating, the competitiveness of a nation as a whole.*

With this said, it would be fair to assume that the performance and development level of any economy depends primarily on the capacity to create a good environment for SMEs which can supply quality services and competitive products at lower costs and in quantities that are adjusted to the market (Robu, 2013:86). Overall, the actual importance of SMEs is to adapt to the changing conditions of competition and innovation with the globalisation process (Keskin *et al.*, 2010:183; Robu, 2013:86).

1.4 Significance of construction SME development

As early as 1996, SMEs in the United States of America (USA) advanced the economy, giving the USA economy a competitive edge within the global economy, by introducing innovative services and products, creating new jobs and opening foreign markets (Scarborough & Zimmerer, 1996, cited by Aigbavboa & Thwala, 2014:771). In addition, the Japanese Ministry of International Trade and Industry (1997, cited by Aigbavboa & Thwala, 2014:771) stated that the SME sector as early as 1997 similarly accounted for the majority of the country's business

establishments, which in turn contributed to healthy employment, strong regional economies and good quality of life for the people of Japan. These meaningful contributions by the SME sector continue to positively impact the economies of Japan and other countries.

In South Africa, SMEs have been identified by government as a primary source of job creation which in essence would boost the economy. Hence, it should be appreciated that the role of SMEs in the South African construction industry is equally important to the economy as that of SMEs in general. Shakantu (2012:256, cited by Wentzel *et al.*, 2016:1479) and Aigbavboa and Thwala (2014:772) affirm that construction SMEs are critical drivers locally and globally, influencing government strategies to generate employment opportunities and to nurture economic growth and national development, given that the formal sector continues to shed jobs when business transactions are not favourable.

Robinson (2017:1) concurs that in the United Kingdom (UK) construction SMEs are indeed the driving force of the construction sector, dedicating their time and efforts to improve their technical expertise and to pioneer ground breaking technologies that push the boundaries of innovation in the industry. These SMEs, whether in the UK or in developing countries such as South Africa, are the avenues through which many underprivileged people, who lack financial resources and skills, can gain access to economic opportunities. In addition, construction SMEs are potential engines of wealth creation, value reorientation, job creation and poverty eradication (Shakantu, 2012: 256-257; Robinson, 2017:1). This is particularly critical for South Africa, a country characterised by the legacy of big-business dominance and an enormous unequal distribution of wealth.

1.5 Problem statement

The existence of a vibrant small business sector often indicates the presence of an economically healthy society which is fuelled by an entrepreneurial spirit. It is well acknowledged that South Africa's small business sector is experiencing many challenges. One challenge is that the birth of SMEs in South Africa, according to Total Early-Stage Entrepreneurial Activity (TEA), is of the lowest in the world (Fatoki, 2014:922). Herrington and Kew (2018:7), however, believe that although growth may be slow, this statistic has to a certain extent improved South Africa's TEA ranking at 27 out of 54 countries. Despite these challenges, the small business sector contributes significantly to the South African economy. According to Bisseker (2018:1), South African SMEs employ 47% of the workforce, contribute to more than 20% of GDP and pay about 6% of all corporate taxes.

These are good statistics in terms of the contributions of SMEs towards society, but unfortunately many SMEs show signs of unsustainable business performance in their first year

of existence (van Scheers, 2011:5048). Vallie (2018:1) reports that a staggering 70-80% of SMEs in South Africa do not manage to survive the first year of business. These signs of unsustainable business performance are not only related to SMEs in general, but also reflect negatively on construction SMEs which form part of the South African business sector at large. This is justified by Vallie (2017:1) who reports that statistics currently illustrate that 70-80% of construction SMEs fail within their first five years of existence. In essence, this raises huge question marks around the sustainability of construction SMEs in South Africa.

According to Vallie (2017:1), construction SMEs in South Africa are presently battling to accomplish their growth potential to become pivotal drivers of job creation, adding that South Africa's tedious economic growth, on-going political uncertainty and current national budget shortfall of R209-billion, all contribute to the current state and position of construction SMEs across South Africa. To sum up, in recent years, the South African government has impacted negatively on SMEs by allowing the small business environment to deteriorate significantly.

1.6 Gap identification

To address this problem, many authors such as Ramukumba (2014:24); Mofokeng (2012:206); Eke, Aigbavboa and Thwala (2015:4-6); Aigbavboa, Oke and Kakanyo (2016:348); Aigbavboa and Thwala (2014:776) and Bushe (2019), conducting research on SMEs in the South African construction industry, have suggested that factors threatening the sustainable business performance and survival of SMEs in the South African construction industry relate primarily to the lack of the SME owner-manager's management knowledge (planning capacity, resourcing capacity, leadership capacity and controlling capacity); business knowledge and self-knowledge; industry experience in the chosen area of business such as construction; and business acumen, aptitude and entrepreneurial mind-set to raise a successful enterprise. However, these studies have not emphasised corporate social responsibility (CSR) as a driver to the sustainable business performance of SMEs in the South African construction industry. Thus, it is the researcher's main beliefs that placing emphasis on CSR will drive sustainable business performance of SMEs in the South African construction industry.

According to Turyakira, Venter and Smith (2012:107), while there has been extensive practical and academic interest in CSR and its impact on the sustainable business performance of SME businesses in general, there are still limitations regarding theoretical and empirical studies. More so, studies such as the ones conducted by Choongo (2017); Turyakira (2017); Jamali, Lund-Thomsen and Jeppesen (2017); Turyakira, Venter and Smith (2014); Turyakira *et al.* (2012); Dahlsrud (2008); Mandl (2009); and Commission of the European Communities (2001) have placed extensive focus on CSR by general SMEs in developing countries. Similarly, studies conducted by Mersham and Skinner (2016); Fredericksz (2015); Ramasobana and Fatoki (2014); Chiloane-Tsoka and Rasivetshele, (2014); Goldengate Consulting (2012), and

Fig (2005) have focussed extensively on CSR by general SMEs in South Africa. Conversely, it is still necessary to address the theoretical and empirical limitations pertaining to CSR, particularly the use of CSR by SMEs in the South African construction industry.

CSR, a widely embraced social phenomenon, has in recent years begun to attract research interest in the construction industry. A study by Xia, Olanipekun, Chen, Xie and Liu (2018:344) confirmed that CSR research in the construction industry worldwide is still in its initial stage as very little research has been conducted on CSR in the construction industry. Xia *et al.* (2018:344) further confirm – utilising descriptive methods such as frequency and percentage, and figures across the Scopus academic database, Emerald, Taylor and Francis, Elsevier, and Google Scholar – that between 2005 and 2017, 68 reliable journal papers were sourced relating to CSR in the construction industry. These articles were sourced from 21 countries covering all the continents. From these 21 countries, the UK (19) and China (10) had the highest number of papers, followed by Australia (9), the USA (4), South Korea (4) and others (2 and below). Xia *et al.* (2018) additionally mention that these journal papers covered themes relating to CSR perceptions, CSR dimensions, CSR implementation and CSR performance. By contrast, a study by Zhang, Lan Oo and Lim (2019: 569) determined that between 2006 to 2018, 50 journal papers and 19 conference papers could be sourced relative to the following CSR themes linked to construction enterprises: drivers of CSR implementation; motivation for CSR implementation; and barriers to CSR implementation. The 69 papers sourced by Zhang *et al.* (2019) covered 17 countries, both developed and developing, with more papers focused on China and the UK. These statistics in themselves give a clear indication as to the limited CSR research in the construction industry globally.

This limitation extends to South Africa as very few studies (only five) can be sourced regarding CSR and its implementation in the South African construction industry. Of these five studies, only two focused on SMEs. These two studies form part of the 69 papers sourced by Zhang *et al.* (2019). The first study, conducted by Othman and Mia (2008), focused on integrating the concept of CSR within South African quantity surveying firms as an approach for solving the housing problem for the poor. The second study, conducted by Othman and Abdellatif (2011), focused on the role of partnership in integrating CSR of project stakeholders towards better housing affordability. The third study, conducted by Ladzani and Seeletse (2010), attempted to establish the status of small medium and micro-enterprises SMMEs in the built environment in relation to CSR to promote an awareness of the CSR function in the community, promoting SME growth, improvement and sustainability. The fourth study, conducted by Ladzani and Seeletse (2012), focused on establishing the extent to which construction SMEs in Gauteng, South Africa, involve CSR in their practices. Finally, the fifth study, conducted by Mokwena, Mashwama, Thwala, Aigbavboa, and Hamma-Adama (2020), focused on appraising the

current practice of corporate social responsibility in firms operating in the South African construction market.

Applying the studies conducted by Xia *et al.* (2018) and Zhang *et al.* (2019) as a benchmark, it is evident that no significant study pertaining to the research themes highlighted by Xia *et al.* (2018) and Zhang *et al.* (2019) have been conducted in South Africa, particularly from a construction business perspective, which includes SMEs operating in the South African construction industry. More so, it is clear that research relating to the use of a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance is limited. Thus, expanding on the knowledge brought forward by Xia *et al.* (2018) and Zhang *et al.* (2019), there is an essential need to effectively understand the concerns in the following areas to develop a CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance:

- the perception of SMEs in the South African construction industry pertaining to the relationship between the integration of CSR and sustainable business performance;

- the CSR drivers that influence the CSR practices of SMEs in the South African construction industry;

- the challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR;

- the CSR activities that must be considered by SMEs in the South African construction industry to achieve sustainable business performance; and

- a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance.

The above has led to the main research question, sub-questions, aim, and research objectives of this present study.

1.7 Research question

Petelin (2014:189) notes that in all fields of study, a research question is comprehensively accepted as fundamental to administering a research project. In addition, authors Bryman (2012:10) and Fellows and Liu (2008:56) insist that research questions are central in the achievement of the research goals. The research question for this study therefore is:

What CSR factors should be modelled to guide SMEs in the South African construction industry towards achieving sustainable business performance?

To appropriately address the issues surrounding the main research question, answers will be sought to the sub-question set, as follows:

i.   How do SMEs in the South African construction industry perceive the relationship between the integration of CSR and sustainable business performance?

ii.   What are the CSR drivers that influence the CSR practices of SMEs in the South African construction industry?

iii.   What are the challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR?

iv.   What CSR activities do SMEs in the South African construction industry need to consider to achieve sustainable business performance?

v.   What CSR model should be developed and validated to guide SMEs in the South African construction industry towards achieving sustainable business performance?

1.8 Aim, objectives, positions and beliefs of the research

The aim of the research is to develop a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance.

The specific objectives, positions, and beliefs of the research are as follows:

Table 1.1 Research objectives, positions and beliefs

Objectives	Research Positions	Research Beliefs
To identify and ascertain how SMEs in the South African construction industry perceive the relationship between the integration of CSR and sustainable business performance	There is a significant need to identify and ascertain the perception of SMEs in the South African construction industry regarding the relationship between the integration of CSR and sustainable business performance to realise sustainable business performance	Small enterprises (SEs) and medium enterprises (MEs) have different perceptions of the relationship between the integration of CSR and sustainable business performance
To identify the CSR drivers influencing the CSR practices of SMEs in the South African construction industry	It is critical to identify the CSR drivers that influence the CSR practices of SMEs in the South African construction industry to achieve sustainable business performance	The CSR drivers influencing the CSR practices of SEs and MEs in the South African construction industry are conspicuously different
To identify and evaluate the challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR	To achieve sustainable business performance there is a need to vividly identify and evaluate the challenges that SMEs in the South African construction industry experience with regards to the implementation of CSR	That the implementation challenges pertaining to the practice of CSR by SEs and MEs in the South African construction industry are substantially different

Table 1.1: (Continued)

To establish the CSR activities that need to be considered by SMEs in the South African construction industry to achieve sustainable business performance	It is critical to establish the CSR activities that need to be considered by SMEs in the South African construction industry to realise sustainable business performance	CSR activities that must be considered to achieve sustainable business performance are noticeably different for SEs and MEs in the South African construction industry
To develop and validate a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance	To achieve sustainable business performance of SMEs in the South African construction industry, there is a need to develop a robust CSR model	The CSR model for achieving sustainable business performance of SMEs in the South African construction industry is different for SEs and MEs

1.9 Significance of the research

For over two decades, SMEs in the South African construction industry have illustrated signs of unsustainable business performance with various contributory factors pointing towards the lack of the business owner's management knowledge and competencies; lack of business knowledge; lack of self-knowledge; lack of industry experience, business acumen and aptitude; and lack of an entrepreneurial mindset for undertaking the business of construction. However, it is surprising that a limitation in construction studies exists in terms of considering CSR as a key influencer towards changing the business trajectory of construction SMEs globally (including SMEs in the South African construction industry) from unsustainability to sustainability, contributing holistically to business performance, as it is well documented in general business literature that practices of CSR in general businesses worldwide have proven to yield substantial benefits on business performance (Xia *et al.*, 2018: 344; Hou, 2018: 26). An obvious reason for this is that CSR has only recently begun to attract interest in the global construction industry which by extension takes into consideration the South African construction industry. Combining the gaps identified in Section 1.6 as well as the significance of the research stipulated in this section, this study therefore contributes significantly to the existing Construction Industry Body of Knowledge (CIBOK), specifically in the area of sustainable business performance.

This study critically identifies that SMEs in the South African construction industry perceive the relationship between the integration of CSR and sustainable business performance as positive, implying that the practice of CSR within SMEs in the South African construction industry leads to sustainable business performance. In addition, and although limitedly driven, this study also exposes that CSR practices of SMEs in the South African construction context are driven by international and national CSR drivers. Furthermore, this study finds that these SMEs also encounter a host of challenges which are experienced at various management levels regarding the implementation of CSR. Moreover, this study establishes specific CSR activities that need to be considered by SMEs in the South African construction industry to achieve sustainable

business performance. Finally, by merging all relevant findings, this study introduces a unique CSR model to achieve sustainable business performance of SMEs in the South African construction industry, which serves as a significant contribution to the CIBOK.

1.9.1 Benefits to SMEs in the South African construction industry

The CSR model will guide SMEs in the South African construction industry who have not considered CSR as a driver of sustainable business performance to recognise the following:

- the positive relationship that the integration of CSR could have on construction business performance;
- the CSR drivers that would influence CSR practices within construction businesses;
- the CSR implementation challenges that can be expected once CSR is considered a driver of sustainable business performance; and
- the CSR activities that must be considered to achieve sustainable business performance.

1.10 Delineation of the research

Typically, this study will be delimited in terms of the SMEs construction industry development board (cidb) class of work, geographical coverage and SME cidb grade.

The research will limit its scope to General Building (GB) and Civil Engineering (CE) contractors registered on the cidb register of contractors across South Africa. The reason for limiting the study to GB and CE contractors is because most contractors across all nine cidb grades are registered within these two categories. In the first and most dominant phase of the data collection process, the research will focus on GB and CE contractors registered between Grades 1 to 6, as this population of contractors represent the SMEs for which this research is purposed. The second phase of the data collection process will also focus on GB and CE contractors registered between Grades 1 to 6 who were part of the initial first phase of data collection, in an effort to obtain a deeper understanding of the findings in the first phase. As the categories of interest are General Building (GB) and Civil Engineering (CE), contractors working in the following categories are not considered for this study: Electrical Engineering Works – Building (EB); Electrical Engineering Works – Infrastructure (EP); and Mechanical Engineering (ME).

1.11 Ethical considerations

This study was carried out in accordance to the ethical concerns raised by Punch (2006:56), which highlights the following:

- **Informed consent:** The language utilised was reasonably understood by the research participants, ensuring their appropriate informed consent, which has been obtained and documented;
- **Confidentiality and anonymity:** Strict adherence was given to personal and commercial confidentiality. The same was applied to relevant professional bodies and related construction institutions;
- **Maintenance of records:** All confidential records accessed were duly disposed immediately after use;
- **Compliance with law and standards:** The research was undertaken within the permitted rules and regulations of the Cape Peninsula University of Technology concerning research;
- **Honesty and trust:** All data collection conditionality was observed;
- **Harm and risk:** The principle of 'no harm' took precedence in this research work;
- **Plagiarism:** The research acknowledged the work of others, used as materials in the research work. All sources of information have been identified and referenced; and
- **Grants:** The researcher obtained a University Capacity Development Grant (UCDG) Improvement of Qualifications Programme (IQP) from the Cape Peninsula University of Technology to fund a replacement lecturer and the research running cost for a year (1 August 2020 to 1 August 2021).

1.12 Thesis outline

Chapter 1: This chapter presents the background of the study, inclusive of the research positions, main research question, sub-questions, significance of the research, aim and objectives and the delineation of the research.

Chapter 2: This chapter provides a review of relevant literature to address the main research question, sub-questions and objectives.

Chapter 3: Subsequent to the review of literature in Chapter 2, this chapter presents the theoretical and conceptual framework upon which the research is predicted.

Chapter 4: This chapter outlines the research methodology adopted for this study and describes the underlying concepts for the choice of various research instruments.

Chapter 5: The chapter provides arguments for and justifies the choice of research approach and specific methods applied to collect data.

Chapter 6: This chapter brings fourth the quantitative data analysis and discussion of the results.

Chapter 7: This chapter presents the analysis of the qualitative data.

Chapter 8: This chapter embraces the development of the CSR model to guide SMEs in the South African construction industry towards achievement of sustainable business performance, with the support of the data collected in Chapters 6 and 7. The CSR model will also be examined and validated in this chapter.

Chapter 9: This chapter will present the conclusions and recommendations stemming from the research.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In the previous section, the research positions, research question, sub-questions and objectives were identified. This chapter sets out to review literature which seeks to define the phrase *sustainable business performance* to bring about clarity in terms of the research direction. Thereafter, a selected literature review is conducted pertaining to the concept of CSR and literature which addresses the objectives of the study as established in the preceding chapter.

2.2 Sustainable business performance

To develop a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance, it is critical that the phrase *sustainable business performance* be correctly defined. Hence, it is interesting to note that as part of 'Philosophical Investigations', Wittgestein (1953, cited by Agyekum-Mensah, Knight & Coffey, 2012:428) defines the word 'meaning' by the way language is used. It is factual that a word and a term may have a variety of meanings, based on how it is used in the context of language. Wittgestein (1953, cited by Agyekum-Mensah *et al.,* 2012:428) further elaborates that words and terms may be meaningless, or may have some meaning, or may be full of meaning. Therefore, in the context of this research, firstly the word *sustainable* is defined, before defining the full phrase *sustainable business performance.*

According to Agyekum-Mensah *et al.* (2012:428), the discussion regarding the precise definition of the word *sustainable* is a significant concern in literature. This could explain why a common understanding of the word *sustainable* is difficult to achieve. Based on the study by Agyekum-Mensah *et al.* (2012:428), the word *sustainable* literally means 'the ability to sustain'. Agyekum-Mensah *et al.* (2012:428) further stipulate that the word *sustainable* is derived from the Latin word *sustinere,* meaning 'to hold'. Authors such as Wilkinson, Hill and Gollan (2001:1492) stipulate that to grasp meaning from the word *sustainable,* it must refer to renewing or restoring something specific, for example a small construction business, and should incorporate elements such as ethical dimensions of fairness of trade-off between current economic pressures and future needs of a business environment. Bonn and Fisher (2011:5) add to the discussion by referring to the word *sustainable* as follows:

> *The long-term maintenance of systems according to environmental, economic and social considerations.*

Based on this debate, it is satisfying to note that there are various synonyms or meanings for the word *sustainable* which, according to Agyekum-Mensah *et al.* (2012:428), may include *bear*, *support*, *endure* or *suffer.* These meanings establish a clear difference between the words, although they complement each other. However, based on Lexico (2018:1) the word *sustainable* also means 'to be maintained at a certain rate or level', generally referring to the word *sustainable* as a form of consistency, for example a sustainable business performance. Thus for the purpose of this research study, *sustainable* will be referred to as maintaining.

In regard to the phrase *business performance,* the general definition is as follows:

> *A combination of management and analytic processes that allow the owner-managers of businesses to achieve their predetermined objectives and goals.* (Rivalfox, 2016:1)

Smith and Reece (1999:153) define *business performance* this way:

> *The operational ability to satisfy the desires of the organisations' major shareholders and it must be assessed to measure the organisations' accomplishments.*

However, with regard to a study conducted by Hove and Banjo (2015:181) and in the context of this research, the term *business performance* for small and medium sized construction businesses is defined as:

> *A phenomenon consisting of a set of attributes focusing on construction SMEs' stakeholders satisfaction, provided in a culture that motivates the construction SME owner-manager to coordinate resources and activities.*

With the word *sustainable* and the phrase *business performance* adequately defined, it is possible to place them alongside each other to form the term *sustainable business performance,* which in the context of this research study can be defined as follows:

> *A phenomenon maintaining a set of attributes at a productive level or rate, focusing on the construction SMEs' stakeholder satisfaction provided in a culture that motivates the construction SME owner-manager to coordinate construction resources and activities.*

With the term *sustainable business performance* defined, the upcoming Sections 2.3 and 2.3.1 will elaborate on the concept of CSR as it serves as the driving concept to this research.

2.3 Corporate social responsibility (CSR)

According to Chi Vo (2011:89), in the business world CSR has to date attracted substantial attention from academics globally and is currently moving up the corporate agenda. Chiloane-Tsoka and Ravetshele (2014:277) believe that although CSR and its corresponding research has become attractive, there has been significantly more research conducted on CSR in large enterprises than in SMEs. Turyakira (2017:465) concurs with Chiloane-Tsoka and Ravetshele (2014:277), suggesting that there is limited research focused on the extent of the application of CSR in SMEs. However, it is believed that SMEs worldwide in all industries, including the construction industry, could take advantage of opportunities offered by CSR to enable SME businesses of all kinds to maximise their business benefits. Hence, according to Turyakira (2017:465), it is important to acknowledge the growing interest in CSR, and issues which are significant for CSR, are as relevant for SMEs as they are for large enterprises.

Chi Vo (2011:89) suggests reason for this situation, contending that less research has been conducted on the use of CSR in SMEs as there seems to be an argument that large organisations are the heart of the economy and that SMEs are merely 'little big companies' to which CSR theory can simply be scaled down to fit their business purpose. Based on the contention by Chi Vo (2011: 89), Davies and Crane (2010:127) disagrees with this argument, as the unique characteristics of SMEs make it difficult to employ the CSR theories and practices of large organisations. This highlights the practice of CSR in SMEs as an important area of study, invaluably contributing to the sustainability of SME businesses across all industries. There is no doubt that although limited, quality research exists in the area of CSR and its application by construction organisations globally, and more specifically SMEs in the global construction industry. Notwithstanding, for this study to expand the body of knowledge pertaining to CSR in the global construction industry, and more so in the South African construction industry, a more contemporary approach to the literature review will be taken, incorporating a mixture of CSR literature from both global construction and business sectors.

2.3.1 Defining CSR

According to Othman and Abdellatif (2011:277) before the 1990s, CSR was only vaguely defined and many companies were simply doing good to look good. Carroll (1999, cited by Othman & Abdellatif, 2011:277) elaborates that companies sponsored as many charitable organisations as possible, with the perception that these practices would satisfy most people and would subsequently establish more visibility for their philanthropic efforts. From a construction industry perspective, Othman and Abdellatif (2011:277) are, however, of the opinion that CSR is about organisations making interim commitments to various stakeholders, viewed in the public eye as socially responsible entities. In addition, Bevan and Yung (2015: 295) suggest that CSR signifies a continuous commitment by an organisation, in particular a

construction organisation, to act responsibly and ethically and to contribute to sustainable and economic development. According to Bevan and Yung (2015: 295), CSR aims to:

reduce the negative impact of business activities, while maximising the positive impacts, by improving a wide range of societal and environmental problems and contributing to the local community and society at large.

Ladzani and Seeletse (2010:34) concur, explaining that indications of CSR would be that,

the business embraces responsibility for the impact of its activities on the environment, consumers, employees, communities, stakeholders and all other members of the public sphere.

To date, many other authors such as the World Business Council for Sustainable Development (1999); Khoury, Rostami and Turnbull (1999); Business for Social Responsibility (2000); and the International Business Leaders Forum (IBLF) (2003) have attempted to define the term *corporate social responsibility* (CSR). However, as per a study by Dahlsrud (2008:7), the most frequently cited definition for the term *CSR* as per frequency counts (286) from Google, stem from the Commission of the European Communities (2001:6) which states that CSR is considered,

a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis.

In addition, Dahlsrud (2008:4) gives further clarity on the definition of *CSR* as seen in Table 2.1, which explains the various dimensions, the coding and example phrases linked to the definition of *CSR* by the Commission of the European Communities (2001:6) and Ladzani and Seeletse (2010:34).

Table 2.1: Five dimensions, how the coding scheme was applied and example phrases (Adopted from: Commission of the European Communities, 2001:6)

Dimensions	The definition is coded to the dimension if it refers to	Example phrases
The environmental dimension	The natural environment	'a cleaner environment'; 'environmental stewardship'; 'environmental concerns in business operations'
The social dimension	The relationship between business and society	'contribute to a better society'; 'integrate social concerns in their business operations'; 'consider the full scope of their impact on communities'
The economic dimension	Socio-economic of financial aspects, including describing CSR in terms of a business operation	'contribute to economic development'; preserving the profitability'; 'business operations'
The stakeholder dimension	Stakeholders or stakeholder groups	'interaction with their stakeholders'; 'how organisations interact with their employees, suppliers, customers and communities'; 'treating the stakeholders of the firm'
The voluntariness dimension	Actions not prescribed by law	'based on ethical values'; 'beyond legal obligations'; 'voluntary'

2.4 Relationship between the integration of CSR and SBP of SMEs

Studies by Chiloane-Tsoka and Rasivetshele (2014:277) and Ladzani and Seeletse (2010:33) show that research on CSR has predominantly been conducted on larger organisations (not the SME sector), with very little research focused on smaller organisations. However, there is compelling evidence in studies by Mandl (2009:1); Szabo (2008:17); Turyakira *et al.* (2012:116); and Chiloane-Tsoka and Rasivetshele (2014:281) that the integration of CSR can be utilised as a tool to enhance the sustainable business performance of SMEs across all business sectors, inclusive of the construction sector. Turyakira, Venter and Smith (2014:157) stress that CSR is regarded as an important business concept, that businesses of all categories (type, size and industry) need to understand and address. Turyakira *et al.* (2014:157) make this claim because global competitiveness is at an all-time high; thus the integration of CSR is proposed as an effective strategy for sustaining the operations and competitiveness of SMEs. CSR has therefore become increasingly important to the survival and competitiveness of SMEs as it promotes sustainable business performance.

Studies conducted by Busch and Friede (2018); Holmes (1976); Marti *et al.* (2015); Martinez-Ferrero and Frias-Aceituno (2015); and Orlitzky *et al.* (2003, cited by Hou, 2018:26), identifying a positive relationship between the integration of CSR and corporate financial performance (CFP), suggest that businesses inclusive of SMEs that implement CSR strategies are more likely to illustrate sustainable business performance. This is supported by Murphey (2021:1) who confirms that socially responsible companies cultivate positive brand recognition, increase customer loyalty and attract top-tier employees, all of which are vital to achieving increased

profitability, long-term financial success and business sustainability. According to Ramasobana and Fatoki (2014:285), CSR strategies implemented by SMEs allow SMEs to produce sustainable business performances which encapsulate excellent financial performances, through various cost reductions, efficient employees and more turnover, resulting in positive growth within SMEs. In addition, Turyakira *et al.* (2012:106) insist that the integration of CSR has a positive impact, influencing the competitiveness and sustainable business performance of SMEs in numerous ways:

> *Improving their products and services, resulting in improved client satisfaction and loyalty, higher motivation and loyalty of employees, better publicity due to awards received and/or enhanced word-of-mouth references, better corporate image and increased turnover due to competitive advantage gained.*

Ramasobana and Fatoki (2014:285), Goldengate Consulting (2012:10-12), Turyakira (2017:466), Hou (2018:26) and Murphy (2021:1) concur with Turyakira *et al.* (2012:106), mentioning several benefits of SMEs practicing CSR: attracting top-tier employees; obtaining better resources; ease of marketing products and services; winning new business; increasing customer retention; generally enhancing the value of the business; saving money on energy and operating cost; differentiating SMEs from their competition; enhancing SME influences in the industry; accessing funding opportunities; improving the business image and brand recognition; uplifting reputation and goodwill; enhancing employee motivation and loyalty; and bringing positive approaches from stakeholders, including the improvement of business trust and understanding between SMEs and their customers, all of which contribute to the overall sustainable business performance of SMEs.

2.4.1 Relationship between the integration of CSR and SBP of construction SMEs

It is worth noting that CSR within the global construction industry, specifically among property companies in the UK, is still regarded as an ambiguous terminology, and as a result it is utilised interchangeably with similar, but different terminologies such as socially responsible investing (SRI), socially responsible property investing (SRPI) and corporate governance (CG) (Roberts, Rapson & Shiers, 2007). According to Yam Lee Hong *et al.* (2008), property developers in Malaysia are also divided on the meaning of CSR: some of them view the concept as conducting businesses as stipulated by the law, while others view CSR as going beyond the stipulations of the law in the conduct of the business. Roberts *et al.* (2007) believe that these differences are due to a lack of a common definition of CSR, particularly in the global construction industry, which reduces the understanding of true CSR activities among construction organisations globally. With these noted differences of the meaning of CSR in the global construction industry, Xia *et al.* (2018: 344) insist that the most notable perception

pertaining to the integration of CSR in the global construction industry is that it assists in the achievement of sustainability holistically.

According to Wu, Fang, Liao, Xue, Li and Wang (2015:186) and Xia *et al.* (2018:342), a construction organisation's CSR perception and performance can significantly influence the construction organisation's reputation and relationship with various stakeholders such as employees, customers, investors, government, suppliers and the community at large. Wu *et al.* (2015:186), moreover, suggest that good CSR performance will not only enhance a construction company's competitiveness in acquiring better human resources, but will improve the morale, loyalty, commitment and productivity of the organisation, contributing significantly to the organisation's sustainable business performance. With this in mind, sub-sections 2.4.1.1 and 2.4.1.2 further unpack the relationship between the integration of CSR and sustainable business performance of construction SMEs in developed and developing countries.

2.4.1.1 Relationship between the integration of CSR and SBP of construction SMEs in developed countries

Findings by Bevan and Yung (2015:303) suggest a positive relationship between the practice of CSR among SMEs in the Australian construction industry and sustainable business performance, as the practice of CSR among SMEs positively contributes to the following: company reputation and image, company efficiency, legal obligations, giving back to the community, longevity of the company, employee loyalty and staff retention, a better future for people, and development of skills in the local community. All of these contribute significantly to the sustainable business performance of SMEs in the Australian construction industry.

A comparative study concerning CSR practices by Duman, Giritli and McDermott (2016:225) between the United Kingdom (UK) and Turkish construction businesses, which include other SMEs, also stipulates a positive relationship between the practice of CSR among the businesses surveyed and sustainable business performance, as the practice of CSR among these businesses positively contributes to increased business relations and new business opportunities. Other contributions pertaining to the practice of CSR among the construction businesses surveyed in the study conducted by Duman *et al.* (2016:225-226) include positive reactions from construction clients; dedication, loyalty, commitment and respect from employees; positive effect on business processes; strengthened company image; increased brand recognition; reputation gain; credibility; improved company prestige; recognition by international credit organisations; improved competitiveness; and being remembered as a responsible corporation by business partners.

From a Portuguese perspective SMEs across all industries inclusive of the Portuguese construction industry believe that an affirmative affiliation exists between the implementation and practice of CSR in their businesses and sustainable business performance, based on the fact that they experience benefits which include a better business reputation with clients, consumers and business partners as well as increased employee satisfaction, employee motivation and better productivity (Santos, 2011:497).

2.4.1.2 Relationship between the integration of CSR and SBP of construction SMEs in developing countries

According to Gamah (2014:62), it is evident that the practice and integration of CSR in Ghanaian construction organisations, for example construction SMEs, contribute to sustainable business performance, as CSR engagements among construction SMEs in Ghana illustrate the following tangible benefits: improved competitive advantage; attracting good quality staff; improved brand image; higher staff retention; reduced regulatory oversight; and cost savings. Parameshwara and Raghurama (2013:24) also insist that the practice of CSR by SMEs across all Indian sectors, inclusive of the Indian construction industry, brings about particular benefits that promote sustainable business performance: better alignment between the SME and consumer concerns; partnership opportunities with transitional companies; improvements in productivity; and improved capacity for learning and innovation.

Findings by Manuere (2016:157) also suggest that the practice and integration of CSR by SMEs in the Zimbabwean construction industry contribute to sustainable business performance, based on the fact that CSR practices by these SMEs impact positively on their business in terms of reputation, marketing of products and services, and improved business image. The situation seems to be similar in South Africa as Othman and Abdellatif (2011:280) suggest that the practice of CSR in construction organisations, which includes SMEs, definitely contributes to the sustainable business performance of these organisations, as the practice of CSR illustrates the following tangible benefits:

> *improving financial performance and increasing sales and market share; better risk and crises management; reducing operating costs; increasing workers commitment; motivating and keeping employees loyal to the organisation; enhancing brand value and reputation; as well as supporting brand positioning; good relations with government and communities; long-term sustainability for the company and society; a license to operate; long-term return on investment; increasing productivity; enhancing corporate image and clout; and increasing appeal to investors and financial analysts.*

2.5 CSR drivers

Despite their significance and contribution towards economic growth, businesses globally, SMEs in particular, are under constant pressure and encounter many challenges in their daily operations to remain in business and remain sustainable for as long as possible (Sitharam & Hoque, 2016:277). Thus, according to Bansal and DesJardine (2014, cited by Ndowora, 2015:9),

> *CSR has been identified as one of the areas that companies can embark on to remain sustainable.*

This sentiment certainly implies that CSR contributes to a company's sustainable business performance. A survey cited by Ndowora (2015:9), conducted by Klynveld Peat Marwick Goerdeler (KPMG) in 2008, supports this view indicating that 47.7% of organisations interviewed considered CSR as a driver for innovation which in turn is a major contributor towards business sustainability and performance. Noting this point and as previously mentioned, research pertaining to CSR, particularly from a global and local construction perspective, remains limited. Despite this, CSR drivers from a construction perspective have been briefly documented by a study of Zhang *et al.* (2019) who collapsed the views of 69 of the most relevant construction related papers published between 2006 to 2017 and found that CSR practices in construction organisations globally are driven by three particular CSR drivers namely: policy pressure, market pressure, and innovation and technology developments. This finding, presented in Table 2.2 below, is worth noting; however, based on the limited CSR research available in the construction industry globally, and even more so locally, it useful to consider merging the findings of Zhang *et al.* (2019) with the findings in literature pertaining to CSR drivers significant to the practice of CSR from a generic business perspective, to later determine the key drivers of CSR pertaining to SMEs in the South African construction industry.

Table 2.2: CSR drivers reflective of the global construction industry (Zhang *et al.*, 2019:572)

Drivers	Attributes	References
Policy pressure	Mandatory policies, regulations, guidance, requirements, or initiatives	(Barthorpe, 2010; Bevan and Yung, 2015; Cambra-Fierro *et al.*, 2013; Duman *et al.*, 2016; Griffith, 2011; Jankovichova, 2012; Jones *et al.*, 2006; Lichtenstein *et al.*, 2013; Lim and Loosemore, 2017; Lu *et al.,* 2016; Masurel and Rens, 2015; Othman and Mia, 2008; Petrovic-Lazarevic, 2008; Wang *et al.*, 2014; Wuttke and Vilks, 2014; Xiong *et al.*, 2016; Zeng *et al.*, 2015; Zhu *et al.*, 2011)
Market pressure	Customers (sometimes known as project investors, clients, owners or end-users) demand or pressure; Award or certification: differentiate of market projects (e.g. meeting evaluation standards for green building), Competitor pressure, e.g. competitors' CSR strategies; Shareholders (or joint venture) demand or pressure	(Botero, 2009; Cambra-Fierro *et al.*, 2013; Duman *et al.*, 2016; Fan and Law, 2010; Griffith, 2011; Huang and Lien, 2012; Jiang and Wong, 2015; Jones *et al.*, 2006; Lu *et al.*, 2016; Othman, 2009; Schieg, 2009; Wang *et al.*, 2014; Willetts *et al.*, 2011; Zhao et al., 2012) (Brown *et al.*, 2009; Huang *et al.*, 2017; Jones *et al.*, 2006; Loosemore and Lim, 2017b; Lu *et al.*, 2016; Upstill-Goddard *et al.*, 2016) (Barthorpe, 2010; Bevan and Yung, 2015; Cambra-Fierro *et al.*, 2013; Jiang and Wong, 2016; Wang *et al.*, 2014; Willetts *et al.*, 2011; Wu *et al.*, 2015b) (Jones *et al.*, 2006; Masurel and Rens, 2015; Zeng *et al.*, 2015; Zhao *et al.*, 2012; Zhu *et al.*, 2011)
Innovation and technology development	Innovations and technology development	(Brown *et al.*, 2009; Lu *et al.*, 2016; Wang *et al.*, 2014; Yam, 2013)

2.5.1 Categorising CSR drivers from a generic business perspective

According to Visser (2008a:1), CSR drivers can be divided into two categories: the international category, derived from pressures of the business environment globally; and the national category, derived from the pressure within a country (Figure 2.1).
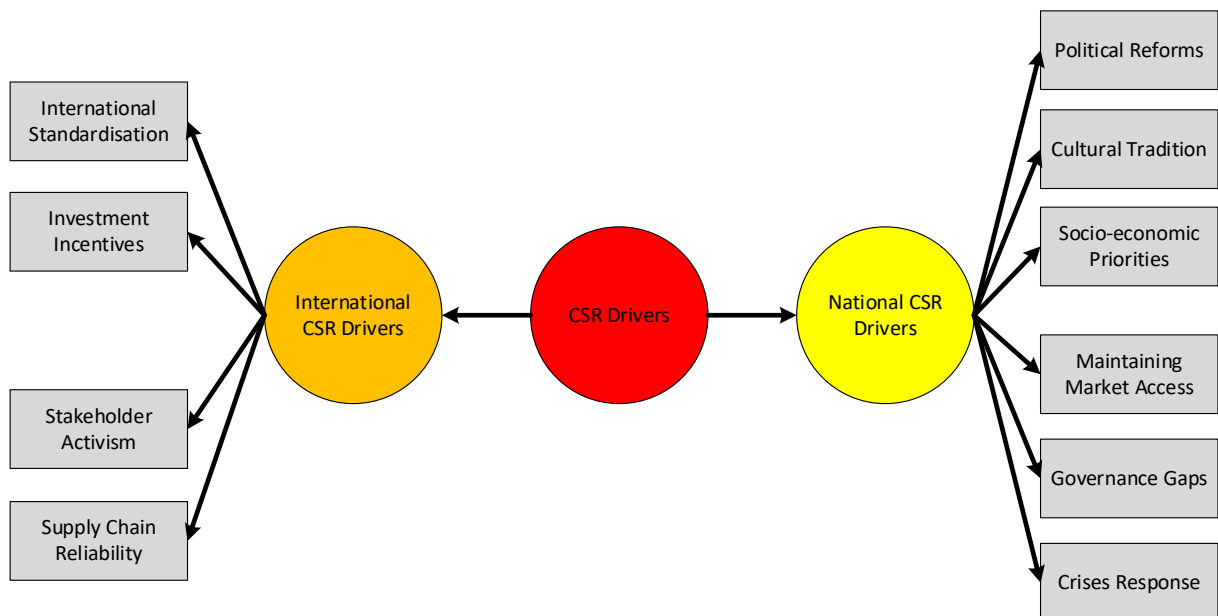
Figure 2.1: International and national CSR drivers
(Adapted from: Visser, 2008a:1)

2.5.1.1 International CSR drivers

2.5.1.1.1 CSR driven by international standardisation

Visser (2008a:2) describes *international standardisation* as CSR codes, guidelines and standards for organisations wishing to operate as global players. According to Ndowora (2015:12-13), there are many CSR codes, guidelines and standards which interested organisations could make use of. These refer to the likes of the International Social and Environmental Accreditation and Labelling (ISEAL) Alliance 2012 which refers to global standardisation and codes of business practice for setting environmental and social standards as the codes and guidelines that drive the need for CSR.

Another international guideline that can drive CSR practices amongst organisations include the global reporting initiative (GRI) standards which have superseded the previous G4 GRI (Global Reporting Initiative, 2016:1). Similar to the G4 GRI, the GRI standards represents a global best practice for organisations to publicly report on a range of economic, environmental and social impacts. The Global Reporting Initiative (2016:1) further comments that sustainability reporting by organisations utilising GRI standards provides information about these organisations' positive or negative contributions towards sustainable development, encapsulating CSR practices.

Similar to reporting on sustainability through the utilisation of the GRI standards, Integrated Reporting also results in organisations being driven towards CSR activities because Integrated Reporting demands of organisations a multi-stakeholder approach in reporting (Ndowora, 2015:13). The Integrated Reporting Committee (IRC) of South Africa (2014:4) buttresses this point by stating that in terms of stakeholder relationships,

> *An integrated report should provide insight into the nature and quality of the organisation's relationships with its key stakeholders. It's important for readers of the report to understand this because the organisation creates value through its relationships with others. The integrated report should show who the key stakeholders are and their impact on the organisation, the impact the organisation has on them, their needs, interests, expectations and issues raised, and how the organisation has responded to these.*

The integrated report thus expects organisations to not only report on organisational strategy, governance, performance and the important capitals, but in addition, to include reporting on social environmental issues. Other codes of practice that drive CSR responses from organisations globally include the well-known International Organisations for Standardisation (ISO) 26000, a standard referring to social responsibility, as well as ISO 14000, a standard giving reference to environmental management (iso.org 2018:1-20 & iso.org 2009:1-12).

Taking into account the preceding international standards, codes and guidelines which have been documented as drivers of CSR, particularly for organisations wishing to operate as global players, a lively debate is still ongoing: many organisations utilising international standards, codes and guidelines as drivers for CSR have the wrong intentions for CSR, resulting in unsustainable business performance, as many of these organisations merely focus on complying with these regulations and reporting requirements. This is reinforced by Font, Walmsley, Cogotti, McCombes and Hausler (2012, cited by Ndowora, 2015:13) who argue that international standards, codes and guidelines which serve as drivers of CSR for many organisations globally often camouflage what is actually happening on the ground as the operations of these organisations often greatly diverge from what they report on, resulting in what Font *et al.* (2012, cited by Ndowora, 2015:13) term the *disclosure performance gap.*

2.5.1.1.2 CSR driven by investment incentives

Another feature that drives organisations to practice CSR is investment incentives. According to Visser (2008:2), CSR practices via investment incentives typically refer to initiatives by an organisation given an incentive based on the trend of socially responsible investment (SRI), where funds are screened on an ethical, social and environmental criterion. With this noted, Ndowora (2015:13) suggest that SRI is becoming a key driver of CSR in organisations across the globe, which is subsequently a result of global SRI funds and indexes, such as the Dow Jones Sustainability Index and the Financial Times Stock Exchange (FTSE)4-Good. It is further observed that the influence of regional and national SRI instruments such as the FTSE/Johannesburg Stock Exchange (JSE) Responsible Investment Index (RII) as documented by Mueller-Hirth (2016:58) is also on the rise in South Africa who are among the first countries to go 'glocal' in this respect. In addition, sector-based indexes are emerging, such as the Information and Communications Technology (ICT) Sustainability Index launched in 2008.

2.5.1.1.3 CSR driven by stakeholder activism

Visser (2008a:2) states that stakeholder activism is yet another CSR driver, explaining that,

> *CSR is also encouraged through the activism of stakeholders or pressure groups often acting to address the perceived failure of the market and government policy.*

These failures refer specifically to the absence of strong market and government controls over social, ethical and environmental performances by organisations (Visser, 2008b:487). Lund-Thomsen (2004:106) describes this phenomenon as,

an outcome of micro-level struggles between companies and communities over the distribution of social and environmental hazards which are created when global political and economic forces interact with local contexts around the world.

In many countries, predominantly in developing countries, it is common to observe the likes of four stakeholder groups as the most dominant activists for CSR. These four groups, according to Visser (2008b:487), are development agencies who, as per Fox and Prescott (2004:2), engage organisations to increase the developmental impact of their business operations; trade unions, who as per the views of Harvey, Hodder and Brammer (2017:47) internally communicate and conduct negotiations between employees and management of organisations and externally are unencumbered by corporate rules and regulations making it easy to disseminate and monitor the compliance by organisations; international NGOs who, according to Arenas, Lozano and Albareda (2009:176), partner with organisations advocating that organisations contribute to the reconstruction of the global public domain where organisations practice their businesses; and business associations who, based on the view of Nadkarni (2104:1), advocate economic growth, development, peace and prosperity. Nadkarni (2014:1) contends that business associations as activists for CSR demonstrate a critical role in building inclusive entrepreneurship ecosystems and can improve the ability of organisations big or small to grow and to create sustainable jobs. According to Visser (2008b:487), the media, in conjunction with other activists, are emerging as a key stakeholder actively promoting CSR, not only in developed countries but in developing nations as well.

2.5.1.1.4 CSR driven by supply chain reliability

Visser (2008b:488) notes that another driver of CSR, particularly among SMEs, are the mandates being enforced by multinationals on their supply chains. Endorsing this CSR driver are, for example, allegations of poor working conditions and human rights abuses which include unethical supply chains occurring in several high-profile multinational supply chains, namely the sporting and clothing sectors, justifying that greater attention be given to CSR requirements (Visser, 2008b:488). Nike, a multinational organisation, is an example of such a situation, as there were countless questions surrounding the unethical factories from which they source raw materials to manufacture their world-famous products. This is merely one example; however, Pedersen and Andersen (2006:229), in Figure 2.2, highlight a range of CSR concerns thought to surface throughout the supply chain.
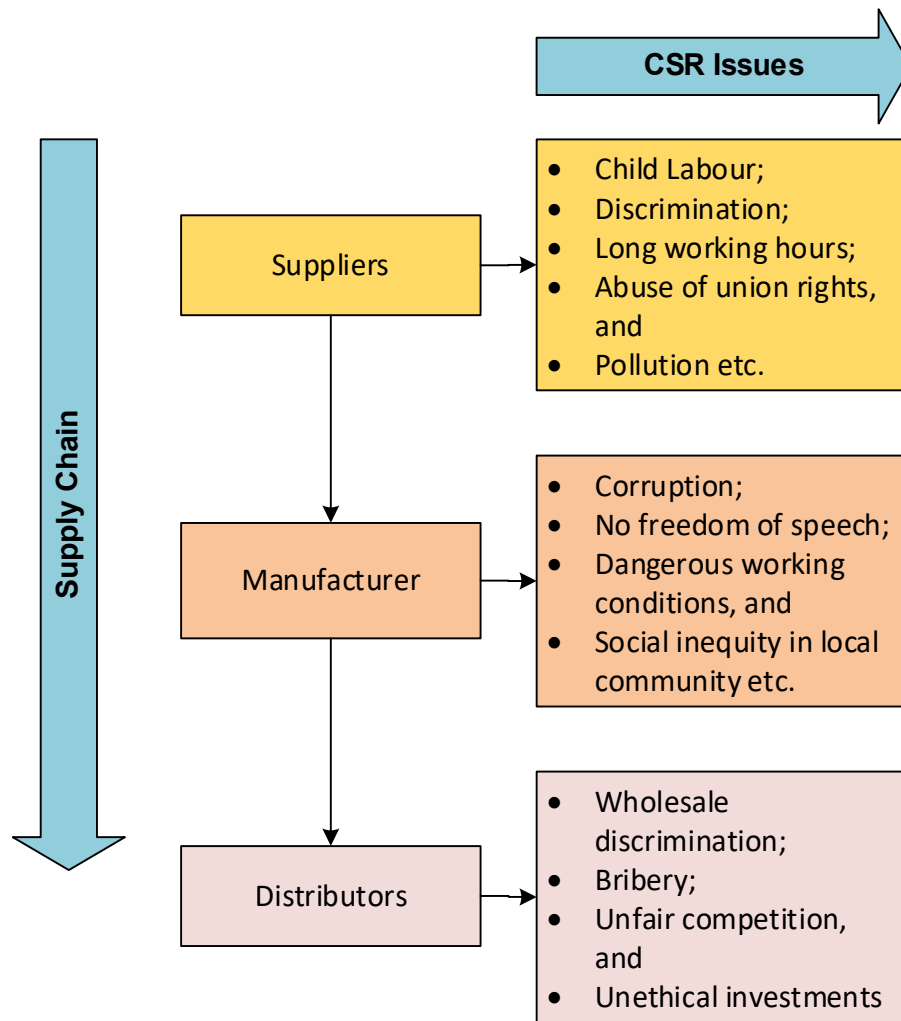
Figure 2.2: Examples of CSR issues in the supply chain
(Adapted from: Pedersen & Andersen, 2006:229)

A response to these issues has been the establishment of supply chain codes of conduct such as the ISO 20400, a standard giving reference to sustainable procurement, which according to iso.org (2017:2) provides,

guidelines for integrating sustainability into an organisation's procurement process. Aimed at top managers and directors of the purchasing function, it covers the political and strategic aspects of the purchasing process, namely how to align procurement with an organisation's goals and objectives and create a culture of sustainability. The standard defines the principles of sustainable procurement, including accountability, transparency, respect for human rights and ethical behaviour, and highlights key considerations such as risk management and priority setting. It also covers various stages of the procurement process, outlining the steps required to integrate social responsibility into the purchasing function.

In addition, a point that should be noted is that the ISO 20400 standard allows for the harmonisation of the purchasing function by improving relationships with suppliers and reducing supply chain risks, for example disruptions due to product recall or supplier failure

(iso.org, 2017:3), thereby providing multinationals such as Nike with guidelines for selecting suppliers, smaller companies in their supply chain, without infringing any CSR requirements.

2.5.1.2 National CSR drivers

2.5.1.2.1 CSR driven by political reforms

CSR in countries across the globe, more specifically in developing countries, as affirmed by Visser (2008a:1),

> *cannot be divorced from the socio-political policy reform process, which often drives business behaviour towards integrating social and ethical issues.*

This is evident from a South African context as changes in the political environment towards the delivery of democracy and restoring the injustices of the apartheid government have proven to be a significant driver for CSR through the practice of affirmative action; Broad-Based Black Economic Empowerment (BBBEE); corporate governance as observed by Visser (2008b:482), and Mueller-Hirth (2016:58). Other political reform drivers of CSR in South Africa observed by Visser (2008b:482) also include collective business action for social upliftment as well as business ethics.

As for developed nations such as the UK, it is clear through the observations of Moon (2004:7-8) that the UK government, although from opposing sides namely the conservative and the labour governments, also drive CSR through various political mechanisms which fit the UK context, such as ministerial leadership; the stimulation of new and existing business associations; subsidising CSR activities and organisations; and the deployment of 'soft' regulations.

2.5.1.2.2 CSR driven by cultural tradition

As observed by Visser (2008a:1),

> *CSR often draws strongly on deep-rooted indigenous cultural traditions of philanthropy, business ethics and community embeddedness.*

Wahyuni and Sentanu (2017:383) concur with this sentiment, stating that the practice of CSR by organisations in different global settings clearly stems from the surrounding culture in which organisations find themselves. In addition, a study by Thanetsunthorn (2014, cited by Wahyuni & Sentanu, 2017:383) documents the effects of four culture dimensions – power distance, individualism, masculinity and uncertainty avoidance – on CSR performance in three dimensions – employee, community and environment – and in four Asian regions: Eastern

Asia, Southeast Asia, South Asia and Asia Pacific. This study established that culture and geographic location significantly stimulate the CSR performance of an organisation. Based on these findings, Wahyuni and Sentanu (2017:383) safely assume that the geographical location of an organisation and the culture within the location have a significant impact on an organisation's CSR practices and ultimately, their sustainable business performance.

Further, a study by Vives (2006:47) containing survey findings linked to reasons why SME organisations across Latin America (Chile, Argentina, Mexico, Peru, Venezuela, Columbia, Brazil and El Salvador) practice CSR, reveals that the single most consistent reason given for these SMEs engaging in CSR practices relates to ethics and religious values. However, from an African context, according to Hamidu, Haron, and Amran (2016:702), the reasons why organisations engage in CSR practices are predominantly linked to communitarianism, charity and all forms of humane practices in African communities. Visser (2005b) agrees with this sentiment, affirming that humanism (Ubuntu) is what reinforces the approach to CSR practices in organisations on the African continent. From these views, it is evident that cultural tradition can surely be considered a driver of CSR.

2.5.1.2.3 CSR driven by socio-economic priorities

As with political reforms, socio-economic priorities are indeed considered a driver of CSR for organisations across the globe, but more specifically, for organisations in developing countries (Visser, 2008b:82). This is evident by the contrast which Visser (2008b: 82) alludes to between developing and developed nations, illustrating that CSR practices in Nigeria and most developing countries are predominantly aimed at responding to socio-economic development challenges which include health-care provision, poverty alleviation, infrastructure development and education. CSR practices in first-world countries are driven mostly by challenges like consumer protection, fair trade, green marketing, climate change concerns and socially responsible investment.

From a South African perspective as a developing country, socio-economic priorities are embedded in business codes which guide good business practice, as socio-economic aspects are regarded as a critical area that organisations in South Africa are compelled to adhere to, especially when trading with government entities, reinforcing that socio-economic priorities are genuine drivers for CSR.

2.5.1.2.4 CSR driven by maintaining market access

According to Visser (2008a), CSR may be seen as an enabler for organisations across the globe, but more so for organisations in developing countries trying to access markets in countries other than their own. However, Choudhary and Singh (2012:58-59) in their study

identify a belief by organisations that competitive advantage to maintain market access drives CSR practices. This sentiment is agreed with by Baskin (2006, cited by Visser, 2008b:85) who identifies competitive advantage to maintain market access in international markets as one key driver for CSR in Central and Eastern Europe and Asia.

2.5.1.2.5 CSR driven by governance gaps

Another driver of CSR that should be noted is that of 'governance gaps' in countries across the globe. This CSR driver shares some similarity to that of the driver of socio-economic priorities. Visser (2008a:483) supports the acknowledgement of 'governance gaps' as a driver of CSR, stating that,

> *CSR is often seen as a way to plug the 'governance gaps' left by weak, corrupt or under-resourced governments that fail to adequately provide various social services.*

Visser (2008b:483) refers to these social services as housing, roads, electricity, health care and education, and notes that the lack of these services is more common in developing countries than in developed countries. Doh, Littell and Quigley (2015, cited by Ndowora, 2015:16) support the view of Visser (2008b:483), explaining that government in developing countries may be more unwilling or unable to fulfil critical social needs; hence CSR practices may mitigate these governance gaps.

2.5.1.2.6 CSR driven by crises response

As expressed by Visser (2008a:1),

> *CSR responses can be catalysed by economic, social, environmental, health-related or industrial crises.*

Tsarenko and Tojib (2015, cited by Ndowora, 2015:17) agree that these crises will lead to organisations embarking on CSR practices using CSR values to manage a particular crisis while simultaneously building the reputation of the organisation's brand. For example, and based on the current global situation regarding the coronavirus disease (COVID-19), it is clear that the world is in a time of uncertainty and anxiety; thus, Prowly Magazine (2020:1) emphasises that CSR values now more than ever have a special purpose in putting a human face on business entities by communicating empathy, showing understanding and support, both morally and financially, for those needing it most. According to Prowly Magazine (2020:1),

We're definitely in a time of need right now and transferring the ideals of CSR to the dislocation caused by COVID-19 can be of great benefit now for all of us, as employees, as consumers and most importantly, as people trying our best to get through an extremely challenging time.

2.6 CSR implementation challenges affecting SMEs

As previously noted, research pertaining to CSR, particularly from a global and local construction perspective, remains limited. Despite this, challenges to CSR implementation from a construction perspective have been thoroughly documented by Zhang *et al.* (2019) who, collating the views of 69 of the most relevant construction related papers published between 2006 to 2017, and found that challenges specific to the implementation of CSR in construction organisations globally occur from five different perspectives namely: government policy, construction enterprise, attributes of CSR, stakeholder perspectives and the construction industry (see Table 2.3). However, based on the limited CSR research available in the construction industry globally, and even more so locally, it is useful to merge the findings of Zhang *et al.* (2019) with the findings in literature pertaining to implementation challenges of CSR from a generic business perspective, to determine the key implementation challenges of CSR in SMEs.

Table 2.3: CSR barriers reflective of the global construction industry (Adopted from Zhang *et al.*, 2019:576)

Perspectives	Barriers	References
Government policy	Lack of government support	(Cambra-Fierro *et al.*, 2013; Chang *et al.*, 2015; Liao *et al.*, 2017; Loosemore and Lim, 2017a, b; Lou *et al.*, 2011; Lu *et al.*, 2016; Ma and Zhai, 2006; Othman and Abdellatif, 2011; Othman, 2009; Wang *et al.*, 2014; Wang, K. *et al.*, 2008; Willetts *et al.*, 2011; Wu *et al.*, 2015a; Zhu *et al.*, 2011)
Construction enterprise	Lack of awareness, knowledge, and information of CSR within the organisation;	(Akotia *et al.*, 2017; Barnes and Croker, 2013; Bevan and Yung, 2015; Chang *et al.*, 2015; Duman *et al.*, 2016; Elmualim, 2017; Evangelinos *et al.*, 2016; Huang and Lien, 2012; Huang *et al.*, 2017; Jankovichova, 2012; Jin *et al.*, 2014; Jones *et al.*, 2006; Liao *et al.*, 2018; Liao *et al.*, 2017; Loosemore and Lim, 2017b; Lu *et al.*, 2007; Lu *et al.*, 2016; Ma and Zhai, 2006; Othman and Abdellatif, 2011; Othman, 2009; Othman and Mia, 2008; Upstill-Goddard *et al.*, 2016; Wang, K. *et al.*, 2008; Watts *et al.*, 2015; Willetts *et al.*, 2011; Wu *et al.*, 2015a; Wuttke and Vilks, 2014; Zhao *et al.*, 2012; Zhou and Mi, 2017; Zhu *et al.*, 2011)
	Lack of capacity and expertise;	(Loosemore, 2016; Loosemore and Lim, 2017b; Zhu *et al.*, 2011)
	Lack of internal resources;	(Bevan and Yung, 2015; Duman *et al.*, 2016; Liao *et al.*, 2018; Othman and Mia, 2008; Zhu *et al.*, 2011)
	Lack of strategic guidance and support from senior leaders or managers within the organisation;	(Bevan and Yung, 2015; Loosemore and Lim, 2017b; Lou *et al.*, 2011; Othman and Abdellatif, 2011; Wang *et al.*, 2014; Willetts *et al.*, 2011; Wu *et al.*, 2015a)
	The negative attitude within the organisation	(Bevan and Yung, 2015; Duman *et al.*, 2016; Liao *et al.*, 2018; Othman, 2009; Watts *et al.*, 2015; Zhao *et al.*, 2016)

Table 2.3: (Continued)

Perspectives	Barriers	References
Attributes of CSR	Lack of measurement of CSR benefits; Incremental time and cost;	(Bevan and Yung, 2015; Zhu *et al.*, 2011)
	Lack of appropriate technology	(Liao *et al.*, 2018; Liu, 2011; Petrovic-Lazarevic, 2008; Upstill-Goddard *et al.*, 2016; Wu *et al.*, 2015a) (Loosemore and Lim, 2017a; Zhao *et al.*, 2016)
Stakeholder perspectives	Lack of communication, coordination, and cooperation among stakeholders;	(Duman *et al.*, 2016; Lin *et al.*, 2017; Othman and Abdellatif, 2011; Upstill-Goddard *et al.*, 2016; Xiong *et al.*, 2016)
	Unclear stakeholder role and power;	(Jin *et al.*, 2014; Lin *et al.*, 2017; Zhou and Mi, 2017; Zhu *et al.*, 2011)
	Stakeholder interest conflict	(Lin *et al.*, 2014, 2017; Wuttke and Vilks, 2014; Zeng *et al.*, 2015)
Construction industry	Lack of awareness and knowledge of CSR among customers;	(Loosemore, 2016; Lu *et al.*, 2007; Ma and Zhai, 2006; Masurel and Rens, 2015)
	Lack of attractiveness of CSR to customers;	(Loosemore and Lim, 2017a, b; Ma and Zhai, 2006)
	Consider CSR in a generic sense, not in a specific strategy;	(Akotia *et al.*, 2017; Bevan and Yung, 2015; Lin *et al.*, 2017; Loosemore and Lim, 2017b; Mayr, 2015; Wang, K. *et al.*, 2008; Xiong *et al.*, 2016) (Duman *et al.*, 2016; Liu, 2011; Loosemore and Lim, 2017a; Masurel and Rens, 2015)
	Attitudes of society, cultures of the construction industry; Lack of evaluation tools, processes, and frameworks to assess CSR performance; Lack of credibility of the disclosed CSR information	(Loosemore, 2016; Shi *et al.*, 2015; Willetts *et al.*, 2011; Zhao *et al.*, 2012; Zhou and Mi, 2017) (Evangelinos *et al.*, 2016; Lu *et al.*, 2016; Willetts *et al.*, 2011)

CSR is an essential element of business strategy for both large corporations as well as SMEs across the globe and within all sectors (Kageyama, 2017:1). Kageyama (2017:1) opines that in many ways SMEs are better positioned than larger corporations to reap the benefits from socially responsible business practices. However, Kageyama (2017:1) is convinced that SMEs across all sectors face unique challenges pertaining to CSR practices.

Based on the organisational characteristics of SMEs as described by Chi Vo (2011:92) and Jenkins (2004:41) as informal, intuitive, ambiguous, but more specifically owner-managed, it seems fitting to categorise CSR challenges faced by SMEs through the adoption of the St. Gallen Management Model (illustrated in Figure 2.3) which places management in the context of the organisation and the business environment, enabling an integral view on management and its interplay with the organisation and the business environment. In addition, in the organisation dimension of the St. Gallen Management Model, CSR challenges affecting SMEs are documented via the three different management levels: normative, strategic, and operative management levels (Ruegg-Sturm & Grand, 2017:178). In the business environment

dimension of the St. Gallen Management Model, CSR challenges affecting SMEs will be documented from an environmental management level perspective.
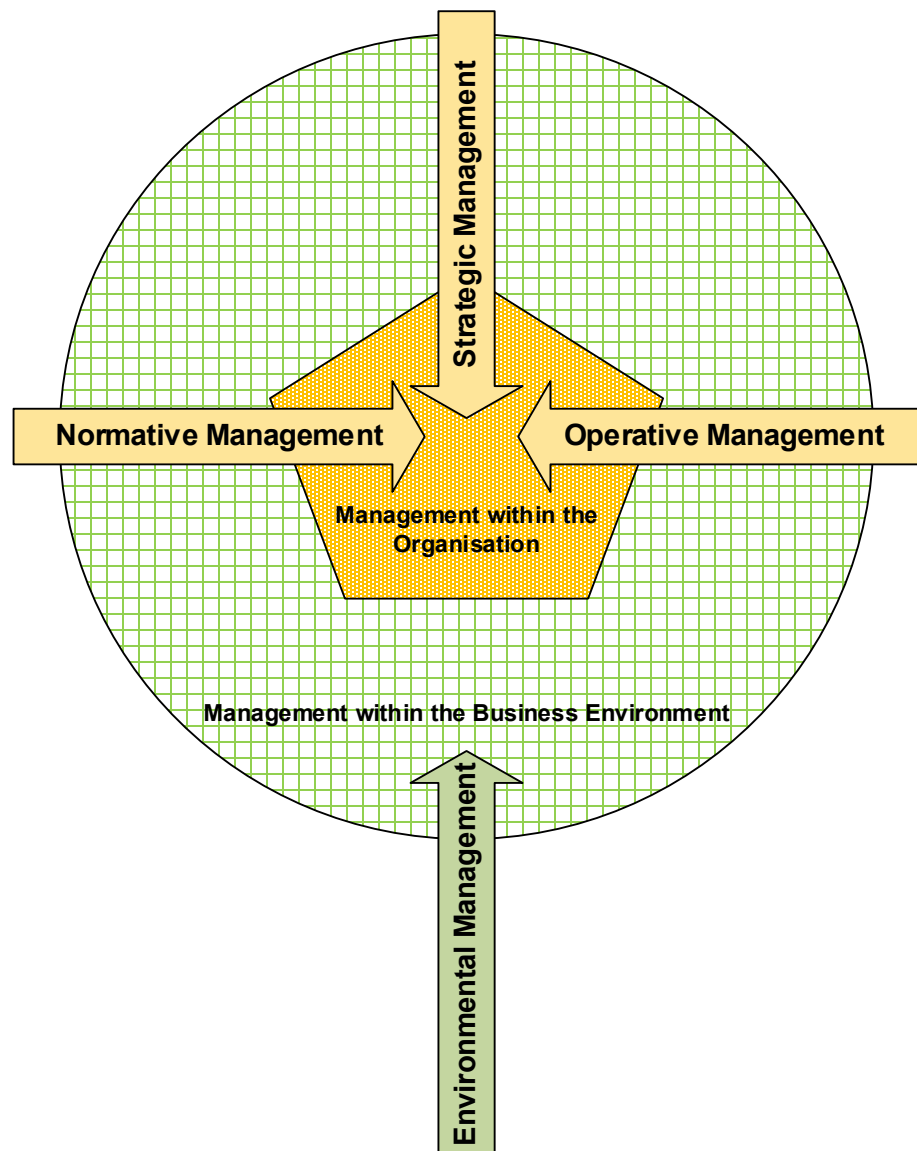
Figure 2.3: The St. Gallen Management Model
(Adapted from Elford & Daub, 2019:3)

2.6.1 CSR implementation challenges affecting SMEs at the normative management level in the organisational dimension

With reference to the St. Gallen Management Model as established by Ulrich and Krieg (1972) and later developed by Bleicher (1991) and Ruegg-Sturm (2002), the first level of management in any organisation in relation to the concept of corporate governance which encompasses CSR practices is referred to as the normative management level. At this management level, the organisational culture, norms and shared values as well as important long-term commitments which determine an organisational culture are established (Ulrich & Krieg, 1972, cited by Elford & Daub, 2019:4). Villa (2019:21), moreover, stipulates that at the normative

management level, the organisation's overall vision, mission, strategy and policies are developed which establish the organisation's identity and its responsibilities.

It is therefore the responsibility of management at the normative management level to inaugurate the organisational culture (Ruegg-Sturm & Grand, 2017:183). Likewise, management at the normative management level is certainly a critical factor in ensuring the successful implementation of CSR via a CSR culture, as the philosophies of management at this level affect the organisation's CSR practices (Goyal & Kumar, 2017:1873). Therefore, the commitment/non-commitment of management at this level may motivate/demotivate employees to either ensure or not ensure the effective implementation of CSR in the organisation (Goyal & Kumar, 2017:1873). This position by Goyal and Kumar (2017:1873) is supported by the view of Wilms, Hardcastle and Zell (1994:108) who state that,

> *People will follow management direction. Whatever management does, and in what direction they push, and how hard they push dictates where the company eventually goes.*

Based on the culture and characteristics of SMEs, as explained by Chi Vo (2011:92), it is possible that CSR practices by the owner-managers of SMEs across all sectors and geographical locations, might not take precedence over more pressing concerns impacting their businesses. Carlisle and Faulkner (2004, cited by Sweeney, 2007:520) support this view as they mention that owner-managers of SMEs, including construction SMEs, are likely to perceive that CSR is irrelevant to them. These sentiments serve as a justification why SMEs in South Africa, particularly owner-managers of SMEs in the South African construction environment, seem to have little to no commitment to CSR and tend to view CSR as an unnecessary burden to their already struggling businesses (Ladzani & Seeletse, 2010:37), suggesting that CSR and its integration into the SME culture, objectives, norms and values particularly in the South African construction environment remains a challenge at the normative management level of these organisations (Murphy, 2020:1). Figure 2.4 indicates the various challenges that owner-managers of SMEs face at the normative management level.
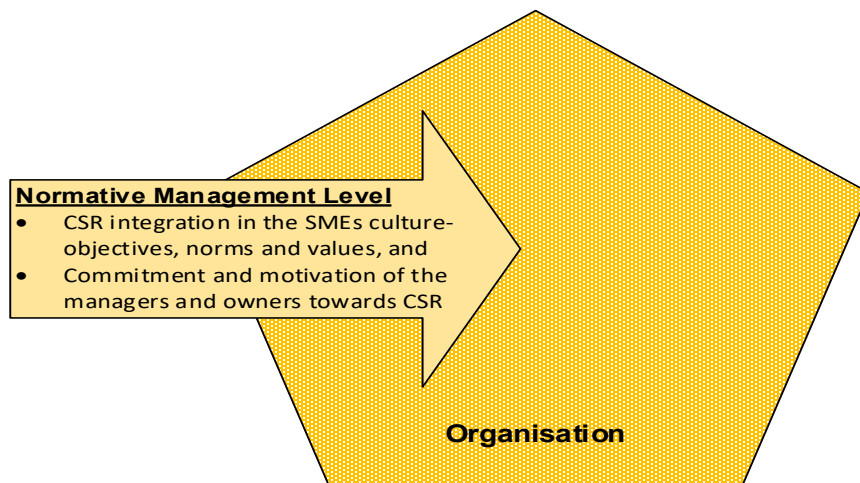
Figure 2.4: CSR implementation challenges on the normative management level (Adapted from Elford & Daub, 2019:3)

2.6.2 CSR implementation challenges affecting SMEs at the strategic management level in the organisational dimension

The St. Gallen Management Model stipulates that the second level of management in any organisation, in relation to the concept of corporate governance, an umbrella term which allows for the infusion of CSR practices, is referred to as the strategic management level. Based on the views of Ruegg-Sturm and Grand (2017:180), the strategic management level emphasises establishing the organisation's strategy for the purpose of ensuring the organisation's competitive advantage and in so doing, gives rise to the organisations long-term survival and success, positively impacting the organisation's sustainable business performance. Elford and Daub (2019:5), in addition, mention that features specific to SMEs also influence CSR practices at the strategic management level.

One challenge related to CSR practices in SMEs that is identified at the strategic management level is that SMEs by nature do not seem to internally or externally communicate their CSR practices, compared to larger organisations. This is justified as a challenge as Hamidu, Haron and Amran (2015:88) confirm that based on legitimacy theory, communicating CSR practices by both SMEs and larger organisations allows for the initiation and protection of the business legitimacy to its stakeholders. According to Elford and Daub (2019:6), another strategic challenge of SMEs when concentrating on CSR practices is their limited resources, which refer not only to their limitation to financial resources as mentioned by Abdullah, Mohandes, Hamid and Singh (2016:749) and Ramasobana and Fatoki (2014: 287), but also to their limited human resources, time, knowledge, awareness, understanding, information, and legal and media support (Abdullah *et al.*, 2016:749; Manuere & Majoni, 2016:68; Lepoutre & Heene, 2006:258; Ramasobana & Fatoki, 2014:258; Chiloane-Tsoka & Rsivetshele, 2014: 277; Zou, Liu, Ahmad, Sial, Badulescu, Zia-Ud-Din & Badulescu, 2021:9). According to Jenkins (2006:243-249) and Bianchi and Noci (1998:272), these stipulated challenges direct SMEs to prioritise differently;

hence challenges closer to home, for example employee motivation, as reinforced by Abdullah *et al.* (2016:749), customer retention and community involvement gain more priority.

Another challenge that SMEs face at the strategic management level in relation to CSR practices due to their informal and owner centric nature is that they find it difficult to justify investments into CSR practices (Stubblefield Loucks, Martens & Cho, 2010:83). Bay (2012, cited by Ramasobana & Fatoki, 2014:285) concurs with the preceding sentiment, explaining that SMEs in South Africa, specifically SMEs in the South African construction environment, lack the necessary investment and justification of investment required to undertake CSR practices. Raynard and Forstater (2002:0) support these views, contending that SMEs in developing economies consider an investment in CSR practices an expense to their businesses, blinding them from the economic perspectives, especially in the short term. This, according to Carroll (1991, as cited by Elford & Daub, 2019:6), illustrates that regardless of the values and norms of management and owners, the legitimation of CSR practices represents a sizeable challenge, given that the main goal of any business is to be profitable. This is especially the case of SMEs where survival and growth of the business take priority, leaving non-commercial goals as secondary (Worthington, Ram & Jones, 2006:103). Therefore, the known organisational characteristics of SMEs typically have a great influence on how these companies deal with CSR practices at the strategic management level (Ruegg-Sturm & Grand, 2017:183-186). An overview of the CSR challenges on the strategic management level, as documented by Elford and Daub (2019:6), is provided in Figure 2.5

Strategic Management Level
- Reluctant to communicate CSR initiatives internally and externally to the business,
- Limited resources, thus other priorities, and
- Difficulty in justifying and / or legitimising CSR efforts, since benefits are challenging to measure.
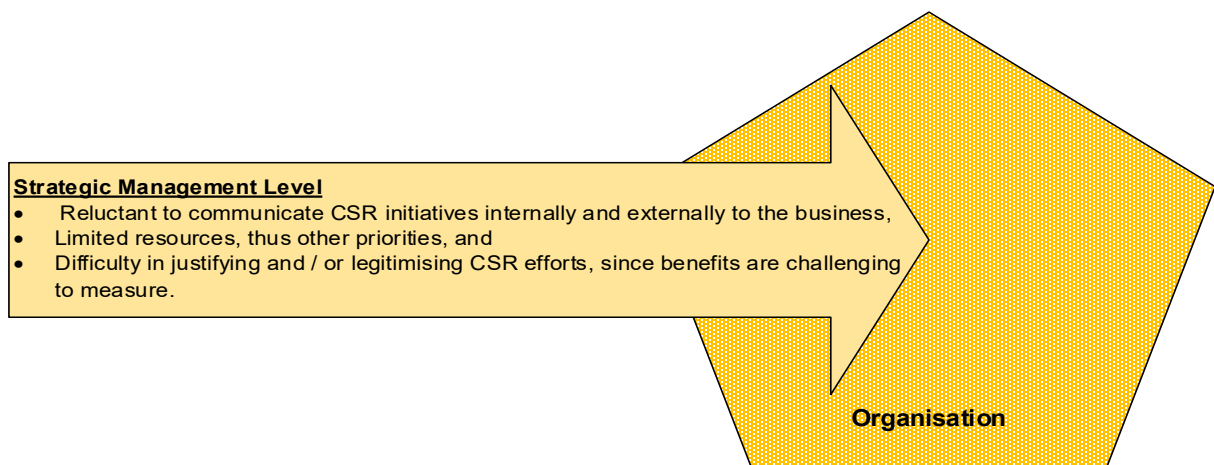
Organisation

**Figure 2.5: CSR implementation challenges on the strategic management level
(Adapted from Elford & Daub, 2019:3)**

2.6.3 CSR implementation challenges affecting SMEs at the operative management level in the organisational dimension

The St. Gallen Management Model stipulates that the third level of management in any organisation, in relation to the concept of corporate governance, which serves as an umbrella

term allowing for the infusion of CSR practices, is referred to as the operative management level. According to Ruegg-Sturm and Grand (2017:186-188) the objective of the operative management level relies on SMEs performing their daily business functions correctly and efficiently and therefore it is believed by Ruegg-Sturm and Grand (2017:186-188) that the key elements at this management level are the proper coordination of practices and allocation of resources, such as finance, knowledge, experience and time.

One CSR challenge identified at the operative management level in relation to CSR practices in SMEs, including construction SMEs across the globe, is the belief that SMEs should apply the same CSR theory and strategies to their organisations as that of their larger counterparts (Chi Vo, 2011:89). According to Chi Vo (2011:89) and Davies and Crane (2010:127), this belief is faulty, considering the cultural differences and specific characteristics of SMEs and larger organisations. It is clear, however, that CSR theory and strategies applied by larger organisations are too complex and suboptimal for SMEs (Jenkins, 2004:38-40; Castka, Balzaro, Bamber & Sharp, 2004:143). Elford and Daub (2019:31); Zou *et al.* (2021:10); and Bello, Banda and Kamanga (2017:5) suggest that high levels of bureaucracy, lack of CSR skills and knowledge and adaptation of CSR practices and standards to SME internal business processes should also be regarded as direct CSR challenges to SMEs within the operative management level. Elford and Daub (2019:7) further emphasise through their research that CSR challenges at the operative management level are linked to barriers at the strategic management level, such as limited financial, human and technical resources. An overview of the CSR challenges on the operative management level, as documented by Elford and Daub (2019:8), is shown in Figure 2.6

Operative Management Level
- High levels of bureaucracy,
- Standardised CSR guidelines are too complex and inapplicable for SMEs,
- Lack of CSR skills and knowledge by SMEs to incorporate CSR into their daily business, and
- Difficulty adapting CSR practices and standards to the SMEs internal business process

Organisation
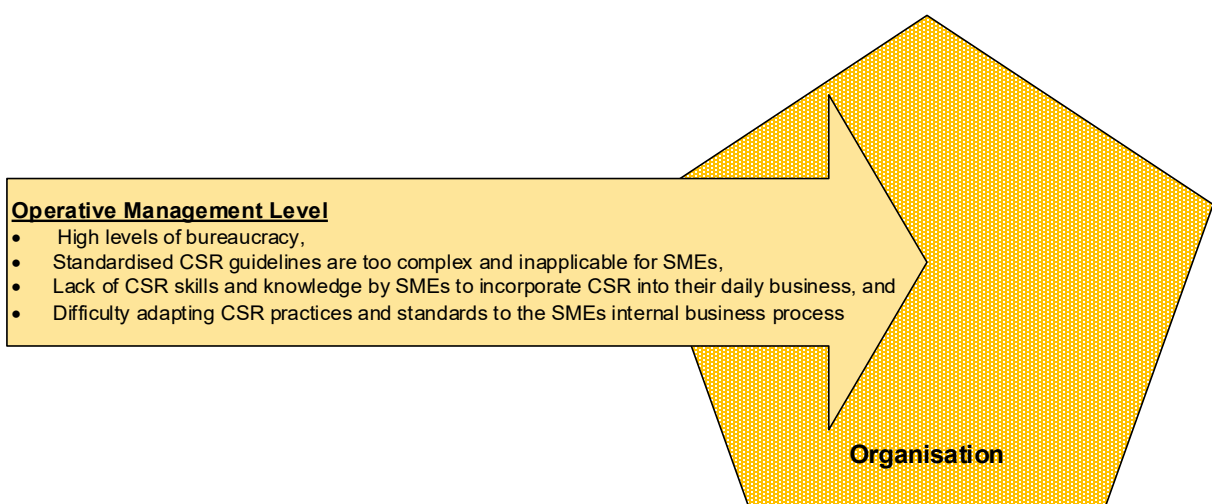
Figure 2.6: CSR implementation challenges on the operative management level
(Adapted from Elford & Daub, 2019:3)

2.6.4 CSR implementation challenges affecting SMEs at the environmental management level in the business environment dimension

CSR challenges affecting SMEs have been discussed predominantly from the organisational dimension, which encapsulated literature via three different management levels – the normative management level, the strategic management level and the operative management level – all of which are linked to the St. Gallen Management Model as adapted by Elford and Daub (2019:4-8). This section documents CSR challenges that SME owner-managers experience within the business environment dimension of the St. Gallen Management Model.

According to Ruegg-Sturm and Grand (2017:118), an organisation is embedded in a dynamic business environment that continuously creates opportunities for the organisation, but which also establishes expectations for the organisation. With regards to the business environment dimension represented in the St. Gallen Management Model, some of the challenges hindering SME owner-managers across all sectors globally from practicing CSR in accordance to Manuere and Majoni (2016:68) are linked to unstable economic conditions, negative government regulations or policies, poor collaboration among SMEs, poor customer care and a lack of CSR culture in SMEs. Moloi (2013:33-50) and Klara (2011:83) suggest that poor supplier care and the organisation's location with respect to the business environment dimension of the St. Gallen Management Model similarly hinder the successful implementation of CSR practices by SME owner-managers, in general and in the South African construction industry. An overview of the CSR challenges in the business environment dimension is provided in Figure 2.7.
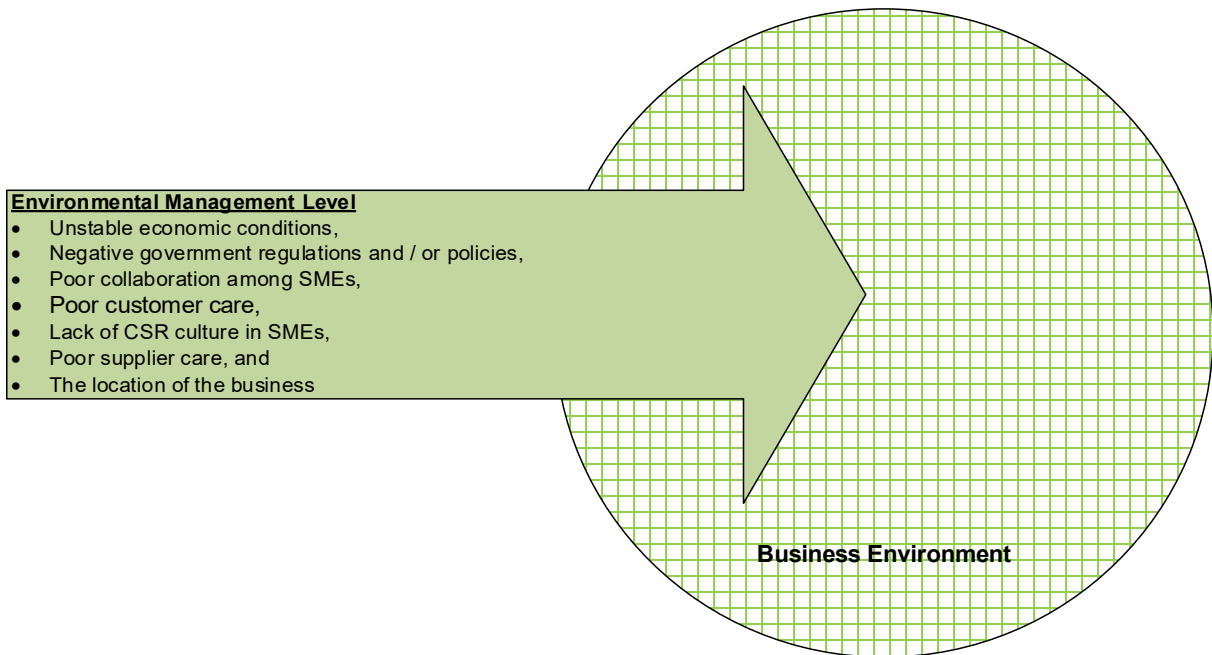
Figure 2.7: CSR implementation challenges on the environmental management level (Adapted from Manuere & Majoni, 2016:68; Moloi, 2013:33-50)

2.7 CSR activities

When trying to determine the CSR activities that exist within CSR, several contributions with different approaches appear in the literature, made by the likes of the Commission of the European Communities (2001) who in a Green Paper analysed CSR activities through two main dimensions: 1) the internal dimension, which includes CSR activities relating to workers and issues regarding the investment in human capital, health and safety, and change management, as well as environmental practices which include activities linked to the management of natural resources; and 2) the external dimension, the dimension dealing with the responsibility that goes beyond the organisation and includes activities relating to the local community, business partners, suppliers, customers, public authorities and non-governmental organisations (NGOs).

Another contribution is made by Gonzalez and Martinez (2003; 2004) who identify CSR activities via three CSR dimensions: 1) the economic dimension, which includes CSR activities relating to maximising the satisfaction of shareholders, clients, employees and suppliers, through a series of economic initiatives for example adequate investment management, fair pricing, optimum quality of products, and adequate salaries; and 2) the sociocultural dimension, which includes CSR activities relating to law, customs and cultural heritage as well as involvement with political and cultural life like patronage activities, promotion of aid to disadvantaged groups, and the promotion of culture at different educational levels with activities through sponsorship; and 3) the environmental dimension, which includes CSR

activities relating to the use of natural resources, organisational sustainability, and the employment and efficient use of different energy sources.

In addition, Sanchez and Acosta (2005) identify CSR activities via four CSR dimensions: 1) the economic dimension, which in their view includes CSR activities pertaining to the production of goods and services to obtain an economic benefit; 2) the legal dimension, which includes CSR activities in line with a series of regulations established by the organisation, that must be respected and adhered to; 3) the ethics dimension, which includes a set of CSR activities and practices of the organisation, that although not required by law are judged as correct or incorrect by society; and 4) the discretionary dimension which includes CSR activities that are not a requirement of society but which are satisfactory, activities such as contributing financial resources to social works and supporting educational programmes.

Based on the preceding information it is acknowledged that a valuable contribution towards determining the number of activities pertaining to CSR globally was made by Dahlsrud (2008:7-11) who analysed 37 definitions of CSR in available literature, dated between 1980 and 2003. The study identifies CSR activities via five CSR dimensions: 1) the environmental dimension, which includes CSR activities related to the organisation advocating for a cleaner environment, the organisation illustrating and practicing environmental stewardship, and the organisation illustrating environmental concerns in their business operations; 2) the social dimension, which includes CSR activities related to the organisation contributing to a better society, the organisation integrating social concerns in their business operations, and the organisation considering the full scope of their impact on the surrounding communities; 3) the economic dimension, which includes CSR activities related to the contribution of the organisation towards economic development, the organisation preserving its profitability, and the organisational operations; 4) the stakeholder dimension, which includes CSR activities related to the organisation's interaction with stakeholders; how the organisation interacts with their employees, suppliers, customers, and communities; and how the organisation treats the stakeholders of the organisation; and finally 5) the volunteering dimension, which includes CSR activities related to the organisation's ethical and legal obligations.

2.7.1 CSR activities practiced by SMEs

According to Goldengate Consulting (2012:16), the CSR dimensions considered by SMEs in general are market, product, employee, society and environmentally focused CSR dimensions. Associated with these dimensions as illustrated in Table 2.4 are the CSR dimension meanings; most importantly the corresponding CSR activities and possible results as stipulated by Goldengate Consulting (2012:16).

Table 2.4: CSR dimensions, meaning, activities and possible results (Adopted from: Goldengate Consulting, 2012:16)

CSR Dimensions	Meaning	CSR Activities	Possible Results
"Market Focused"	*CSR initiative tied to the consumers or client base of the company*	• *Excellent service delivery* • *Customer feedback;* • *Good customer relation services* • *Customer education* • *Ethical business practices*	• *Customer satisfaction* • *Good customer feedback* • *Referrals* • *Publicity*
"Product Focused"	*CSR initiative tied to the system of production or quality of the products/service range*	• *Provision of high-quality products* • *Using organic or natural ingredients in production* • *Excellent service delivery*	• *Business reputation* • *Competitiveness*
"Employee Focused"	*CSR initiative to improve the wellbeing of employees*	• *Employee wellness programme* • *Fair wages and salaries* • *Job security* • *Better working conditions* • *Workplace diversity.*	• *Low staff turnover* • *Staff loyalty* • *Motivated employees* • *Reduced rate of absenteeism* • *High staff morale* • *Efficient staff*
"Society Focused"	*CSR initiative focused on the betterment of the society*	• *Support for the underprivileged* • *Provision of jobs* • *Health talk/awareness programme* • *Community education/literacy programmes*	• *Relationship with the local community* • *Customer loyalty* • *New business opportunities* • *Recognition by community stakeholders*
"Environmentally Focused"	*CSR initiative focused on conservation or sustainability of the environment*	• *Energy and water saving practices* • *Environmental product responsibility* • *Ecologic and economic use of natural resources* • *Environmentally friendly packaging* • *Use of recycled materials* • *Waste reduction practices*	• *Competitiveness* • *Cost reduction* • *Customer loyalty* • *Opportunity for innovation*

Another study conducted by Hlatywayo (2015:38) suggests that SMEs focus on the following CSR activities via four CSR dimensions as presented in Table 2.5 when attempting to practice CSR.

Table 2.5: CSR dimensions and activities (Adopted from: Hlatywayo, 2015:38)

CSR Dimensions	Activities by SMEs
"Community focused"	• *Contribute money to be used to construct infrastructure for local communities* • *Contribute towards scholarships for students in the local communities and other research programmes* • *Donate to games and sports events in communities* • *Participate in community projects such as building libraries, schools, houses for the needy families* • *Donate towards treatment of chronic disease e.g. Ebola, Human Immunodeficiency Virus (HIV)/ Acquired Immunodeficiency Syndrome (AIDS), Cancer and Tuberculosis (TB)* • *Provide voluntary counselling and physical support to enhance motivation to workers*
"Employee focused"	• *Fair treatment of workers* • *Provide bonuses and incentives for workers to stimulate competition in the company* • *Include workers in decision making processes*
"Environmental focused"	• *Reduce pollution* • *Produce products that are environmentally friendly* • *Craft and implement policies that can be used to safe guard the natural environment in business processes* • *Work with government and other organisations in environmental campaigns*
"Customer focused"	• *Make sure customer complaints are responded to quickly* • *Make sure that products and services do not harm people and the natural environment* • *Provide product information to customers* • *Provision of honesty advertising, product safety, reliability and durability of products*

Turyakira *et al.* (2012:109), Turyakira *et al.* (2014:159), Turyakira (2017:467-468) and Ramasobana and Fatoki (2014:286-287) concur with Hlatywayo (2015:38) and Goldengate Consulting (2012:16), suggesting that SMEs are particularly active in workforce-orientated; market-orientated; society-orientated, and environment-orientated CSR activities.

Choongo (2017:5), however, argues that SMEs are mainly active in social and environmental CSR activities. This view is supported by Jorge, Madueno, Sancho and Martinez-Martinez (2016:6) who in their study investigated international state of art of CSR in SMEs and determined specific CSR activities utilised by SMEs globally. Jorge *et al.* (2016:6) established these CSR activities by analysing 107 empirical studies related to CSR in the field of SMEs, using a bibliometric research methodology, and determining that SMEs globally, primarily focus on environmental and philanthropic CSR activities. Jorge *et al.* (2016:11) substantiate this finding by citing Davies and Crane (2010:128), stating that managers of SME businesses are strongly influenced by social issues in their surrounding environments. It can therefore be expected that environmental and philanthropic CSR activities are predominantly practiced by SMEs globally as SMEs are typically located or embedded in local communities. For many

SMEs, physical propinquity may translate to moral propinquity. SMEs therefore focus their CSR activities on local communities, promoting closer dialogue and collaboration (Jenkins, 2004; Murillo & Lozano, 2006 cited by Jorge *et al.*, 2016:11).

Jorge *et al.* (2016:11) also mention that internal, internal/external communication, client, and supply chain CSR activities are utilised by SMEs globally. These CSR dimensions are not as rigorously embraced as environmental and philanthropic CSR activities. Table 2.6, adapted from Jorge *et al.* (2016: 9-10), depicts CSR dimensions and, more importantly, CSR activities utilised by SMEs globally.

Table 2.6: CSR dimensions and corresponding activities (Adapted from: Jorge *et al.*, 2016:9-12)

CSR Dimensions	Activities by SMEs
Environmental focused	The provision of: • Waste management practices • Environment protection measures that include recovery/recycling of packaging • Reduction of pollution • Energy saving investments • Sustainable resources • Environmental innovations • Programmes to reduce water consumption • Environmental training to employees • Participation in environmental networks • Programmes to reduce noise • Recycling wate; • Measures to reduce resources in production • Environmental audits
Philanthropic focused	The provision of: • Initiatives in favour of the local community • Various sponsorships • Donation or support programmes • Initiatives at national or international cooperation projects • Network participation or association for the promotion of CSR • Marketing practices • Volunteering initiatives • Grants or support for projects promoted by public administration • Social audits
Internal focused	The provision of: • Regular training programmes • Occupation health and safety initiatives • Reconciling or balancing work and family life • Social performance initiatives • Work or labour environment initiatives • Fair and equal opportunities • Social audits or certification • Employee interest considered with organisational decision making • Adequate human resource policies • Benefits going beyond the law requirements when in crises and distress
Internal/external communication focused	The provision of: • Social and environmental performance initiatives • Certification and quality • Information and transparency to new candidates • Internal corporate communication • Honest and truthful reporting information • Informal communication • Reports of suppliers' compliance • A code of conduct • An integrated annual report

	• Health and safety issues • Social and ethical policies

Table 2.6: (Continued)

Client focused	The provision of: • Innovation practices • The implementation of additional services to clients at a fair price • Consumer protection • Compliance with quality standards • Complete and accurate product information • Partnerships with clients • The implementation of quality certifications • Customer training
Supply chain focused	The provision of: • A code of conduct for suppliers • Establishing partnerships or long-term networks • Supplier selection • CSR practices in the supply chain • Transferring social responsibility values • Training • Clients selection • An open-door policy

2.7.2 CSR activities practiced by construction SMEs in developed countries

From a construction perspective in developed countries, Brown (2012:50) identifies CSR activities via three CSR dimensions that are valued by construction organisations (inclusive of construction SMEs) in the UK: 1) the economic dimension, which include CSR activities concerned with the construction SME providing a living or minimum wage to its workers, providing lifelong learning and training programmes, promoting local recruitment schemes, implementing policies to prevent corrupt activities within the organisation, and implementing local supplier policies where applicable; 2) the environmental dimension, which includes CSR activities concerned with the construction SME initiating biodiversity management programmes, emissions or affluent monitoring, waste minimisation and recycling initiatives, and green energy use and energy efficiency initiatives; and 3) the social dimension which includes CSR activities concerned with construction SMEs promoting diversity and equality policies, becoming patrons of charities, establishing procedures to prevent human rights breaches in the supply chain, and giving staff members volunteering opportunities.

In Australia, Bevan and Yung (2015:307) agree with the CSR activities via the three CSR dimensions as stipulated by Brown (201250). However, Bevan and Yung (2015:307) add another CSR dimension and its corresponding CSR activities which they suggest be practiced not only by SMEs in the Australian construction industry but by SMEs in the global construction context. This CSR dimension is the ethics dimension, which includes CSR activities concerned with construction SMEs correlating the value system of their business towards society and briefing society on their businesses CSR initiatives. According to Sanchez and Acosta (2005), these activities under the ethics dimension are not necessarily required by certain laws, but are judged as either correct or incorrect by society.

According to a study conducted in the Republic of Ireland by Sweeney (2007:519-520), SMEs which include construction SMEs in the region tend to focus primarily on CSR activities linked to the community CSR Dimension, which include associated CSR activities pertaining to community projects such as charitable donations and scholarship programmes to impact surrounding communities located in the proximity of various construction businesses. Sweeney (2007:519-520), however, advocates that even though construction SMEs in the region primarily focus on the community dimension and its associated CSR activities, other CSR activities relative to other CSR dimensions are equally important and applicable to construction SMEs: 1) the employee dimension, which includes CSR activities concerned with the construction business providing a work/life balance for employees, as well as initiating diversity policies for employees; 2) the customer dimension which includes CSR activities concerned with the construction business providing innovative products to their customers and enhancing product accessibility to their customers; and 3) the environment dimension which includes CSR activities concerned with the construction business initiating waste management systems and practices for recycled material.

2.7.3 CSR activities practiced by construction SMEs in developing countries

Ekung, Ujene and Ebong (2014:20), from the perspective of the Nigerian construction industry, contend that CSR activities which construction organisations participate in, including SMEs in the region, occur via three CSR dimensions: 1) the social dimension, which includes CSR activities concerned with construction SMEs making internships and study grants available to the surrounding community, donating and sponsoring sports events, partnering with relevant societal organisations, participating in educational initiatives, providing social amenities and rehabilitation programmes, and releasing employees to provide voluntary activities to the community; 2) the environmental dimension, which includes CSR activities concerned with the construction SME practicing waste management and noise control as well as allowing for natural resource conservation; and 3) the economic dimension, which includes CSR activities concerned with the construction SME prioritising client and end user satisfaction, implementing a complaint handling system, and providing prompt payments and guarantees to local suppliers. The findings of Xia *et al.* (2018: 345) obtained through deductive content analysis of 68 reliable journal papers between 2005 and 2017 support the position of Ekung *et al.* (2014:20) in explaining that CSR activities executed in the global construction industry are categorised into social, environmental and economic dimensions inclusive of their respective CSR activities.

Zhao *et al.* (2012:277), from a Chinese construction industry perspective, suggest that the understanding of what CSR means to the construction industry and how it is practiced are still

quite limited as very little research has espoused the development of a framework for CSR activities relevant to construction enterprises as a tool for CSR performance and ultimately sustainable business performance for construction enterprises large or small. According to Xie, Xu, Le, Chen, Xia and Skitmore (2020:2), current research on CSR of construction enterprises is still in its infancy. Hence, Zhao *et al.* (2012: 277) establish a generic indicator system stipulating specifically the CSR activities that are practiced by construction organisations inclusive of construction SMEs in China. Table 2.7 illustrates these CSR activities in relation to the CSR dimensions and performance areas associated with construction businesses, inclusive of construction SMEs in China.

Table 2.7: CSR dimensions, performance areas and activities for construction businesses (Adapted from: Zhao *et al.*, 2012:277)

CSR dimensions related to employees	
CSR sub-dimensions	**CSR activities**
Occupational health and safety of employees	• Providing a safe working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures) • Providing a healthy working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures) • Providing health inductions for employees • Providing health training for employees • Providing safety inductions for employees • Providing safety training for employees • Establishment of a self-awareness system for construction safety • Improving the self-awareness system for construction safety • Establishment of a responsibility system for construction safety • Improving the responsibility system for construction safety • Providing access to on-site and off-site facilities e.g. staff areas, drinking water, food • Contribute towards design review from construction hazard perspective • Regular maintenance of construction machinery and equipment • Effective emergency management procedures in place pertaining to, e.g., injuries, accidents and occupational diseases • Effective safety supervision in place pertaining to, e.g., injuries, accidents and occupational diseases • Regular inspections of employees work practices • Regular health checks • Regular notification of health check results; • Participation of employers representatives in Occupational Health and Safety Commission • Participation of employees' representatives in Occupational Health and Safety Commission
Legal working hours and rest time	• Compliance with working hours regulation • Allocate appropriate working hours according to the type of work • Process to manage weekly maximum overtime and average working time
Wages and welfare	• Guarantee the professional minimum wage • Awareness of employees on various components that constitute wages • Process in place to ensure wages are not altered for disciplinary purposes • No delay in wages and allowances according to employment contract • Commitments to improve staff welfare • Give special allowances to employees under special work conditions • Additional remuneration for overtime work
Staff employment	• Provide fair job opportunities • Provide equitable job opportunities • All employees are formally contracted • Organisation abides by laws regarding the non-employment of child labour • Human resources policy in place to attract qualified staff • Human resource policy in place to retain qualified staff

Table 2.7: (Continued)

Education and training	• Appropriate training for the job, as well as specific OHS and W training • Employees are aware of relevant organisational regulations • Employees are aware of relevant organisational rules • Employees are aware of relevant organisational values • Career guidance plan in place for employees
Freedom of association and bargaining	• Employees have the right of association and freedom to join trade unions • Organisation supports the existence of trade unions • Organisation supports the functions of trade unions • Organisation supports the maintenance of communication and dialog with trade unions at all times • An effective and confidential system in place for employee complaints • Negotiate employee benefits with trade unions • Effective, confidential procedure in place to manage employee complaints
Harmonious labour/management relationship	• Employees representation and participation in corporate decision-making • Appropriate information channels to inform employees about any organisational changes • Employees experiencing personal problems receive appropriate support • Systems in place to manage employees who are sick and no longer able to continue in existing capacity
Human rights measures	• Organisational values do not interfere with employee beliefs • Organisational values do not interfere with employee customs • Organisational values do not interfere with employee legal rights • Prohibit harassment of the employees • Prohibits abuse of the employees • Prohibits corporal punishment towards employees • Employees are not forced to work beyond legal entitlement • Human rights policies in place to assess human rights performance • Human rights procedures in place to assess human rights performance • Employees are provided with appropriate cultural environment • Employees are provided with appropriate cultural facilities
CSR dimensions related to shareholders	
CSR performance areas	**CSR activities**
Shareholder legal revenues	• Maintain their shareholder revenues • Maintain their shareholder profits • Enhance their shareholder revenues • Enhance their shareholder profits • Increase in value of shareholder shares
Accurate disclosure of corporate status and development prospects	• Accurate information on corporate operating performance • Accurate information on corporate financial performance • Accurate information on corporate sustainable development prospects (e.g. social and environmental performance)
Decision-making participation	• Shareholders participate in corporate decision-making on major corporate activities • Shareholders participate in decision-making regarding corporate income distribution
Shareholder relationship management system	• Establish the sense of being responsible to shareholders • Establish the sense of being an agency of shareholder relationship management
	•
CSR dimensions related to customers	
CSR performance areas	**CSR activities**
Quality and safety of construction product	• Quality of buildings and their components • Durability of buildings and their components • Attainment of legal requirements • Attainment of safety requirements • Elimination of potential safety threats to the customer • Elimination of potential safety threats to the community • The organisation employs a good record keeping system that enables easy analysis of all incidents during the construction process • The organisation employs a good record keeping system that enables easy response to all incidents during the construction process

	• Establish a project quality management system

Table 2.7: (Continued)

Customer satisfaction	• Complete project within budget • Complete project on time • The organisation has a policy to meet customer needs • The organisation has a policy to meet customer expectations • Procedures in place to manage customer complaints properly • Maintains appropriate relationship with supervision engineers and consultants
Customer service culture	• Has set up an appropriate asset management system (e.g. construction maintenance and post-construction service)
Innovation and development	• Investment on developing innovative construction materials • Investment on developing innovative construction methods • Investment on developing innovative construction technology
Disclosure of true performance information of the organisation	• Accurate information on corporate credit records • Accurate information on corporate finance records • Accuracy of credit records of compliance with contract • Accurate information on product quality credit records • Accurate information on corporate tax credit records
CSR dimension related to suppliers and partners	
CSR performance areas	**CSR activities**
Maintain an appropriate partner relationship	• Contractual obligations are met and suppliers are paid in timely manner • Contractual obligations are met and contractors are paid in timely manner • Mutual respect for laws • Mutual respect for regulations • Mutual respect for business ethics
Enhance communication with partners/suppliers	• Disclose organisation-to-supplier (partner) policies and establish appropriate safeguards • Disclose organisation-to-supplier (partner) commitments and establish appropriate safeguards • Effective communication with suppliers/partners
Promote CSR performance of partners and suppliers	• Record the CSR commitment and performance of suppliers and partners • Assess the CSR commitment and performance of suppliers and partners
CSR dimensions related to government	
CSR performance areas	**CSR activities**
Pay tax	• Pay required tax payments as stipulated by law
Obey the requirements of laws and policy	• Abide by the law (codes of conduct, anti-corruption, building regulation) and bear other obligations stipulated by the government • Actively support the public welfare activities that government initiated.
Provide employment opportunities	• Provide employment opportunities for society
CSR dimensions related to environment and resources	
CSR performance areas	**CSR activities**
Conservation of energy and resources	• Water conservation and harvesting in construction process and building operation • Land use efficiency • Minimising construction demolition waste to landfill and energy consumption • Organisation encourages responsible utilisation of resources • Organisation promotes the use of renewable resources and alternative energy systems • Scientific and technological innovation (energy conservation/reduce consumption of resources) during construction process • Organisation trains labour force to encourage resource saving • Organisation trains labour force pertaining to the awareness of environmental protection

Table 2.7: (Continued)

Environment protection	- Construction practices that reduce pollution emissions (e.g. gas, dust, sewage, solid waste and other hazardous substances) - Impact evaluation of the construction project on the environment during project planning, construction and operation stages - Establishment of corporate environmental management system - Improvement of corporate environmental management system - Compliance with environmental laws and regulations in construction industry - Organisation engages in R and D of building designs that improve the energy efficiency - Organisation engages in appropriate R and D that encourages green construction (e.g. green building design, green materials, new construction methods) - Appropriate waste disposal processes - Appropriate waste recycling processes
CSR dimension related to community	
CSR performance areas	**CSR activities**
Project impact on community	- Commitments to protect local environment - Minimise safety hazards to the community - Maintain good communication channels with neighbours
Build harmonious community	- Participate in community activities and provide some financial support where appropriate - Build community welfare facilities - Business promotes work opportunities to the local community - Communicate of corporate values and create long-term relationship with the local community
CSR dimension related to competitors	
CSR performance areas	**CSR activities**
Operation ethically	- Establish self-regulatory mechanisms and abide by the law - Actively coordinate with construction-related associations - Actively comply with the construction-related regulations of associations
Fair competition	- Prohibit bribery and other unacceptable business practices - Boycott illegal behaviour in the construction market, maintain market order
CSR dimension related to NGOs	
CSR performance areas	**CSR activities**
Social and public service strategy	- Provide care and support for disadvantaged groups where appropriate - Business engages in public and cultural activities, support public education - Business provides funds and sponsorships where appropriate for public or social welfare purposes - Business provides assistance wherever appropriate for public health activities - Business provides assistance wherever appropriate for disaster prevention activities - Business encourages its employees to take part in public welfare activities

As an adaption to the indicator system established by Zhao *et al.* (2012: 277), Bac and Huyen (2020:8-10), from a Vietnamese construction industry perspective, also produced an indicator system stipulating CSR activities practiced by construction organisations. Table 2.8 indicates these CSR activities in relation to the CSR dimensions and performance areas associated with construction businesses, inclusive of construction SMEs in Vietnam.

Table 2.8: CSR dimensions, performance areas and activities for construction businesses inclusive of construction SMEs in Vietnam (Adapted from: Bac & Huyen, 2020:8-10)

CSR dimensions related to shareholders

CSR performance areas	CSR activities at corporate level	CSR activities at project level
"Financial performance"	• Maintaining the indicators of revenue • Maintaining the indicators of profit • Maintaining the indicators of stock value • Maintaining the indicators of organisations reputation • Maintaining the indicators of the construction market share • Improving the indicators of revenue • Improving the indicators of profit • Improving the indicators of stock value • Improving the indicators of the organisations reputation • Improving the indicators of the construction market share	• Maintaining the indicators of revenue • Maintaining the indicators of profit • Maintaining the indicators of the construction market share • Improving the indicators of revenue • Improving the indicators of profit • Improving the indicators of the construction market share
"Efficiency on management"	• Management effectiveness is assessed on indicators related to the organisation and decentralisation in construction enterprises • Organising and coordinating between departments, corporate culture, building relationships and images of businesses with customers and partners	• Organising and coordinating between departments, corporate culture, building relationships and image of businesses with customers and partners
CSR dimensions related to employees		
CSR performance areas	CSR activities at corporate level	CSR activities at project level
"Health and labour safety"	• Provide a safe working environment (e.g. construction machinery and equipment, labour protection equipment and technical measures) • Provide a healthy working environment (e.g. construction machinery and equipment, labour protection equipment and technical measures) • Organising medical examinations for officials and employees • Organising medical treatments for officials and employees • Raising awareness and responsibility for construction health • Raising awareness and responsibility for construction safety • Regular maintenance of construction machinery and equipment • Management process of labor safety supervision (injury, accident and occupational disease)	• Provide a safe working environment (e.g. construction machinery and equipment, labour protection equipment and technical measures) • Provide a healthy working environment (e.g. construction machinery and equipment, labour protection equipment and technical measures) • Organising medical examination for officials and employees • Organising medical treatments for officials and employees • Raising awareness and responsibility for construction health • Raising awareness and responsibility for construction safety • Regular maintenance of construction machinery and equipment • Management process of labor safety supervision (injury, accident and occupational disease)

"Wages and benefits"	• Ensuring the minimum wage as prescribed • Clear salary, bonus, allowance and social security policies • Resort according to regulations	• Ensuring the minimum wage as prescribed • Clear salary, bonus, allowance and social security policies • Resort according to regulations
"Training and promotion"	• Training suitable for the job, as well as occupational health and safety (OHS) & wellness (W) training • Employees are aware of the organisations rules • Employees are aware of the organisations culture • Employees are aware of the organisations values • On-site career guidance plan for employee	• Training suitable for the job, as well as OHS & W training • Employees are aware of the organisations rules • Employees are aware of the organisations culture • Employees are aware of the organisations values • On-site career guidance plan for employees
"Fairness of rights and obligations"	• Human rights policies to assess the exercise of human rights • Human rights procedures to deal with the exercise of human rights • Regulations on corporate cultural environment • Purchase policy for employees	• Human rights policies to assess the exercise of human rights • Human rights procedures to deal with the exercise of human rights • Regulations on corporate cultural environment • Purchase policy for employees
CSR dimensions related to products		
CSR performance areas	**CSR activities at corporate level**	**CSR activities at project level**
"Quality and safety of construction product"	• The quality of buildings and their components • The durability of buildings and their components • Meet legal requirements • Meet safety requirements • Eliminate potential safety threats for customers • Eliminate potential safety threats for the community • Establishing a project quality management system	• The quality of buildings and their components • The durability of buildings and their components • Meet legal requirements • Meet safety requirements • Eliminate potential safety threats for customers • Eliminate potential safety threats for the community • Establishing a project quality management system
"Customer satisfaction"	• Complete the project within the budget • Complete the project on time	• Complete the project within the budget • Complete the project on time
"Customer service culture"	• Process of resolving customer complaints • Maintenance procedure • The attached after-sales services	• Process of resolving customer complaints; • Maintenance procedure • The attached after-sales services
"Innovation and development"	• Investment in developing creative construction materials • New construction method • New construction technology	
CSR dimension related to the environment and resources		
CSR performance areas	**CSR activities at corporate level**	**CSR activities at project level**

Table 2.8: (Continued)

"Conserve energy and resources"	• Saving water in the process of building the structure • Saving water in the process of operating the structure • Land use efficiency • Minimise construction waste for landfill and energy consumption • Minimise construction demolition for landfill and energy consumption • Development of renewable energy and alternative energy initiatives • Saving resources and awareness about environmental protection	• Saving water in the process of building the structure • Saving water in the process of operating the structure • Land use efficiency • Minimise construction waste for landfill and energy • Minimise construction demolition for landfill and energy consumption • Development of renewable energy and alternative energy initiatives • Saving resources and awareness about environmental protection
"Environmental Protection"	• Appropriate disposal of waste • Development of recycling and reduction of pollutant emissions (for example, gases, dust, wastewater, solid waste and other hazardous substances) • Development of environmentally friendly products (for example, green building design, green materials, new construction methods)	• Appropriate disposal of waste • Development of recycling and reduction of pollutant emissions (for example, gases, dust, wastewater, solid waste and other hazardous substances)

CSR dimensions related to society		
CSR performance areas	**CSR activities at corporate level**	**CSR activities at**
"The impact of the project on the community"	• Provide employment opportunities for local communities • Commitment to protect the local environment • Minimise safety hazards to the community	• Provide employment opportunities for local communities • Commitment to protect the local environment • Minimise safety hazards to the community
"Join the community activities"	• Participate in community support activities for security • Participate in community support activities for finance • Construction of community welfare facilities • Training human resources for localities	• Participate in community support • activities for security • Participate in community support activities for finance • Construction of community welfare facilities • Training human resources for localities
"Contribution of businesses to the community"	• Tax rates paid to the State • Compliance with laws and government policies	• Tax rates paid to the State • Compliance with laws and government policies

CSR dimensions related to suppliers and contractors		
CSR performance areas	**CSR activities at corporate level**	**CSR activities at project level**
"Legal records"	• Accurate information on credit records • Accurate information on corporate finance • Accurate information on product quality • Accuracy of the credit contract compliance contract	• None
"Progress of loan repayments and payment"	• Pay on schedule • Strictly comply with commitments with suppliers (partners)	• Pay on schedule • Strictly comply with commitments with suppliers (partners)
"Maintain relationships with partners"	• Level of increase in the number or value of contracts	• None

	• Attachment and association shown by the number of new customers introduced	

2.8 Chapter summary

The purpose of this review was to focus on the research objectives of this study. It is evident by the review of literature that although research in the area of CSR and its application by construction organisations globally, more specifically SMEs in the global construction industry, remains limited, meaningful research has been conducted within this area of study. Notwithstanding, for this research to expand the body of knowledge pertaining to CSR in the South African construction industry, a more contemporary approach to the literature review was conducted incorporating a mixture of CSR literature from both the global construction and business sectors. By following this trajectory, the literature review exposed a variety of variables linked to each of the objectives, as summarised below.

The first objective ascertains the perception of SMEs in the South African construction industry regarding the relationship between the integration of CSR and sustainable business performance. It is apparent from the literature that from a global construction perspective, CSR as a concept is still an ambiguous term, which according to Roberts *et al.* (2007) is due to the lack of a common definition of CSR, particularly in the global construction industry, which reduces the understanding of true CSR activities among construction organisations. Despite this ambiguity, Xia *et al.* (2018: 344) opine that the most notable perception pertaining to the integration of CSR in the global construction industry is that it assists in the achievement of sustainability in a holistic view. In addition, literature by Bevan and Yung (2015); Duman *et al.* (2016); Santos (2011); Gamah (2014); Parameshwara and Raghurama (2013); Manuere (2016); and Othman and Abdellatif (2011) suggest that a positive relationship exists between the integration of CSR and sustainable business performance, among construction organisations in developed as well as developing countries. However, a substantial gap in literature exists in terms of the way in which SMEs, particularly in the South African construction industry, perceive the relationship between the integration of CSR and sustainable business performance. In addition to the identification of this specific gap, it is believed that there is a positive relationship between the integration of CSR and sustainable business performance. However, based on business backgrounds and experiences, SEs and MEs have different perceptions of the relationship between the integration of CSR and sustainable business performance.

With regard to the second objective of this study, which identifies CSR drivers influencing the CSR practices of SMEs in the South African construction industry, it is clear that very few construction related findings relevant to CSR drivers exists in literature, in contrast to general business literature which seems to have highlighted a reasonable number of CSR drivers that

influence the CSR practices of generic businesses globally. This is reflective in that according to Zhang *et al.* (2019:572) only three CSR drivers – namely policy pressure, market pressure, and innovation and technology development – emerge from recent construction related literature, compared to the 10 CSR drivers – international standardisation; investment incentives; stakeholder activism; supply chain reliability; political reforms; cultural tradition; socio-economic priorities; maintaining market access; governance gaps; and crises response – emerging from generic business literature (Visser, 2008a:1). This comparison clearly illustrates that the practice and research specific to CSR drivers in the generic business sector is far more advanced than the practice and research of CSR drivers in the global construction sector, presenting a relevant construction research gap that must be addressed. This includes the South African construction industry as no significant evidence of CSR drivers influencing CSR practices of SMEs exists. Attempting to bridge this gap, thought should be given to the fact that the CSR drivers among SEs and MEs in the South African construction industry are conspicuously different, taking into consideration their business backgrounds and experiences, thus adding value in developing a CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance.

The third objective of this study identifies and evaluates the challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR. It is once again clear that fewer construction related findings relevant to the implementation of CSR exist in literature in comparison to generic business literature which have highlighted a broader spectrum of challenges in relation to the implementation of CSR in businesses globally. This, to a certain extent, touches on SMEs in the construction sector. Based on the views of Chi Vo (2011:92) and Jenkins (2004:41) regarding the organisational characteristics of SMEs in general as informal, intuitive, ambiguous, but more specifically owner-managed, the literature pertaining to CSR challenges of SMEs, which include construction SMEs, was led through the adoption of the St. Gallen Management Model established by Ulrich and Krieg (1972) and later developed by Bleicher (1991) and Ruegg-Sturm (2002). This subsequently highlighted CSR implementation challenges affecting generic businesses including the likes of SMEs at four different management levels – the normative management level; the strategic management level; the operative management level; and the environmental management level – all of which provided valuable literature for bridging the gap which currently exists in effectively establishing the implementation challenges regarding CSR by SMEs in the South African construction industry. Although only limited information exists, key challenges that were exposed in the literature pertaining to the four management levels are identified as follows:

- *Owner-managers of SMEs in the South African construction environment seem to have very little to no commitment to CSR as they tend to view CSR as an unnecessary burden to their*

already struggling businesses (Ladzani & Seeletse, 2010:37) indicating that CSR and its integration into the SME culture, objectives, norms and values particularly in the South African construction environment remains a challenge;

- *SMEs in South Africa more specifically SMEs in the South African construction environment claim to lack the necessary investment as well as justification of investment required to undertake CSR initiatives. Raynard and Forstater (2002:50) support these views and mention that SMEs in specifically developing economies consider an investment in CSR practices as an expense to their businesses, blinding them from the economic perspectives, especially in the short term;*

- *One of the CSR challenges identified at the operative management level in relation to CSR practices in SMEs which include among other construction SMEs across the globe, is the belief that SMEs should apply the same CSR theory and strategies to their organisations as that of their larger counterparts (Chi Vo, 2011:89);*

- *Some of the challenges hindering SME owner-managers across all sectors globally from practicing CSR in accordance to Manuere and Majoni (2016:68) are linked to unstable economic conditions, negative government regulations or policies, poor collaboration among SMEs, poor customer care and a lack of CSR culture in SMEs. Moloi (2013:33-50) mentions that poor supplier care and the location of the organisation with respect to the business environment dimension of the St. Gallen Management Model similarly hinders the successful implementation of CSR practices by SME owner-managers in general, but more specifically SME owner-managers in the South African construction industry.*

Attempting to bridge this particular gap, it is important to note that implementation challenges relating to the practice of CSR by SEs and MEs in the South African construction industry are substantially different.

With regards to the fourth objective of this study, which establishes CSR activities that must be considered by SMEs in the South African construction industry to achieve sustainable business performance, it is evident that many generic business findings around CSR activities surface within the literature review. Surprisingly similar findings are also available in relation to specifically construction related literature. However, an important finding that should be noted within the literature in line with this objective is that of Zhao *et al.* (2012) who clearly stipulate that the understanding of what CSR means to the construction industry, and how it is practiced, is still quite limited as very little research progressed toward the development of a framework for CSR activities relevant to construction enterprises worldwide as a tool for CSR performance and ultimately sustainable business performance for construction enterprises of any size. This

view is supported by Xie *et al.* (2020:2) who confirm that current research on CSR of construction enterprises is still in its infancy.

These findings affect SMEs in the South African construction industry directly in relation to their CSR practices for the achievement of sustainable business performance. It is in this regard that the literature review identifies two CSR indicator systems specific to CSR activities developed by Zhao *et al.* (2012) and Bac and Huyen (2020) which serve as benchmark indicator systems to the CSR practices of SMEs in the South African construction industry. This research intends to adapt the systems developed by Zhao *et al.* (2012) and Bac and Huyen (2020) for the context specific to SMEs within the South African construction industry. A substantive gap remains in terms of the CSR activities that must be considered by SMEs in the South African construction industry to achieve sustainable business performance, and moreover, with the absence of a CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance persists.

The fifth objective of this study is addressed in the following chapter which provides an overview of the various theories that will enable the development of a conceptual framework upon which a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance could be achieved.

CHAPTER 3

THEORETICAL AND CONCEPTUAL FRAMEWORK

3.1 Introduction

In Chapter 2 a review of the literature was conducted primarily focusing on the first four objectives of this study. This chapter is will bring exposure to the fifth objective by providing a perspective of the theories that will enable the development of a conceptual framework upon which a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance could be achieved.

3.2 Perspective of CSR theories

Although CSR is a widely embraced social phenomenon, there are limitations pertaining to theoretical and empirical evidence across most business studies, including business studies related to the construction industry worldwide (Turyakira, Venter & Smith 2012:117; Xia *et al.*, 2018:344). All theories in CSR serve as a point of reference for every set of CSR practice, and since there is no single accepted theory and perspective of CSR, there should be extensive variation in what constitutes the theoretical and practical aspects of CSR (Choi, 1999:97). According to Hamidu *et al.* (2015:88), the theories underpinning CSR studies express how CSR is observed or interpreted by different business stakeholders from different perspectives.

For the purpose of this study, the following theories – instrumental theory, legitimacy theory, stakeholder theory and perception theory – will be examined, of which one or a combination of these theories will support the conceptual framework and therefore the achievement of the research aim.

3.2.1 Instrumental theory and its link to CSR

According to Garriga and Mele (2004:53) with regards to instrumental theory, CSR is only a strategic tool to achieve economic objectives that include competitive advantage over competitors and ultimately wealth creation for a business. Hamidu *et al.* (2015:90) concur with Garriga and Mele (2004:53), stating that instrumental theory views CSR from the perspective of a strategist aiming to practice CSR as an indispensable opportunity to exploit and receive economic benefits for the business. Hamidu *et al.* (2015:90) further explain that instrumental theory accentuates the association of CSR practices of a business with the maximisation of profits to benefit various business stakeholders. Representative of instrumental theory is the familiar view of Friedman (1970:6):

The only one responsibility of business towards society is the maximisation of profits to the shareholders within the legal framework and the ethical custom of the country.

Hence, when a business commits to CSR to support its core business activities, accompanied by substantial profit maximisation, the commitment assumes a strategic position in the decision-making process of the business if underpinned by instrumental theory (Hamidu *et al.*, 2015:90). Many studies in the general business environment which include Ruf, Muralidhar, Brown, Janney and Paul (2001:147); Goll and Rasheed (2004:42); Luo and Bhattacharya (2006:11); Turyakira *et al.* (2012:106); and Ramasobana and Fatoki (2014:288) uphold instrumental theory and its link to CSR practice; the studies agree that there is a positive relationship between a business practicing CSR and its overall financial performance. Similarly, studies by Othman and Abdellatif (2011:280) and Wu *et al.* (2015:186), in the construction business environment, share the same sentiments. This therefore serves as a justification that instrumental theory does encourage the commitment in CSR practices by businesses if it allows for profitability, competitive advantage, good business image or reputation enhancement.

3.2.2 Legitimacy theory and its link to CSR

Legitimacy theory, like any other theory, is perceived by various authors from different perspectives. According to Suchman (1995:574),

Legitimacy is a generalised perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs and definitions.

Likewise, Lindblom (1994:1) insists that legitimacy is a condition or status that exists when a business's value system correlates with the value system of a major portion of a society. Based on morality, Maurer (1971) views legitimacy as a process of justification by which a business strives to justify itself to its peers or to its superordinate systems of its right to exist. In addition, Dowling and Pfeffer (1975:123) support the view of Maurer (1971), adding that a business is legitimate when judged to be just and worthy of support by society. In contrast, when an actual or potential disparity exists between the business and societal value systems, there is a threat to the entity's legitimacy (Hamidu *et al.*, 2015:88). Thus, with regards to legitimacy theory via CSR practices, a business throughout its survival, needs to fulfil what the society expects from it, and by adhering to the society's expectations, the business is considered deserving of being in the same environment with the society it serves. Again, the business is regarded as part of society with a legitimate right of survival. In other words, the legitimacy theory argues that a

business can only continue to exist if the society in which it is based perceives the business to be operating with a value system (demonstrating CSR initiatives) that is commensurate with the society's own value system (Gray, Owen & Adams, 2010:28).

According to Hamidu *et al.* (2015:88), it is critical to note that legitimacy theory deals with two major concepts: the first is the way in which the general public perceives the business, and the second is the efficiency of the communication channels between the business and its society. Between the two concepts, the efficiency of the business communication channel to the surrounding society is most essential with regards to legitimacy theory and therefore as a link to practicing CSR through legitimacy theory; communicating the business CSR practices is advantageous, allowing for the initiation and protection of the business legitimacy. Hence, Pattern (1992), Deegan and Rankin (1997), and Brown and Deegan (1998) all observe a positive relationship between the disclosure of CSR practices and a business's legitimacy to survive in society.

3.2.3 Stakeholder theory and its link to CSR

Stakeholder theory is primarily concerned with the relationship between a business and its stakeholders. Fernando and Lawrence (2014:157) mention that although Ansoff (1965) was the first proponent of the term *stakeholder theory,* the fulcrum of stakeholder theory was utilised prior by Johnson (1947). Stakeholder theory was only really used from the mid- 1980s. Literature makes evident that the theoretical and empirical works of Freeman (1984; 1994; 2005) and several other scholars – for example Clarkson (1995); Donaldson and Preston (1995); Harrison and Freeman (1999); Branco and Rodrigues (2008); Carrol and Buchholtz (2009) – address most of the fundamental ideas related to stakeholder theory.

With regards to understanding stakeholder theory in its totality, defining who and what a stakeholder represents is of paramount importance. Freeman (1984:53) suggests that a *stakeholder* is defined as:

Any group or individual who can affect or is affected by the achievement of the firm's objectives.

Clarkson (1995:106) defines *stakeholder* as any person or group of people who have an ownership right or any form of interest or claim to a business. Starik (1995:209) includes human and non-human entities to the definition of a stakeholder, and by doing so regards the natural environment as the non-human stakeholder due to the implications and relevance it has on CSR policies. Clarkson (1995:106-107) further classifies stakeholders into two groups, namely primary and secondary groups. According to Hamidu *et al.* (2015:89), the primary group of stakeholders are those who have a direct impact on the survival of the business, as their

continuous participation allows the business to survive. For example, the business is only able to survive if its managers utilise their skills by establishing valuable products to satisfy its shareholders, customers, suppliers, partners, investors, employees and government. According to Hamidu *et al.* (2015:89), secondary stakeholders to a business do not directly impact the achievement of the business objectives as their roles and responsibilities are less important so business survival does not depend on whether or not they participate in the business.

From a construction business perspective, Zhao *et al.* (2012:281) establish two categories of stakeholders specifically mapped for construction enterprises: project level stakeholders and business level stakeholders. Table 3.1 illustrates how Zhao *et al.* (2012: 281) categorise the stakeholders relevant to construction businesses worldwide.

Table 3.1: Stakeholders and categories relevant to construction businesses worldwide

Project level category	Business level category
Employees	Employees
	Shareholders
Customers	
Suppliers and Partners	
	Government
Environment and Resources	
Community	Community
Competitors	Competitors
	NGOs

According to Mitchell, Agle and Wood (1997:855), stakeholder theory extends the business objectives from profit maximisation to the satisfaction of stakeholder needs and despite the criticism that stakeholder theory receives – for example serving as an excuse of managerial opportunism and destruction of business accountability in an attempt to satisfy all stakeholders is impossible, according to Jensen (2000:17) – the theory is supported by empirical studies that indicate that many businesses partake in CSR to serve stakeholder demands (Maignan & Ferrel, 2000:283). Stakeholder theory as a link to CSR definitely specifies how a business – more specifically in the case of this study a construction business, bearing in mind the stakeholder categories as stipulated by Zhao *et al.* (2012:284) – should implement CSR without viewing CSR as an isolated concept (Clarkson,1995). Linking stakeholder theory to the implementation of CSR practices, as documented by Zhang *et al.* (2019:577), will lead to construction businesses, large or small, achieving business goals and subsequently sustainable business performance. Ruf *et al.* (2001:143) and Waddock and Graves (1997:307)

concur that business performance is measured by the way it satisfies its stakeholders as there is a positive relationship between stakeholder satisfaction and sustainable business performance.

3.2.4 Perception theory and its link to CSR

Gibson's theory of direct perception alleges that human beings' cognitive thinking evolved by the evolutionary influence of the external environment, causing the receptors of human beings to be sensitive to relevant stimuli in the environment, allowing for cognitive adaptation (Demuth, 2013:24). Demuth (2013:24) states that this type of interpretation of perception is called *ecological perception* as the external environment plays a pivotal role in influencing the process of perception in human beings. According to Robins (2005), various factors within the external environment such as time of event, work setting, social setting and background influence the perception of human beings. In addition, The Peak Performance Centre (2021:1) insists that past and present experiences (challenges, failure, success), assumptions and expectations, education, self-concept, culture, faith, values, preconceived notions and present circumstances all influence the perception of humans and thereby impact the decision-making process.

This information can also be correlated to the way in which business owners (human beings), particularly construction business owners such as SMEs, perceive their business environment and the way business decisions, particularly around CSR initiatives and activities, are made, considering CSR drivers and implementation challenges influence perceptions and choices of CSR practice (Zhang *et al.,* 2019). Gibson's other theory relating to perception in action posits that perception is viewed as a requisite property of animate action, arguing that without perception being realised, action would be unguided, and without action, perception would serve no purpose (Hurley, 2002). From a business perspective, UK Essays (2018:1) supports this view, stating that decision making is an important and necessary skill that a business owner needs to acquire in order for a business to achieve its goals and objectives. Furthermore, UK Essays (2018:1) mentions that organisational excellence, which encompasses sustainable business performance, leans heavily on proper decision making by the business owner and management team, guided by their perceptions. Consequences from these decisions can therefore make or break a business, so UK Essays (2018:1) feel strongly that business owner perceptions and decision-making processes work hand in hand, stating the following:

> *Perception plays a vital role in the decision-making process. Therefore, decision makers often use perception to create, evaluate, and choose decision options.*

For ease of reference to the reviewed theories linked to CSR, Table 3.2 provides a summary, indicating the supporting literature and variables of the theories, including the theory findings.

Table 3.2: Summary of theories linked to CSR (Adapted from: Hamidu *et al.*, 2015:91-92)

Theory	Literature and Variables	Summary of Findings
Instrumental theory	Garriga and Mele (2004); Hamidu *et al.* (2015); Ruf *et al.* (2001); Goll and Rasheed (2004); Luo and Bhattcharya (2006); Turyakira *et al.* (2012); Ramasobana and Fatoki (2014). Strategic tool; Wealth creation; Maximisation of profits; Business image; Positive relationship between a business practicing CSR and its overall financial performance	• CSR is seen only as a strategic tool to achieve economic objectives and ultimately wealth creation for a business. • CSR is seen as a tool for strategizing the restoration of goodwill, achieving a competitive advantage over competitors as well as enhancing the business image.
Legitimacy theory	Lindblom (1994); Gray *et al.* (2010); Hamidu *et al.* (2015); Pattern (1992); Deegan and Rankin (1997); Brown and Deegan (1998). Correlation between the value system of the business and the society; Relationship between CSR practices and societies perception; Efficiency of the business communication channels in achieving legitimacy; Relationship between the disclosure of CSR practices and the business's legitimacy.	• Businesses engage in CSR to gain legitimacy or moral standing from the society in which they operate, who expect specific CSR initiatives to be fulfilled. • It is the society in which the business operates that determines the CSR initiatives that they the society receive from the business. The higher the rate of conformity between the societies expectations and what they receive in CSR initiatives the higher the legitimacy bestowed to the business. • There is a positive relationship between CSR disclosure and the business's legitimacy. • Engaging in CSR increases the business's legitimacy.
Stakeholder theory	Clarkson (1995); Mitchell *et al.* (1997); Ruf *et al.* (2001); Waddock and Graves (1997). Stakeholder ownership rights, interests and claims; Extending the business objectives from profit maximisation to the satisfaction of the stakeholders needs; Measuring sustainable business performance by stakeholder satisfaction.	• A business is a social institution responsible to both primary and secondary stakeholders. However, from a construction industry perspective a construction business is a social institution responsible to both project level stakeholders as well as business level stakeholders. • Sustainable business performance is measured by the way the business satisfies its stakeholders. • Stakeholder theory broadens the objectives of a business from profit maximisation to the satisfaction of the stakeholders needs.
Perception theory	Demuth (2013); Robins (2005), and Hurley (2002). External environment influences the perception of human beings (business owners); Without perception action is unguided; Without action perception serves no purpose.	• Correctly perceiving the influences in the business environment allows for business owners to make proper CSR decisions in terms of CSR initiatives and activities.

3.3 Selection of the theory underpinning the conceptual framework and research aim

It is evident that all four theories are linked to the practice of CSR. The research aim of this study is as follows:

> *To develop a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance.*

It is therefore important that the term *sustainable business performance* as in the research aim be acknowledged as a key driver in the selection of any one, or combination of, the aforementioned theories to support the conceptual framework and the achievement of the research aim; The term *sustainable business performance* is defined in this study as follows:

> *A phenomenon maintaining a set of attributes at a productive level or rate, focusing on the construction SMEs' stakeholder satisfaction provided in a culture that motivates the construction SME owner-manager to coordinate construction resources and activities.*

From this definition and for the purpose of this study, SMEs in the South African construction industry should acknowledge and maintain their stakeholder satisfaction levels, which include not only the satisfaction of the society in which they operate, but also the satisfaction of their employees, shareholders, customers, suppliers and partners, government, the environment and resources, competitors and NGOs to achieve sustainable business performance. This is supported by Zhang *et al.* (2019:577) who suggest three distinct constructs influencing CSR practices (underpinned by stakeholder theory) of construction businesses globally: CSR drivers; motivation to practice CSR; and CSR barriers. These constructs and possible relationships amongst them are open to further debate and investigation. Thus, this is the point of departure for this study considering stakeholder theory and perception theory as the most relevant theories to support the conceptual framework and anticipated CSR model.

3.4 Conceptual framework

A conceptual framework, according to Bella-Omunagbe (2015:89), helps explain what is to be studied in a logical and sequential arrangement as well as the relationship of the subjects graphically or in a narrative form. In addition, Olivia (2011: online) explains that the conceptual framework, also called the research paradigm, provides direction missing in the theoretical framework, displays the variables to be tested, delineates the input, and organises the research output. The conceptual framework of this study is outlined in Figure 3.1.

3.4.1 Knowledge gap

The conceptual framework illustrates the knowledge gaps requiring closure after the computation of the study variables. In this study, the knowledge gaps illustrated in Figure 3.1 and justified in Section 2.8 of the literature review, include a lack of evidence related to the following: the perception of SMEs in the South African construction industry relative to the relationship between the integration of CSR and sustainable business performance; the CSR

drivers that influence CSR practices of SMEs in the South African construction industry; CSR implementation challenges that SMEs in the South African construction industry experience; CSR activities that must be considered by SMEs in the South African construction industry to achieve sustainable business performance; a CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance that serves as a combination of the first four knowledge gaps identified. By closing the identified knowledge gaps, a significant theoretical and practical contribution to the body of knowledge relative to CSR and sustainable business performance, particularly of SMEs in the South African construction industry, will be achieved.

3.4.2 Variables

As presented in Figure 3.1, the conceptual framework of this study illustrates the research variables – latent variables and measured variables – that will be examined. To understand the difference between latent and measured variables, Kenton (2021:1) clarifies that a measured variable is a variable that can be directly measured or observed, whereas a latent variable cannot be directly measured, and requires a measured variable assigned to it as an indicator to test whether it exists or not.

3.4.2.1 Latent and measured variables

The conceptual framework has four latent variables, namely: SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance; CSR drivers influencing CSR practices of SMEs; CSR implementation challenges experienced by SMEs; and CSR activities to be considered by SMEs to achieve sustainable business performance. According to Kenton (2021:1), these latent variables cannot be directly measured and are assigned measured variables that have been established through the extensive review of literature. From the conceptual framework, it can be seen that the measured variables associated with the latent variables are:

- *Measured Variables 1:* Internal and external organisational perceptions;
- *Measured Variables 2:* International CSR drivers and national CSR drivers;
- *Measured Variables 3:* Normative management level challenges, strategic management level challenges, operational management level challenges, and environmental management level challenges; and
- *Measured Variables 4:* Employee dimension activities, shareholder dimension activities, customer dimension activities, supplier and partner dimension activities, government dimension activities, environment and resources dimension activities, community dimension activities, competitors dimension activities and NGOs dimension activities.

(A) Research Topic

A Corporate Social Responsibility (CSR) Indicator Model Guiding SMEs in the South African Construction Industry Towards Sustainable Business Performance

(B) Knowledge Gap

Knowledge Gap 1: To identify and ascertain how SMEs in the South African construction industry perceive the relationship between the integration of CSR and sustainable business performance. (Obj-1)

Knowledge Gap 2: To identify the CSR drivers influencing the CSR practices of SMEs in the South African construction industry. (Obj-2)

Knowledge Gap 3: To identify and evaluate the challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR. (Obj-3)

Knowledge Gap 4: To establish the CSR activities that need to be considered by SMEs in the South African construction industry to achieve sustainable business performance. (Obj-4)

(C) Research Variables

Latent Variable 1: SMEs perceptions pertaining to relationship between the integration of CSR and sustainable business performance

Latent Variable 2: CSR Drivers influencing the CSR practices of SMEs

Latent Variable 3: CSR implementation challenges experienced by SMEs

Latent Variable 4: CSR activities considered by SMEs to achieve sustainable business performance

Measured Variable 1:
- Internal organisational perceptions, and
- External organisational perceptions

Measured Variable 2:
- International CSR drivers, and
- National CSR drivers

Measured Variable 3:
- Normative management level challenges;
- Strategic management level challenges;
- Operational management level challenges, and
- Environmental management level challenges

Measured Variable 4:
- Employee dimension activities;
- Shareholder dimension activities;
- Customer dimension activities;
- Supplier and partner dimension activities;
- Government dimension activities;
- Environment and resources dimension activities;
- Community dimension activities;
- Competitors dimension activities, and NGOs dimension activities

(D) Contribution to Knowledge

Develop and validate a CSR indicator model to guide SMEs in the South African construction industry towards achieving sustainable business performance. (Ob-5)

Key:
A – Research topic;
B – Knowledge gaps exposed by the research objectives;
C – Research variables
D – Contribution to knowledge

Figure 3.1: Conceptual framework

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3.4.3 Anticipated model

Considering the knowledge gaps and variables highlighted in the preceding section and deduced from the literature review, and the theories adopted to underpin this study, this present research aims to develop a CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance. This will begin with the identification of measured variables associated with each latent variable, through data collection and analysis of the study, and thereafter testing the hypothetical relationships between the latent variables. The anticipated CSR model (illustrated in Figure 3.2) predicts the following hypothetical relationships presented in Table 3.3, supported by theory and literature, that exist between the latent variables presented below:

Table 3.3: Predicted hypothetical relationships between latent variables

Hypothetical Relationships	Supporting Theory	Supporting Literature
Hypothesis $_1$: There is a significant relationship between CSR implementation challenges experienced by SMEs and SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance	Perception theory	Robins (2005) and The Peak Performance Centre (2021)
Hypothesis $_2$: A significant association exists between CSR drivers influencing the CSR practices of SMEs and SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance	Perception theory	Robins (2005) and the Peak Performance Centre (2021)
Hypothesis $_3$: There is a significant relationship between CSR implementation challenges experienced by SMEs and the CSR activities considered by SMEs to achieve sustainable business performance	Perception theory and Stakeholder theory	Zhang *et al.* (2019); Carlisle and Faulkner (2004) cited by Sweeney (2007); Ladzani and Seeletse (2010); Hamidu, Haron and Amran (2015); Elford and Duab (2019); Abdullah, Mohandes, Hamid and Singh (2016); Manuere and Majoni (2016); Lepoutre and Heene (2006); Chiloane-Tsoka and Rsivetshele (2014); Stubblefield Loucks, Martens and Cho (2010); Chi Vo (2011); Moloi (2013); Loosemore and Lim (2017a); Loosemore and Lim (2017b), and Loosemore (2016)
Hypothesis $_4$: A significant affiliation exists between SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance and the CSR activities considered by SMEs to achieve sustainable business performance	Perception theory and Stakeholder theory	Hou (2018); Ramasobana and Fatoki (2014); Xia *et al.* (2018); Wu *et al.* (2015); Bevan and Yung (2015); Duman *et al.* (2016); Gamah (2014); Parameshwara and Raghurama (2013); Manuere (2016); Othman and Abdellatif (2011)
Hypothesis $_5$: There is a significant relationship between CSR drivers influencing the CSR practices of SMEs and the CSR activities considered by SMEs to achieve sustainable business performance	Perception theory and Stakeholder theory	Zhang *et al.* (2019); Ndowora (2015); The Global Reporting Initiative (2016); Visser (2008a); Mueller-Hirth (2016); Visser (2008b); Harvey, Hodder and Brammer (2017); iso.org (2017: 2); Wahyuni and Sentanu (2017); Hamidu, Haron and Amran (2016); Choudhary and Singh (2012); Prowly Magazine (2020); Duman *et al.* (2016)

Table 3.3: (Continued)

Hypothesis 6: Merging the CSR implementation challenges experienced by SMEs, SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance, as well as CSR drivers influencing the CSR practices of SMEs, impacts the CSR activities considered by SMEs to achieve sustainable business performance.	Perception theory and Stakeholder theory	Zhang *et al.* (2019) including a combination of all the other literature reviewed in this study.
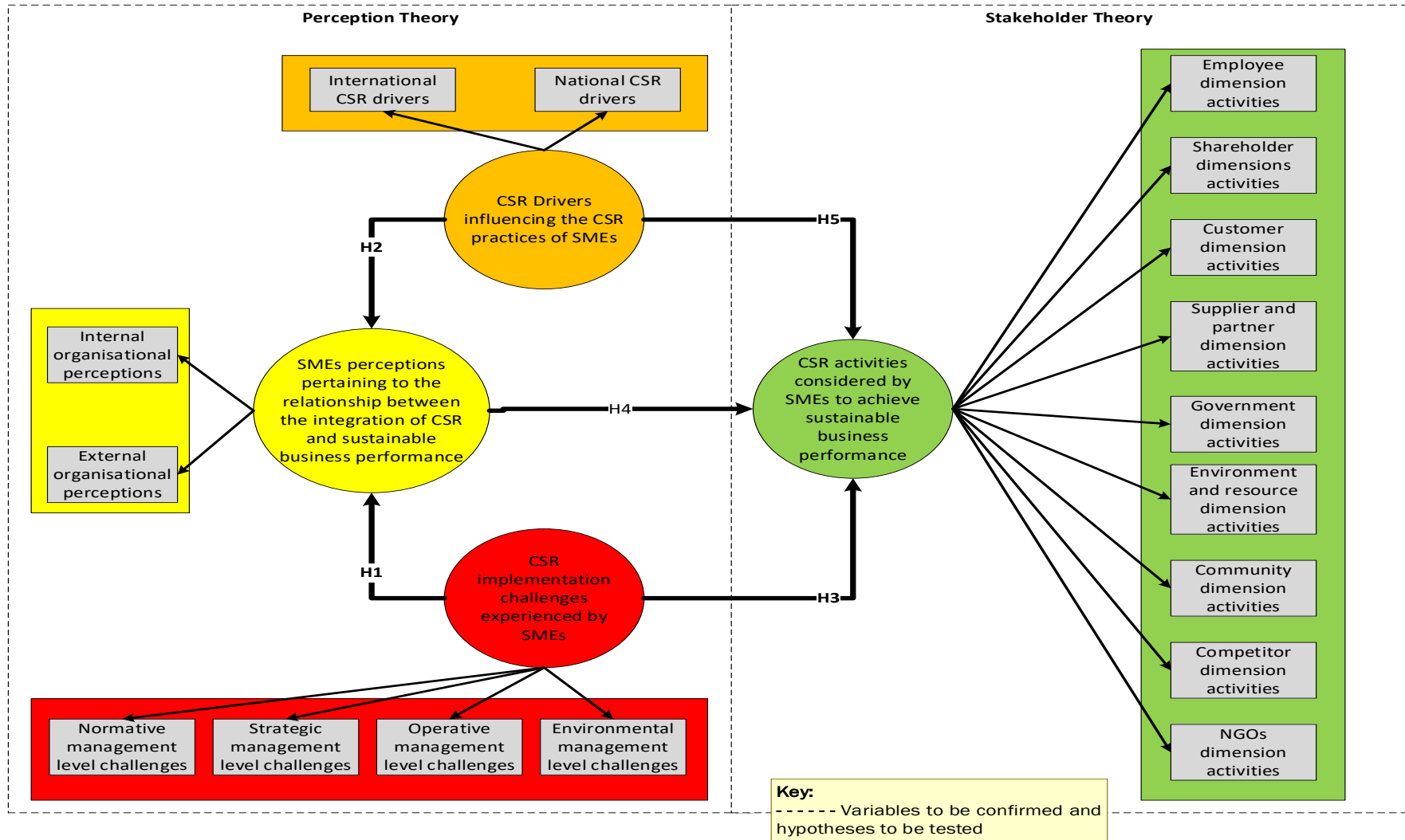
Figure 3.2: Anticipated CSR model

3.5 Chapter summary

The conceptual framework and anticipated CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance has been outlined in this chapter. To underpin the conceptual framework and the anticipated CSR model as illustrated, specific theories linked to CSR such as instrumental theory, legitimacy theory, stakeholder theory, and perception theory were examined, considering the constructs the theories support. The examination of the theories in line with the research aim reveals that the conceptual framework and anticipated CSR model should be underpinned by stakeholder and perception theory. In addition, and as part of the conceptual framework, the knowledge gaps and variables were identified, all of which led to the development and presentation of the anticipated CSR model that will serve as a guide to achieve the aim of this study.

CHAPTER 4
RESEARCH METHODOLOGY

4.1 Introduction

In Chapter 2, an overview of existing topical literature was presented. Then Chapter 3 revealed the theoretical and conceptual framework of the study. This chapter presents the literature pertaining to research methodology in this sequence: research assumptions, research philosophies, research reasoning and methodological approaches. A decision on the specific research assumption, philosophy, reasoning and approach will be taken and justified to ensure that the research objectives can be achieved and that the research findings can be validated, as per Akadiri (2011:169).

4.2 Research assumptions

4.2.1 Epistemology

Epistemology is a branch of research philosophy which "concerns assumptions about knowledge, what constitutes acceptable, valid and legitimate knowledge, and how individuals can communicate knowledge to others" (Saunders, Lewis & Thornhill, 2016:127). Norris (2005:71) explains that epistemology is a philosophy that helps the researcher to adequately define what acceptable knowledge is in a field of research and what information is known to be true. Similarly, Reber (1995, cited by Schuh & Barab, 2007:70) clarifies that epistemology is concerned with the "origins, nature, methods, and limits of human knowledge", all of which concentrate on questions of knowledge and the nature thereof. Therefore, it can be said that individuals who are attracted to learning or instructing have an epistemological purpose (Schuh & Barab, 2007:70). In essence, epistemology is concerned with how we come to know about what exists (Schuh & Barab, 2007:70).

4.2.2 Ontology

Ontology, according to Mouton (2006:8) and Saunders *et al.* (2016:127), generally "refers to assumptions about the nature of reality". Ontology defines what is tangible in this world, for instance, physical or abstract structures (Schuh & Barab, 2007:70). For clarity, "those interested in learning and instruction indicate their ontological preference by specifying what are considered truths about knowledge, information, and the world" (Schuh & Barab, 2007:70). Ontology is therefore concerned with what exists in the world (Creswell, 2009:6).

4.2.3 Axiology

According to Saunders *et al.* (2016:128), *axiology* is the branch of research philosophy that deals with the role of values and ethics within the research process. Saunders *et al.* (2016:128) insist that axiology integrates questions about how the researcher deals with personal values and the values of research participants. For example, "conducting a study where you place great importance on data collected through interview work suggests that you value personal interaction with your respondents more highly than their views expressed through an anonymous questionnaire" (Saunders *et al.*, 2016:128). Axiology is the branch of philosophy that deals with value (Saunders *et al.*, 2016:128).

4.3 Research philosophies

4.3.1 Positivism

Positivism, according to Saunders *et al.* (2016:135), "relates to the philosophical stance of the natural scientist and entails working with an observable social reality to produce law-like generalisations". Researchers who conduct their research from a positivism stance generally implement a scientific method to recommend and test various theories with highly structured measurable data that is not influenced by researcher values (Saunders & Tosey, 2013:58).

4.3.2 Postpositivism

According to Bergman (2016), *postpositivism* is a metatheoretical position that critiques and adjusts positivism. Robson (2002) also states that postpositivism deliberates that theories, hypotheses, background knowledge and researcher values can influence what is observed. Furthermore, a postpositivist researcher pursues objectivity by highlighting the possible effects of biases (Robson, 2002; Miller, 2007; Taylor & Lindlof, 2011). In terms of the methodological approach, a postpositivist researcher predominantly considers both quantitative and qualitative methods.

4.3.3 Feminism

Lexico (2020:1) defines *feminism* as "the advocacy of women's rights on the ground of the equality of the sexes". Moon and Blackman (2014:1169) view feminism as an approach to philosophy from a feminist perspective implying that the researcher who conducts research using this approach views the world as patriarchal and the culture it inherits as masculine. According to Gatens (1991), the feminist philosophy involves both reinterpreting philosophical texts and methods to supplement the feminist movement and attempts to criticise or re-evaluate the ideas of traditional philosophy from within a feminist framework. Creswell and

Plano Clark (2011:72) believe that researchers who take a feminist stance would predominantly rely on the transformative mixed method design.

4.3.4 Critical realism

According to Saunders *et al.* (2016:138), the philosophy of *critical realism* explains what researchers or individuals see and experience in terms of the fundamental structures within reality, which forms observable events. Saunders *et al.* (2016:139) suggest that reality is the most significant philosophical choice for a critical realist, as reality is regarded as external and independent, but is not directly accessible through the critical realist's observation and knowledge of reality. So what critical realists experience is, "the empirical, in other words sensations, which are some of the manifestations of the things in the real world, rather than the actual things". Saunders and Tosey (2013:58) are therefore of the opinion that data collection techniques and analysis with regard to this research philosophy could be varied, as the researcher could utilise either or both quantitative and qualitative data.

4.3.5 Constructivism

Based on the views of Elliott, Kratochwill, Littlefield, Cook and Travers (2000:256), *constructivism* refers to an approach to learning which maintains that individuals actively construct or establish their own knowledge and that reality is determined by the learner's or individual's experiences. The view of Elliott *et al.* (2000:256) is supported by Arends (1998) who notes that constructivism believes in personal construction of meaning by a learner or individual through various experiences. Arends (1998) clarifies that this meaning is influenced by the learner or an individual's interaction with prior knowledge and new events.

4.3.6 Interpretivism

As a research philosophy, *interpretivism* denotes approaches that emphasise the meaningful nature of people's characters and participation in social and cultural life (Chowdhury, 2014:433). Chowdhury (2014:433) states that "It denotes that the methods of the research which adopt the position that people's knowledge of reality is a social construction by human actors, and so it distinctively rules out the methods of natural science". Interpretivism as a philosophy allows an interprevist researcher to look for the reasons and meanings behind people's actions, for example, an individual's relationship and behaviour with other individuals in society and culture (Whitley, 1984, cited by Chowdhury, 2014:433).

4.3.7 Postmodernism

According to Saunders *et al.* (2016:141), the research philosophy of *postmodernism* centres on power relations and the function of language that endeavours to interrogate putative ways

of thinking and gives a voice to alternative, marginalised views. Researchers who take a postmodernist stance are likely to collect and analyse qualitative data from in-depth investigations of anomalies, silences and absences (Saunders *et al.*, 2016:137).

4.3.8 Relativism

The establishment of *relativism* is rooted in dissatisfaction pertaining to some aspects of the realist view. According to Fitzgerald and Howcroft (1998:321), relativists believe that reality is steered by societal positions and varies according to language and culture, so that concepts such as right or wrong, truth and falsehood differ from culture to culture and situation to situation (Fitzgerald & Howcroft, 1998:321). The relativist position holds that human intellectual mechanisms are flawed and that life's phenomena are basically intractable; therefore "true" reality can never be captured. The key distinction between the realist and relativist views is that the realist stresses "theory verification" while the relativist stresses "theory falsification" (Lincoln & Guba, 2000). Despite the distinction between the two ontological positions, they share much in common, as both provide an explanation that leads to prediction and control of phenomenon. Both the realist and relativist operate from nomothetic and etic perspectives. Realism and relativism serve as the primary foundation and anchor for qualitative research.

4.3.9 Pragmatism

As a research philosophy, *pragmatism* supports a researcher who believes that the most important element of research is the practical consequences of discoveries (Saunders & Tosey, 2013:58; Saunders *et al.*, 2016:142-143). Saunders *et al.* (2016:143) clarifies that pragmatism declares that concepts are only applicable in a case where action is supported. The central focus of researchers who follow pragmatism is on the adaptive purposes that justify the existence of the mind (Schuh & Barab, 2007:72). According to Rorty (1991, cited by Schuh & Barab, 2007:72),

> *Pragmatism requires neither a metaphysics (ontology) or an epistemology.*

Saunders and Tosey (2013:58) concur that a researcher following the pragmatic philosophy considers that,

> *No single viewpoint can ever give the entire picture and that there may be multiple realities.*

Saunders *et al.* (2016:137) suggest that data collection techniques and analyses are likely to involve a range of methods, giving rise to a range of data. Pragmatism emphasises practical solutions and outcomes and provides the philosophical underpinning for mixed methods research (Saunders *et al.*, 2016:137).

4.4 Research reasoning

4.4.1 Inductive reasoning

Inductive reasoning is a logical process in which multiple premises, all believed true or found true most of the time, are combined to obtain a specific conclusion or to supply evidence for the truth of a conclusion (Sauce & Matzel, 2017:1). Burns (2000:8) contends that with inductive reasoning, individual facts are pulled together in clusters to form manageable sets of generalisations which act as theories. Sauce and Matzel (2017:1) add that inductive reasoning is often used to generate predictions or to make forecasts. Burns (2000:9) and Walliman (2011:37) argue that there are vital weaknesses in inductive reasoning, as inductive results can only be regarded as valid if they meet the following three conditions:

- a large population size for observation or survey;
- an observation or survey coordinated repeatedly under different conditions; and
- observed empirical data corresponding with the general results.

Burns (2000:9) also contends that with inductive reasoning, observers perceive and interpret what they see in subtly various ways from other observers, with past experience, expectations and personality all influencing the construing of the event.

4.4.2 Deductive reasoning

Dahlberg and McCaig (2010:28) describe *deductive reasoning* as a "top down" research approach, involving the process of generating hypothesis from a general statement to reach a precise, explicit and clearly defined conclusion. Mouton (2001:117) similarly indicates that the most common forms of deductive reasoning in science are the following:

- deriving the hypothesis from theories and models; and
- conceptual explications: when the meaning of the concept is clarified through the deductive derivation of its constructive meaning.

According to Burns (2000:9), the main strengths of deductive reasoning are precision and control. Burns (2000:9) posits that control is attainable through sampling and design whilst precision is attained through quantitative and consistent measurement.

4.4.3 Abductive reasoning

According to Wheeldon and Ahlberg (2014:117), *abductive reasoning* is a process that values both inductive and deductive approaches but relies principally on the expertise, experience and intuition of researchers. In addition, abductive reasoning is associated with mixed methods research through the intersubjectivity of researchers and their understanding based on shared meaning. This approach to reasoning encourages testing intuitions theoretically and empirically (Wheeldon & Ahlberg, 2014:117). Abductive reasoning also offers an important new conception of research and produces more robust measures of association, while allowing that multiple paths to meaning exist with practical benefits (Wheeldon & Ahlberg, 2014:118).

4.5 Methodological approach

To determine an appropriate methodological approach for a particular research design, it is vital to give careful consideration to the types of methodological approaches and the relationships between methodological approaches and data collection, analysis of results and study conclusions. Based on the development of research processes, various researchers classify research methodological approaches into different categories. Teddlie and Tashakkori (2009:4), for example, suggest three categories for methodological approaches: quantitative research, qualitative research and mixed method research. Fellows and Lui (2008:20), though, categorise methodological approaches as action research, ethnographic, surveys, case studies and experiments. Similarly, Yin (2009) classifies research methodological approaches in social sciences into five categories, namely: surveys, experiments, archival analysis, histories and case studies.

From these variations, it is evident that the basis for categorising the methodological approaches as they do relate to the different perspectives provided by different types of research fields. It should be observed that definitions of each style vary, thus the boundaries between the methodological approaches are not well defined. Because of this, the following subsections will provide a brief description of the quantitative, qualitative and mixed methodological approaches.

4.5.1 Quantitative method

Quantitative research in natural science and social science can be described as a systematically empirical investigation of observable phenomenal via statistical, computational and mathematical techniques (Creswell & Poth, 2017). According to Creswell (2003:153), quantitative methodologies manipulate variables and control natural phenomena. It constructs

a hypothesis and tests it against the hard facts of reality. Of all quantitative hypotheses, the null hypothesis is perhaps the most often tested: the researcher decides what factors or variables might cause certain results (cause and effect) and carries out tests to either support or reject the null hypothesis at some level of statistical probability. The whole process is cold, calculating and deductive logic from the positioning of a hypothesis to supporting or not supporting it (Creswell, 2003:153). Thomas (2003:2) concurs that quantitative research seeks explanations and predictions that will generalise to other persons and places. Careful sampling strategies and experimental designs are aspects of quantitative methods aimed at producing generalisable results. With respect to quantitative research, the researcher's role is to observe and measure, and care is taken to keep researchers from contaminating the data through personal involvement with the research subjects. Maree (2007:145-146) adds that when making use of the quantitative research methodology, the sample sizes are usually large and are ideally randomly selected from a larger population to generalise the results to the specific population.

4.5.2 Qualitative method

Thomas (2003:1) states that *qualitative research* is multi-method in focus, involving an interpretive and naturalistic approach to subject matter. However, it is also a creative scientific process that necessitates a great deal of time and critical thinking as well as emotional and intellectual energy (Denzin & Lincoln, 2005:3). According to Jackson (2008:95-96), when making use of qualitative methods, researchers are typically not interested in simplifying, objectifying or quantifying what they observe. Instead, more interest is given to interpreting and making sense of what has been observed (Jackson, 2008:95-96). According to Fellows and Lui (2008:27) qualitative research gains insight into people's perceptions of the world, whether as individuals or groups. Jackson (2008:95-96) states that when using this method, researchers may not necessarily believe that there is a single 'truth' to be discovered, but instead that there are multiple positions or opinions that have some degree of merit. Bryman (2012:380) views qualitative research as a research strategy that places emphasis on words rather than quantification in the collection and analysis of data. Table 4.1 presents the characteristics of both quantitative and qualitative methods.

Table 4.1: Characteristics of quantitative and qualitative methods

Characteristics	Quantitative Method	Qualitative Method
Type of data	Facts are presented and described numerically	Facts are presented and described in a narrative fashion
Analysis	Descriptive and inferential statistics	Descriptive statistics via the identification of major themes
Scope of inquiry	Specific questions of hypotheses	Broad, thematic concerns
Primary advantage	Large sample, statistical validity, accurately reflect the population	Rich, in-depth, narrative description of sample
Primary disadvantage	Does not capture emotions, behaviour and change of emotions of respondents	Small sample, not generalisable to the population at large

4.5.3 Mixed method

Several authors (Greene, Caracelli & Graham, 1989:256; Tashakkori & Teddlie, 1998:ix; Tashakkori & Creswell, 2007b:4) have defined *mixed method research*. For example, Creswell and Plano Clark (2011:5) define *mixed method* research as:

> *Mixed method research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of the research problem than either approach alone.*

Mixed method research emphasises the similarities and differences between particular aspects of a phenomenon. Interest pertaining to the utilisation of mixed method research designs have most recently been driven by pragmatic issues, for example the increasing demand for cost effective research and the quest to move away from theoretical research to research that meets the needs of 'policymakers' and 'practitioners'.

According to Creswell and Plano Clark (2011:69-70), there are six major mixed method research designs to be considered when undertaking mixed method research: convergent parallel design; explanatory sequential design; exploratory sequential design; embedded design; transformative design; and multiphase design.

4.5.3.1 Convergent parallel design

According to Creswell and Plano Clark (2011:70-71), the convergent parallel design necessitates that the researcher collects the quantitative and qualitative data concurrently in

the same phase of the research process, weighs the methods equally, analyses the two data sets independently and interprets the results together, a process illustrated in Figure 4.1.
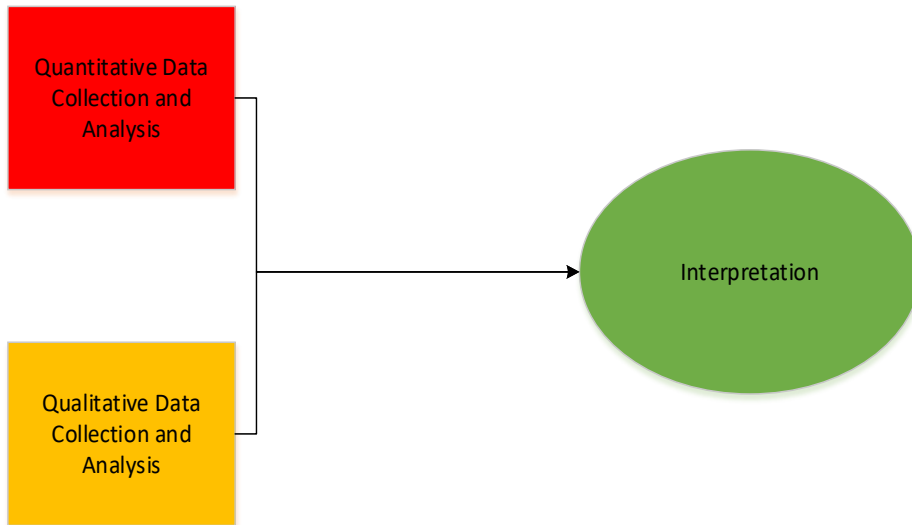
Figure 4.1: Convergent parallel design (Adapted from: Creswell & Plano Clark, 2011:69)

Instead of trying to mix different paradigms, Terrell (2012:8) recommends that researchers who decide to utilise the convergent parallel design consider working from a paradigm such as pragmatism as it will function as an "umbrella" paradigm to the research study. Creswell and Plano Clark (2011:78) clearly motivate that a pragmatist assumption is well suited to direct the merger of the two approaches associated with the convergent parallel design into a larger understanding. The advantages and disadvantages of the convergent parallel design are tabulated in Table 4.2

Table 4.2: Advantages and disadvantages of convergent parallel design (Adapted from Creswell & Plano Clark, 2011)

Advantages: Convergent parallel design	Disadvantages: Convergent parallel design
- The research design makes intuitive sense - The research design is extremely efficient based on the fact that quantitative and qualitative data are collected during one phase at approximately the same time - Both the quantitative and qualitative data can be collected and analysed autonomously, utilising suitable procedures for each set of data - The research design is well suited for team research, as teams can include individuals with both quantitative and qualitative expertise	- A huge amount of effort and know-how is required, based on the fact that data is collected simultaneously and that equal weight is normally assigned to each data type - Consequences pertaining to the different samples and sample sizes exist when integrating the two data sets - A challenge also exists in the attempts to merge two sets of very different data and their results in a significant way - Questions may arise in terms of what to do if the two data set results do not agree with one another

4.5.3.2 Explanatory sequential design

According to Terrell (2012:10), the explanatory sequential design necessitates that the researcher start off by collecting and analysing quantitative data and thereafter collects and

analyses qualitative data in a second phase, representing a follow-up to the quantitative results. Then the researcher connects the phases by utilising the quantitative results to shape the qualitative research questions, sampling and data collection. This process is illustrated in Figure 4.2.
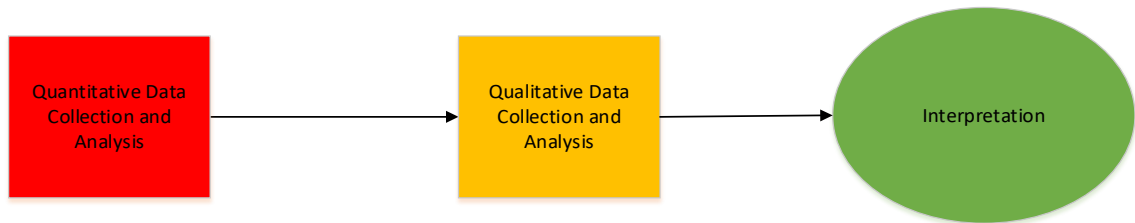
Figure 4.2: Explanatory sequential design (Adapted from: Creswell & Plano Clark, 2011:69)

In terms of the philosophical assumptions, Creswell and Plano Clark (2011:83) explain that the philosophical assumptions associated with the explanatory sequential design change and shift from postpositivism, which is representative of the quantitative phase of data collection and analysis, and constructivism which is representative of the qualitative phase of data collection and analysis, as illustrated in Figure 4.2. The advantages and disadvantages of the explanatory sequential design are tabulated in Table 4.3.

Table 4.3: Advantages and disadvantages of explanatory sequential design (Adapted from: Creswell & Plano Clark, 2011)

Advantages: Explanatory sequential design	Disadvantages: Explanatory sequential design
• The research design suits quantitative researchers more, because it often begins with a strong quantitative orientation • It's a two-phase structure makes it straightforward to implement, because the researcher conducts the two methods in separate phases and collects only one type of data at a time • The final report can be written with a quantitative section followed by a qualitative section, making it straightforward to write and providing a clear explanation for readers • The research design lends itself to evolving approaches where the second phase can be designed based on what is learned from the initial quantitative phase	• The research design requires a more time for implementing the two phases • It can be difficult to secure institutional review board (IRB) approval for this design, because the researcher cannot specify how participants will be selected for the second phase until the initial findings are obtained • The researcher must decide which quantitative results need to be further elaborated • The researcher must decide who to sample in the second phase and what criteria to use for participant selection

4.5.3.3 Exploratory sequential design

Berman (2017:1) states that exploratory sequential design entails that the researcher conduct an initial qualitative phase of data collection and analysis, followed by a phase of quantitative data collection and analysis, with a final phase of integration or linking of data from the two separate strands of data. Figure 4.3 demonstrates the exploratory sequential design.
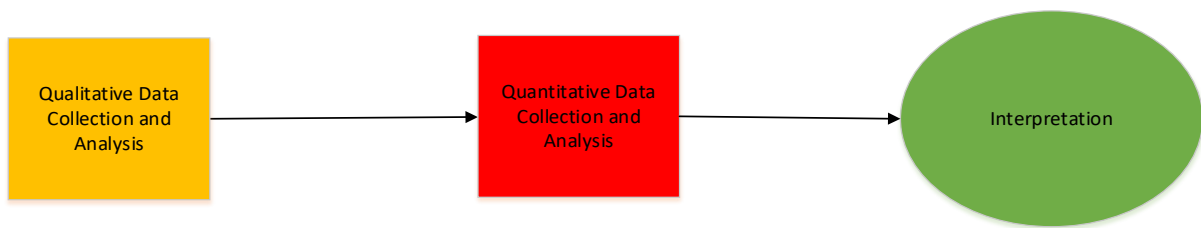
Figure 4.3: Exploratory sequential design (Adapted from: Creswell & Plano Clark, 2011:69)

In terms of the philosophical assumptions, Creswell and Plano Clark (2011:87) contend that the philosophical assumptions associated with the exploratory sequential design shift from constructivism, which is representative of the qualitative phase of data collection and analysis, and postpositivism which is representative of the quantitative phase of data collection and analysis, as illustrated in Figure 4.3. The advantages and disadvantages of the exploratory sequential design are tabulated in Table 4.4.

Table 4.4: Advantages and disadvantages of the exploratory sequential design (Adapted from: Creswell & Plano Clark, 2011)

Advantages: Exploratory sequential design	Disadvantages: Exploratory sequential design
• Separate phases make the exploratory design straightforward to describe, implement and report • Although this design typically emphasizes the qualitative aspect, the inclusion of a quantitative component can make the qualitative approach more acceptable to quantitative-biased audiences • This design is useful when the need for a second, quantitative phase emerges based on what is learned from the initial qualitative phase • The researcher can produce a new instrument as one of the potential products of the research process	• The two-phase approach requires considerable time to implement, potentially including time to develop a new instrument • It is difficult to specify the procedures of the quantitative phase when applying for initial IRB approval for the study • Researchers should consider using a small purposeful sample in the first phase and a large sample of different participants in the second phase to avoid questions of bias in the quantitative strand • If an instrument is developed between phases, the researcher needs to decide which data to use from the qualitative phase to build the quantitative instrument and how to use these data to generate quantitative measures • Procedures should be undertaken to ensure that the scores developed on the instrument are valid and reliable

4.5.3.4 Embedded design

According to Creswell and Plano Clark (2011:90), the embedded design is a mixed method approach which necessitates that the researcher collect and analyse both quantitative and qualitative data within a traditional quantitative research design or qualitative research design. Creswell and Plano Clark (2011:90) add that with the embedded design, the collection and analysis of secondary data is generally done before, during or after the primary methods. Figure 4.4 shows the embedded design.
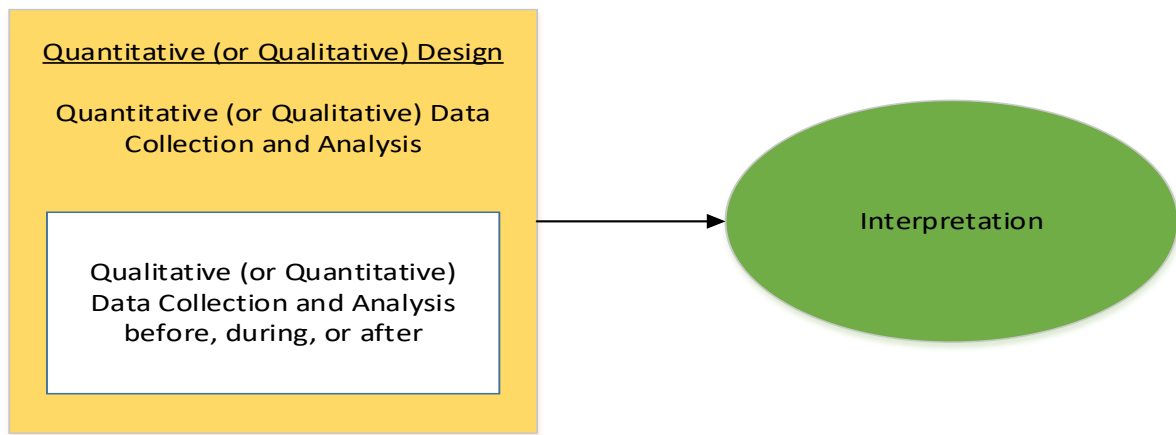
Figure 4.4: Embedded design (Adapted from: Creswell & Plano Clark, 2011:70)

According to Creswell and Plano Clark (2011:92), researchers who utilise the embedded design should understand that the design is specifically to improve the application of a traditional quantitative or qualitative design. The primary approach, therefore, establishes the philosophical assumptions associated with this design, making the data set submissive with the methodology undertaken (Creswell & Plano Clark, 2011:92). For example, if the primary approach is quantitative, it will support the rationale that the researcher will most likely be working from a postpositivist assumption. Similarly, if the primary approach is qualitative, it will support the rationale that the researcher will most likely be working from a constructivist assumption. In either case, Creswell and Plano Clark (2011:90) explain that the supplemental method is used in service to the guiding approach. The advantages and disadvantages of the embedded design are tabulated in Table 4.5.

Table 4.5: Advantages and disadvantages of the embedded design (Adapted from: Creswell & Plano Clark, 2011)

Advantages: Embedded design	Disadvantages: Embedded design
• This design can be used when the researcher does not have sufficient time or resources to commit to extensive quantitative and qualitative data collection because one data type is given less priority than the other • By the addition of supplemental data, the researcher is able to improve the larger design • Because the different methods are addressing different questions, this design fits a team approach well, where members on the team can focus their work on one of the questions based on their interests and expertise • The focus on different questions means that the two types of results can be published separately • This design may be appealing to funding agencies that are less familiar with mixed methods research because the primary focus of the approach is on a traditional quantitative or qualitative design	• The researcher needs to have expertise in the quantitative or qualitative design used in addition to expertise in mixed methods research • The researcher must specify the purpose of collecting qualitative (or quantitative) data as part of a larger quantitative (or qualitative) study • The researcher must decide at what point in the experimental study to collect the qualitative data in relation to the intervention (i.e., before, during, after, or some combination) • It can be difficult to integrate the results when the two methods are used to answer different research questions • For during-intervention experimental approaches, the qualitative data collection may introduce potential treatment bias that affects the outcomes of the experiment

4.5.3.5 Transformative design

Baharom (2015:7) argues that the transformative design is more complex than the four previously discussed designs. The reason for this is that the transformative design anticipates utilising one of the four previously discussed designs and encasing the selected design within a transformative-based theoretical framework (Baharom, 2015:7). This framework, according to Creswell and Plano Clark (2011:96), allows the researcher to address social issues for marginalised or underrepresented populations, necessitating the researcher to take a position sensitive to the needs of the population being studied, and recommending specific changes as a result of the research to improve social justice for the population under study. Figure 4.5 depicts the transformative design.
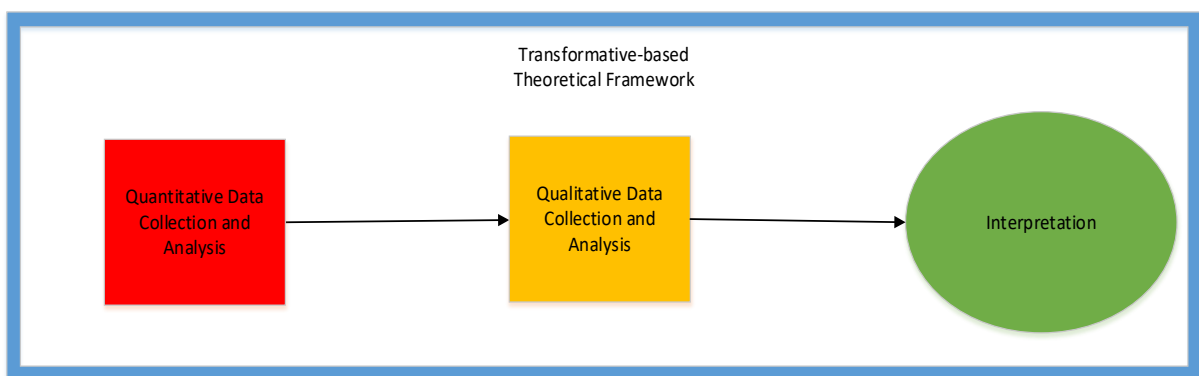
Figure 4.5: Transformative design (Adapted from: Creswell & Plano Clark, 2011:70)

In terms of the philosophical assumptions, Creswell and Plano Clark (2011:72) argue that the philosophical assumption associated with the transformative design is a feminist assumption. As an example, a researcher may quantitatively uncover and then qualitatively illuminate how the stereotypes of female smokers have served to marginalise them as "at risk" students within their school context. The advantages and disadvantages of the transformative design is tabulated in Table 4.6

Table 4.6: Advantages and disadvantages of the transformative design (Adapted from: Creswell & Plano Clark, 2011)

Advantages: Transformative design	Disadvantages: Transformative design
• The researcher positions the study within a transformative framework and an advocacy or emancipatory worldview • The research helps to empower individuals and bring about change and action • Participants often play an active, participatory role in the research • The researcher is able to use a collection of methods that produces results that are both useful to community members and viewed as credible to stakeholders and policy makers	• There is still little guidance in the literature to assist researchers with implementing mixed methods in a transformative way • The researcher may need to justify the use of the transformative approach • The researcher must develop trust with participants and be able to conduct the research in a culturally sensitive way

4.5.3.6 Multiphase design

According to Creswell and Plano Clark (2011:72), the multiphase design consists of different studies completely separated from each other and yet informing each other with regards to achieving the overall programme objective. This is illustrated in Figure 4.6. For example, if the overall programme objective is to assist in lowering the smoking rate for adolescents living in a particular community, it is expected from the multiphase design that the researcher might begin with a qualitative needs assessment study to understand the meaning of smoking and health from the perspective of adolescents in the community under study. Using the results of the first study, the researcher may develop an instrument to assess the prevalence of different attitudes across the community under study. Creswell and Plano Clark (2011:72) stipulate that in a third phase, the researcher could develop an intervention based on what has been learned and then examine both processes and outcomes of this intervention programme.
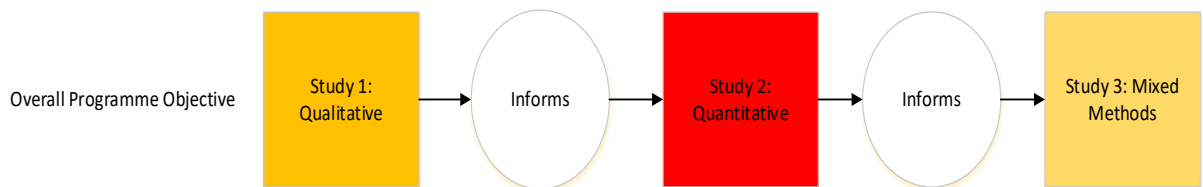
Figure 4.6: Multiphase design (Adopted from: Creswell & Plano Clark, 2011:70)

In terms of the philosophical assumptions, Creswell and Plano Clark (2011:101) argue that the philosophical assumptions associated with the multiphase design will vary based on the specifics of the design. As a general framework, it is suggested that the researcher use pragmatism as an umbrella foundation if strands are implemented concurrently and use constructivism for the qualitative component and postpositivism for the quantitative component if the strands are sequential. The advantages and disadvantages of the multiphase design are tabulated in Table 4.7

Table 4.7: Advantages and disadvantages of the multiphase design (Adapted from: Creswell & Plano Clark, 2011)

Advantages: Multiphase design	Disadvantages: Multiphase design
• The multiphase design incorporates the flexibility needed to utilise the mixed methods design elements required to address a set of interconnected research questions • Researchers can publish the results from individual studies while simultaneously contributing to the overall evaluation or research programme • The design fits the typical programme evaluation and development approach well • The researcher can use this design to provide an overall framework for conducting multiple iterative studies over multiple years	• The researcher must anticipate the challenges generally associated with individual concurrent and sequential approaches within individual or subsequent phases • The researcher needs sufficient resources, time, and effort to successfully implement several phases over multiple years • The researcher needs to effectively collaborate with a team of researchers over the scope of the project, while also accommodating the potential addition and loss of team members • The researcher needs to consider how to meaningfully connect the individual studies in addition to mixing quantitative and qualitative strands within phases • Due to the practical focus of many multiphase designs for programme development, the investigator needs to consider how to translate research findings into practice through developing materials and programs • The researcher may need to submit new or modified protocols to the IRB for each phase of the project

4.6 Research triangulation

According to Bogdan and Biklen (2006:24), *triangulation* is a procedure that facilitates the validation of data via cross-verification from two or more sources. Cohen and Manion (1986) suggest that triangulation tests the consistency of findings obtained through different instruments and increases the chance to control, or at least assess, some of the threats or multiple causes influencing the research results. According to Bogdan and Beklin (2006:24), triangulation can be utilised in quantitative and qualitative (inquiry) studies and has become an alternative to the traditional criteria such as reliability and validity. According to Wang and Duffy (2009:2), triangulation provides a quick turnaround between data collection and presentation of results because it relies on multiple sources of data. Wang and Duffy (2009) contend that this approach can be used when the available data is too scanty, or too much, when the 'best' data is not available, or when rapid intervention measures to improve the quality are required. The triangulation method is therefore helpful in eliminating biases and deficiencies that may emanate from relying on a single method of analysis (Wang & Duffy 2009:9).

4.6.1 Reasons for utilising triangulation

According to Carvalho and White (1997), the main reasons for undertaking triangulation are to:

• *Enrich:* The outputs of different informal and formal instruments add value to each other by explaining different aspects of an issue;

- *Refute:* Where one data set disproves a hypothesis generated by another data set;

- *Confirm:* Where one data set confirms a hypothesis generated by another data set; and

- *Explain:* Where one data set sheds light on unexpected findings derived from another data set of options.

4.6.2 Types of triangulation

Denzin (1973:301) proposes four basic types of triangulation that could be utilised by researchers:

- *Data triangulation:* involving time, space and persons;

- *Investigation triangulation:* involving multiple researchers in an investigation;

- *Theory triangulation:* involving more than one theoretical scheme in the interpretation of the phenomenon under study; and

- *Methodological triangulation:* involving the utilisation of more than one option to gather data, such as interviews, observations, questionnaires and documents.

4.7 Chapter summary

This chapter discusses the types of research assumptions, philosophies, reasoning and methodological approaches, placing considerable emphasis on the way the methodological approaches were discussed and explained. The decision to utilise a particular methodological approach is critical as the methodological approach is linked to data collection, data analysis and study conclusions. The subsequent chapter, Chapter 5, presents the methods employed for this research and provides justification for the adopted techniques towards the achievement of viable and reliable results.

CHAPTER 5

RESEARCH METHODS

5.1 Introduction

In Chapter 4, literature pertaining to research methodology in terms of research assumptions, research philosophies, research reasoning and methodological approaches were discussed. Chapter 5 initially elaborates on the pilot study. Thereafter, clarity on the methodological approach, research philosophy and research reasoning is provided, followed by clarity on the procedures utilised to gather and analyse data related to the research questions. The processes of questionnaire development and administration, sampling techniques and methods of data analysis are also discussed.

5.2 Pilot study

A pilot study was conducted at the proposal stage of this study to test the viability of the research problem, research questions and objectives. The pilot study was also conducted to intensify the research problems existence, and to establish the adequacy of the research approach and instruments to be employed by the main study. Semi-structured interviews were conducted with 10 purposive samples comprised of small, medium and large enterprises which participate in the South African construction industry. The significance of the pilot study, as indicated in Section 5.2.1, provides the basis for the primary study.

5.2.1 Significance of the pilot study

The pilot study confirmed the following:

- There is a significant need for research to develop a CSR model that will guide SMEs in the South African construction industry towards the achievement of sustainable business performance;

- The relevance of the main research question, sub-questions and objectives;

- Readiness of the participants to contribute at length to the research as it addresses a critical area;

- Self-confidence of the researcher to endeavour research on CSR, particularly on the practice of CSR in SMEs;

- Clarity on the appropriateness of the research approaches and instruments adopted for the primary study; and

- An indication of the probable duration of time for data collection, data analyses and overall completion of the research study.

5.3 Methodological approach

Based on the significance of the pilot study and the secondary data represented by the literature review, this study adopted a mixed method approach in the form of an explanatory sequential design, which utilises a structured questionnaire survey (predominantly closed-ended questions) in phase 1 of the data collection process and structured interviews (predominantly open-ended questions) in phase 2 to solicit respondent opinions on the following:

- The perception of SMEs in the South African construction industry pertaining to the relationship between the integration of CSR and sustainable business performance;

- CSR drivers that influence CSR practices of SMEs in the South African construction industry;

- Challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR; and

- CSR activities that must be considered by SMEs in the South African construction industry to achieve sustainable business performance.

The justification for the choice of this design stems from the fact that the study required a large strand of quantitative data in phase 1 of the data collection process, and a smaller strand of qualitative data in phase 2. This smaller strand of qualitative data collected in phase 2 was utilised to compile case studies that allowed for the sourcing of valuable information to complement the quantitative data with the aim of developing a comprehensive CSR model to guide SMEs in the South African construction industry towards a sustainable business performance. Hence, the design of the structured interviews pertaining to phase 2 of the data collection process took place once the data pertaining to the structured questionnaires in phase 1 was collected and analysed.

Both methodological triangulation and data triangulation were utilised. Justification for selecting the explanatory sequential design, according to Creswell and Plano Clark (2011:83), is that the explanatory sequential design is more appealing to quantitative researchers as it starts with a strong quantitative orientation followed by smaller set of qualitative data which in itself affords the researcher a simplistic pathway to document the findings and to provide clear explanations to the reader; the research design is also a two-phase structure, making it easy

to implement as the researcher conducts the quantitative and qualitative methods in two separate phases entirely. Additionally, the explanatory sequential design lends itself to evolving approaches where the second phase of qualitative data collection can be designed based on what is learned from the initial quantitative phase. Figure 5.1 shows the data collection and analysis procedure, based on the choice of the researcher, by utilising the explanatory sequential design.
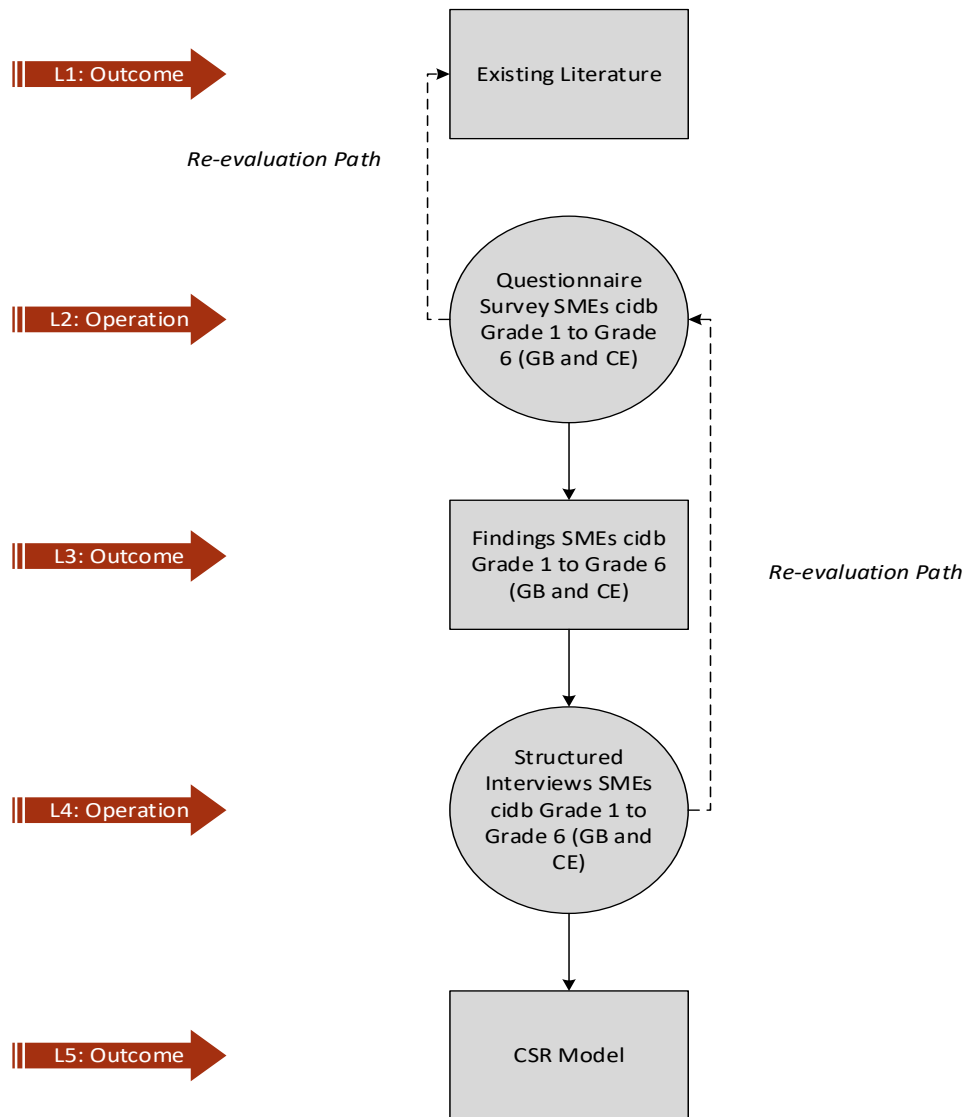
Figure 5.1: Schematic representation of data collection and analysis

5.4 Research philosophy

As this research adopts a mixed method approach, it is expected that a pragmatic philosophical stance should be adopted; however, the research philosophy adopted for this study was a combination of two philosophies – postpositivism, representing the quantitative strand of data collected in phase 1 of the data collection process; and constructivism, representing the qualitative strand of data collected in phase 2. This decision is based on the views of Creswell and Plano Clark (2011:74) who claim that a pragmatic philosophical stance can only be adopted if the methodological approach for data collection is of a concurrent nature such as when the research adopts a convergent parallel design. However, this research study adopted a mixed method approach in the form of an explanatory sequential design that supports the adoption of the two philosophical stances (postpositivism and constructivism) in two separate phases of data collection. Postpositivism was the dominant philosophical stance as there was more emphasis on the collection of quantitative data represented in phase 1 of the study.

5.5 Research reasoning

Because the research adopted a mixed method approach, it was expected to adopt abductive reasoning. This agrees with Wheeldon and Ahlberg (2014:117) who support that abductive reasoning is associated with mixed methods research. However, the reason why abductive reasoning was not adopted for this study is primarily because the type of mixed method applied in this study does not reflect a convergent parallel design, where the data collection is concurrent. Rather, the type applied in this study reflects an explanatory sequential design that supports the adoption of deductive reasoning in phase 1 and inductive reasoning in phase 2. Deductive reasoning was represented, however, as the dominant reasoning as there was more emphasis on the collection of quantitative data in phase 1 of the study.

5.6 Data collection procedures

5.6.1 Quantitative data collection phase

With regards to social and management research, quantitative data collection procedures are predominantly conducted through survey approaches. According to Kabir (2016:244), surveys provide a means of measuring a population's characteristics, self-reported and observed behaviour, awareness of programmes, attitudes or opinions, and needs, by studying a sample of that specific population. To contribute significantly to the development of a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance, a series of questions were solicited, via a questionnaire survey, in order to obtain the quantitative data set in phase 1 of the data collection process.

With the adoption of a questionnaire survey, it is quite evident that the design of a questionnaire survey in line with the method upon which the survey is administered needs attention. This protocol was followed. In addition to the design of the questionnaire survey, it is paramount to note that this research used an online platform called "LimeSurvey" on which the questionnaire survey was created and distributed to the research respondents via email, with a survey link. LimeSurvey allows researchers to send a survey link to relevant respondents via WhatsApp, affording respondents the opportunity to submit responses comfortably via their mobile devices. Authors such as Queiros, Faria, and Almeida (2017:382) and Creswell (2009:149) acknowledge the value of online platforms for quantitative data collection since these platforms allow a larger population to be contacted at minimal cost and time, one of the clear platform benefits which surpasses its disadvantages.

5.6.1.1 Sources of the quantitative data

The quantitative data for phase 1 of this study was sourced via an online questionnaire distributed to a calculated sample of registered cidb GB and CE SMEs across all nine provinces in South Africa, who registered between Grade 1 and Grade 6.

5.6.1.2 Development of the research questionnaire

A questionnaire survey is a research instrument that consists of a sequence of questions, either closed-ended or open-ended, or a mixture of both, intended to gather information from respondents. According to McLeod (2018:1), a questionnaire survey can be viewed as a written interview, administered face-to-face or by telephone. McLeod (2018:1), however, explains that most questionnaire surveys are either sent to respondents via post or via online platforms such LimeSurvey and WhatsApp. Questionnaire surveys provide a relatively inexpensive and efficient way to obtain large amounts of data from a large sample group.

With regards to the accuracy and success of the questionnaire survey, emphasis was placed on its design in terms of content, structure and response format. The following aspects were taken into consideration for the design of the survey:
- The questions should be clear and easily understood by respondents;
- It should be easy to administer via an interview process;
- Recorded answers should be easily edited, coded and transferred onto a computer file for statistical analysis; and
- Its flow, length and structure must motivate respondents to complete the questionnaire.

In terms of this research study, significant efforts have been devoted to fulfilling these requirements. The literature review in Chapter 2 guided the formulation of the questionnaire survey for the first phase of this study.

The questionnaire was divided into five sections, the first representing the general information required from each respondent. Thereafter, the remaining four sections covered the specific content-related questions in line with each of the study's objectives:

- To identify and ascertain how SMEs in the South African construction industry perceive the relationship between the integration of CSR and sustainable business performance;
- To identify the CSR drivers influencing CSR practices of SMEs in the South African construction industry;
- To identify and evaluate the challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR; and
- To establish CSR activities that must be considered by SMEs in the South African construction industry to achieve sustainable business performance.

5.6.1.3 Construct used in design of the questionnaire

The design of the questionnaire was based on the information and factors derived from the literature review. The construct comprised all variables that make up the conceptual framework presented in Chapter 3.

5.6.1.4 Unit of analysis

Trochim (2020:1) suggests that the most important idea in a research project is the unit of analysis. In particular, according to Trochim (2020:1), the unit of analysis reflects the major entity being analysed in a particular study. For instance, any of the following could be a unit of analysis in a study: individuals; groups; artefacts (books, photos, newspapers); geographical units (town, census tract, state), and social interactions (dyadic relations, arrests). Easterby-Smith, Thorp and Jackson (2012:65) describe the unit of analysis as the entity that forms the basis of the research sample; therefore, the unit of analysis is the key focus area for data gathering for a research project. The aim of this study is to develop a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance.

Accordingly, the unit of analysis for this research is steered towards the inclusion of construction organisations registered GB and CE contractors with the cidb, between Grade 1

to Grade 6, across the nine provinces in South Africa. The unit of analysis for the quantitative phase of data collection with a questionnaire survey (phase 1) reflects a sample of GB and CE contractors with the cidb between Grade 1 to Grade 6 country-wide. The unit of analysis for the qualitative phase of data collection through the use of structured interviews (phase 2) reflects the same sample as that of phase 1; however, purposive sampling allowed specific respondents to give a more in-depth view of findings in phase 1 of data collection.

5.6.1.5 Piloting the questionnaire

According to Creswell (2012:390), after the researcher has developed the questionnaire applying principles of question construction, it is critical that the researcher pilots the questionnaire among potential participants in the research target population. This will ensure that the data collected will be comprehensible, establishing a productive data analysis. Hence, two pilot tests were conducted on the questionnaire, the first an internal pilot for which the questionnaire was forwarded to the researcher's supervisors for comments and changes which were subsequently addressed by the researcher. To assess the clarity and feasibility of the questionnaire survey, a second pilot test was conducted among a randomly selected sample of the potential research participants within the research target population, highlighted in Table 5.1, specifically located in South Africa's Western Cape province. Based on the views of Saunders, Lewis and Thornhill (2009), the process of piloting a questionnaire provides the researcher with an assessment of the question validity and reliability of the collected data, which in fact demonstrates the methodological rigor of the survey. Twenty-four questionnaires were sent to several research participants, comprising two GB and two CE contractors between cidb Grade 1 to Grade 6. Of the 24 questionnaires sent, 14 were returned, representing a 58.3% response rate. By piloting the questionnaire, the researcher also noted that the questionnaire took approximately 30 minutes to complete. Accordingly, it was concluded that no reduction would be necessary to the number of questions. However, feedback from respondents led to the re-wording of some questions, prior to the administration for the main study.

5.6.1.6 Sampling for the main study

Subsequent to this piloting, the questionnaire was distributed widely for the main study. According to several prominent researchers (Babbie, 1990; Onwuegbuzie & Collins, 2007), sampling is essential for researchers to decide on the number of participants from which inference will be drawn, and the techniques to adopt in their selection (sampling method), within constraints of time and cost. Similarly, sampling provides a practical means of enabling

data collection and processing in a study while ensuring that the sample provides a better representation of the study population (Fellows & Liu, 2008:159).

Because the primary investigation was conducted in two phases, the research target population for the first phase consisted purely of General Building (GB) and Civil Engineering (CE) contractors registered with the cidb across South Africa, between Grades 1 and 6. This implies that the target population did not include, for example, a contractor registered in the GB and CE category together with another category, for example, Mechanical Engineering (ME), Demolition and Blasting (SE), as a contractor of this nature is not focused exclusively on GB or CE works. The current population for the two categories across the six cidb grades in South Africa are illustrated in Table 5.1 below. The figures in Table 5.1 are subject to constant change due to newly registered contractors, contractor upgrading and dormant contractors, affecting the figures daily. While Table 5.1 specifically indicates the contractors registered in each grade and individual class, at the time of data collection it was expected that some contractors might be registered in two classes (GB and CE) for the same cidb grade. Therefore, this is anticipated in the data.

Table 5.1: Research target population

Province	Western Cape	Northern Cape	North West	Mpumalanga	Limpopo	Kwa Zulu Natal	Gauteng	Free State	Eastern Cape	Total
cidb Grade										
1GB	1828	804	2910	2802	3024	6901	11154	1481	2819	33723
1CE	413	270	972	1489	1553	5289	1863	842	2500	15191
2GB	77	25	70	47	43	89	234	29	60	674
2CE	24	15	19	51	27	58	66	33	117	410
3GB	27	3	11	10	12	31	58	7	19	178
3CE	22	4	5	25	14	163	31	24	27	315
4GB	51	2	15	18	28	37	83	5	25	264
4CE	37	2	11	22	28	78	55	22	36	291
5GB	20	3	0	6	9	15	30	2	4	89
5CE	19	2	8	18	17	51	19	10	13	157
6GB	29	2	6	17	14	28	32	5	13	146
6CE	25	7	5	20	19	49	47	8	18	198
Total	2572	1139	4032	4525	4788	12789	13672	2468	5651	51636

As it may not be possible to obtain data from the entire research population, sampling is essential for the questionnaire survey to represent the population and to form a sample that can be generalised. To determine a suitable representative sample, the formula by Czaja and Blair (2005:146, cited in Ankrah, 2007:141) and Akadiri (2011:185) was applied:

$$ss = z^2 \; x \frac{p(1-p)}{c^2}$$

Where;

ss = sample size

z = standardised variable

p = percentage picking a choice, expressed as a decimal

c = confidence interval, expressed as a decimal

To achieve a sample size for the first phase of the primary investigation with a given degree of accuracy, the worst-case percentage picking choice of 50% was assumed (Ankrah, 2007:142; Akadirim 2011:186; Oyewobi, 2014:112); a 95% confidence level was assumed as in other studies with a significance level of α = 0.05; z = 1.96 at 95% confidence level; and a confidence interval (c) of ±10% was taken.

The sample size was computed as follows: $\mathbf{ss = \frac{1.96^2 \times 0.5(1-0.5)}{0.1^2} = 96.04}$

Thus, the required sample size for the questionnaire survey is 96 respondents across General Building (GB) and Civil Engineering (CE) contractors registered with the cidb across South Africa, between Grades 1 and 6. This number was required to generate a new sample size from the research population using the following, as suggested in Czaja and Blair (2005:146):

$$\text{New } ss = \frac{ss}{1 + \frac{ss - 1}{pop}}$$

Where:

pop = population

$$\text{New } ss = \frac{96.04}{1 + \frac{96.04 - 1}{51636}}$$

New *ss* / = 95.86 rounded off to 96

From the above calculations, the sample size is approximately 96 respondents across General Building (GB) and Civil Engineering (CE) contractors registered with the cidb across South Africa, between Grades 1 and 6. Takim, Akintoye and Kelly (2004:1126) contend that the response rate is usually in a range of 20-30%. Consequently, it was necessary to adjust the sample size to account for non-responses. Assuming a conservative response rate of 20%, the appropriate sample size to be surveyed was calculated as follows:

$$Survey \; ss = \frac{new \; ss}{response \; rate}$$

$$Survey \; ss = \frac{96}{0.2} = 480$$

The survey sample size for the first phase of the primary investigation was therefore approximately 480 respondents, who, in terms of this study, were randomly selected from General Building (GB) and Civil Engineering (CE) contractors registered with the cidb across South Africa, between Grades 1 and 6. Table 5.2 illustrates the sampled survey participants based on the class of work and province.

Table 5.2: Sample survey participants

Province	Western Cape	Northern Cape	North West	Mpumalanga	Limpopo	Kwa Zulu Natal	Gauteng	Free State	Eastern Cape	Total
cidb Grade										
1GB	16	6	6	6	6	16	16	6	6	84
1CE	16	6	6	6	6	16	16	6	6	84
2GB	6	5	5	5	5	6	6	5	5	48
2CE	6	5	5	5	5	6	6	5	5	48
3GB	5	2	2	2	2	5	5	2	2	27
3CE	5	2	2	2	2	5	5	2	2	27
4GB	5	2	2	2	2	5	5	2	2	27
4CE	5	2	2	2	2	5	5	2	2	27
5GB	5	2	2	2	2	5	5	2	2	27
5CE	5	2	2	2	2	5	5	2	2	27
6GB	5	2	2	2	2	5	5	2	2	27
6CE	5	2	2	2	2	5	5	2	2	27
Total	84	38	38	38	38	84	84	38	38	480

5.6.1.7 Main study questionnaire administration and collection

The sample for the administration of the questionnaire was drawn from the national cidb register of contractors, obtained through a formal request process, supported by the university letterhead and forwarded to the cidb requesting the national cidb register of contractors who

occupy GB and CE classes of work between Grade 1 and Grade 6. Through this process, the researcher obtained contact details provided on the national cidb register of contractors, which then allowed for the dissemination of the survey. Between October 5 and 12, 2020, a cover letter with the survey (LimeSurvey) link (see Appendix A) was sent via email to all research participants (see Table 5.2). By October 19, one week later, 38% of the targeted sample size pledged their readiness to participate in the study. Participants who did not respond were contacted via telephone as a follow-up mechanism. These calls took place from October 20, 2020, to November 27, 2020. Further to the follow-up calls, 71% of the targeted sample size agreed to participate; however, this did not guarantee the rate of questionnaire completion and submission.

The internet-mediated questionnaire survey approach was utilised as it had the potential to reach a widespread audience throughout provinces with a wide geographical dispersion. This is supported by Queiros *et al.* (2017:382-383). However, it is worth noting that some respondent emails bounced back, while some respondents opted-out, claiming disinterest in operating in the construction sector any longer as they suffered too many disappointments; others opted out because they were too busy; others, prioritising their business around the COVID-19 pandemic, were unable to attend to the questionnaire. Most of these reasons were contained in the follow-up telephone calls to respondents. To achieve a high response rate from the participants who showed interest in taking part, reminders requesting a response to the survey were issued weekly to boost their interest and to ensure a satisfactory response rate (Easterby-Smith *et al.*, 2012:126).

5.6.2 Qualitative data collection phase

According to Queiros *et al.* (2017:375), qualitative methods of data collection most often include observations, ethnography, field research, focus groups, case studies, structured interviews and in-depth interviews. According to Ganiyu (2016:115), qualitative researchers have documented several advantages and disadvantages pertaining to qualitative research methods. One main merit of qualitative research methods is that they facilitate a detailed and in-depth study capable of providing valuable information and insightful understanding of the research topic studied utilising smaller sample sizes (Amaratunga, Baldry, Sarshar & Newton, 2002:20; Easterby-Smith *et al.*, 2012:126). In terms of the qualitative data collection for this study, structured interviews were employed to source valuable information to complement and enrich the quantitative data with the aim of developing a comprehensive CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance. As a precautionary measure and to eliminate bias in the selection of

participants to be interviewed a formal letter (see Appendix B) was sent via email on May 17, 2021, asking construction organisations who partook in the first phase of the data collection process (quantitative data collection) if they will consent to be interviewed for the purpose of achieving the overall objectives of this research. Some of the respondents indicated interest while others declined. Respondents who indicated a willingness to be interviewed were immediately contacted via email thanking them for their interest shown and requesting an interview appointment date, which was then scheduled by the researcher (as indicated in Appendix C). According to Easterby-Smith *et al.* (2012), this immediate action by the researcher indicates to respondents the level of seriousness attached to the research by the researcher.

This research adopted structured, face-to-face interviews with respondents who indicated an interest to partake in the interview process. The interview guide was prepared utilising the findings of the quantitative data and was structured to cater for the open-endedness of interviewee responses. This practice is supported by Knox and Burkard (2009) who indicate that this affords respondents an opportunity to express their innermost beliefs on the subject discussed and to share experiences to generate reliable descriptions of occurrences based on the interviewer's ability to facilitate trust and openness in the interviewee. To ensure that respondents were asked the same question and for ease of analysis, all interview questions were identical for the participants. The investigative questions were categorised into five sections: Section (A) general and demographical information of respondent (SME); Section (B) perception pertaining to the relationship between the integration of CSR and sustainable business performance; Section (C) CSR drivers influencing the CSR practices of SMEs; Section (D) CSR implementation challenges experienced by SMEs; Section (E) CSR activities considered by SMEs to achieve sustainable business performance. A copy of the interview guide is attached as Appendix D.

From the 110 responses received at the close of the quantitative survey, four respondents with head offices in Cape Town and smaller offices in other parts of South Africa indicated interest in participating in the interview. All four respondents were contacted and individual interview dates scheduled with each participant, taking into consideration postponements that might arise due to the COVID-19 pandemic. The first interview was thus conducted with the owner of Organisation A (cidb Grade 6 GB and CE) on May 27, 2021, at 16:00 at the organisation's head office in Cape Town, with the interview recording lasting 58 minutes. The second interview was conducted with the owner of Organisation B (cidb Grade 4 GB and CE) on May 28, 2021, at 15:00 at a neutral venue (coffee shop) in the northern suburbs of Cape Town,

lasting 45 minutes. The third interview was conducted with the owner of Organisation C (cidb Grade 1 GB and CE) on May 31, 2021, at 18:00 at a neutral venue (coffee shop) in the southern suburbs of Cape Town, lasting 30 minutes. The fourth interview was conducted with the owner of Organisation D (cidb Grade 2 GB and CE) on June 3, 2021, at 19:00 at a neutral venue (coffee shop) in the southern suburbs of Cape Town, lasting 63 minutes.

The researcher requested permission from all four interviewees to use a digital voice recorder to record the interview. Permission was granted to the researcher.

5.7 Methods of data analysis

Analysing research data is a crucial step in exposing research outcomes. However, an equal if not more important step is the correct identification and adoption of the most appropriate data analysis techniques. This being said, the quantitative data collected for this study conformed to scale measurements, as the majority of the research responses were ratings measured on a 4-point Likert scale. Both descriptive and inferential statistical techniques were utilised, ensuring reliability, validity and the appearance of the research outcomes. Descriptive statistics are seen throughout the quantitative data analysis chapter, predominantly in the form of percentiles, frequencies, means scores (MSs) and charts. Similarly, inferential statistics are also seen throughout the data analysis chapter, and brought across through the use of analysis of variance (ANOVA) and factor analysis (FA). All the quantitative statistical techniques were analysed through Statistical Package for Social Sciences (SPSS). In addition, as part of the adopted research methodology of this study, qualitative data was collected using structured face-to-face interviews which were analysed using a form of thematic analysis, namely deductive thematic analysis. Analysing both the quantitative and qualitative data structural equation modelling (SEM) was used to develop the research model.

5.7.1 Descriptive statistical analysis

According to Lund Research Ltd (2018:1), descriptive statistics are generally referred to as research statistics that assist in describing, illustrating or summarising research data in a valuable and meaningful manner so that, for example, sequences might emerge from the data. However, descriptive statistics are not sufficient for conclusions to be drawn on a subject matter (Lund Research Ltd, 2018:1). In general, descriptive statistics include the use of percentiles, frequencies, means scores (MSs) and charts. Descriptive statistics through percentiles, frequencies and mean scores were utilised for analysing data from the research questionnaire to develop an inclusive understanding of the characteristics and nature of the data. More specifically percentiles and frequencies were used to analyse data related to

respondent demography, background and experience. Descriptive statistics were also used in the initial analysis of ranking the mean scores of various research variables. Descriptive statistics in the form of charts were utilised for presenting only the results of appropriate sections in this thesis.

5.7.1.1 Mean scores

To achieve the significant factors in a data set, Oyewobi (2014:127) highlights that the mean scores of variables within the very same data set need to be established and ranked. Therefore, as part of this study, the mean scores of variables in each research construct were calculated from the respondents' ratings and subsequently ranked, establishing the most important factors. This is supported by Fellow and Liu (2008:182) who confirm that the ranking is produced by rating, with rating establishing the degree of importance and ranking displaying the hierarchy. The mean ranking was implemented in this study to establish the hierarchy of numerous variables pertaining to the research constructs.

5.7.1.2 Thematic analysis

Based on the views of Braun and Clarke (2012), *thematic analysis* is a method of qualitative data analysis which systematically identifies, organises and offers insight into various patterns of meaning (themes) across a particular qualitative data set, affording the researcher an opportunity to view and understand collective or shared meanings and experiences. Thematic analysis is thus a qualitative data analysis method which allows for the identification of what seems to be common in the way a topic is talked or written about, making sense of the commonalities that surface (Braun & Clark, 2012). There are two forms of thematic analysis, namely inductive and deductive. According Braun and Clarke (2012:3), inductive thematic analysis,

> *….is a 'bottom up' approach, and is driven by what is in the data. What this means is that the codes and themes derive from the content of the data themselves -so that what is 'mapped' by the researcher during analysis closely matches the content of the data.*

Whereas deductive thematic analysis refers to,

> *...a 'top down' approach, where the researcher brings to the data a series of concepts, ideas, or topics that they use to code and interpret the data. What this means is that the codes and themes derive more from concepts and ideas the researcher brings to the data - here what is 'mapped' by the researcher during analysis does not necessarily closely link to the semantic data content.*

Based on the views of Braun and Clarke (2012), this research used deductive thematic analysis as a method to analyse the qualitative strand of data.

5.7.2 Inferential statistical analysis

According to Frost (2021:1), inferential statistics involve collecting data from a population sample pertaining to a specific subject matter and drawing conclusions from the sample, which can then be generalised to the entire population. For the purpose of this study, inferential statistics validated the data collected through factor analysis (FA) and analysis of variance (ANOVA).

5.7.2.1 Factor analysis (FA)

According to Pallant (2020:188), *factor analysis* (FA) is a data reduction technique that takes a large set of variables and identifies a way in which the data may be reduced, or summarised, using a smaller set of factors or components. Pallant (2020:188) suggests that FA consists of many different, although related, techniques. One major difference is amongst principal component analysis (PCA) and FA. FA and PCA are alike in a variety of ways and are often utilised interchangeably by researchers in an attempt to produce a reduced number of linear combinations of the original variables in a manner that captures most of the variability in the pattern of correlations. According to Pallant (2020:188), although FA and PCA are similar, there are differences between the two techniques. With FA, factors are projected utilising a mathematical model with only the shared variance in the variables being analysed. However, when utilising PCA, the initial variables are converted into a smaller set of linear combinations, utilising all the variances in the variables. Based on SPSS, FA was adopted using PCA as an extraction method to analyse the CSR drivers influencing the CSR practices of SMEs, and CSR activities to be considered by SMEs, as these two sections of the data are pivotal in terms of their contribution towards the development of a CSR model.

Pallant (2020:189) states that to conduct FA utilising PCA as an extraction method, two main concerns are relevant for determining whether the data set is suitable for FA: the sample size and the strength of the relationship among the variables (or items). Concerning the sample size, to date there is little agreement amongst authors as to how big a sample should be (Cattell, 1978; Hair, Anderson, Tatham & Grablowsky, 1979; Comrey & Lee, 1992; Mundfrom, Shaw & Ke, 2005; Tabachnick & Fidell, 2012:618), indicating that there is no stipulated acceptable sample size for FA and PCA. This research followed the suggestion of Tabachnick and Fidell (2012:618) that a sample size in the range of 100-200 is sufficient and acceptable for PCA. The sample size for this research was 110 (more than 100 and less than 200) so this sample size sufficed.

In terms of the strength of the relationship among the variables (or items), the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity were administered to inspect the sample

adequacy, confirming that FA was appropriate for the research. FA utilising PCA as an extraction method was then utilised to extract groups of factors with eigenvalues greater than 1, supressing all other factors with eigenvalues less than 1 based on Kaiser's criterion (Pallant, 2020:191). To aid the interpretation of the relationship between the variables in the latent factors, varimax rotation was selected.

5.7.2.2 Analysis of variance (ANOVA)

This research adopted the ANOVA test to evaluate if there were any statistically significant differences in the responses among SMEs (Grade 1-Grade 6) pertaining to the perceptions based on the relationship between the integration of CSR and SBP; CSR drivers influencing the CSR practices of SMEs; CSR implementation challenges experienced by SMEs; and CSR activities to be considered by SMEs to achieve sustainable business performance. This will confirm or reject the researcher's belief's stipulated in Section 1.8. According to Pallant (2020:262), ANOVA is so named as it compares the variance (variability in mean scores) between different groups (i.e., two or more than two groups). According to Fellows and Liu (2008), the ANOVA test is dependent on the F-test statistical method to determine whether the mean scores of the investigated groups differ significantly. Fellows and Liu (2008) make clear that an ANOVA test is only employed if three conditions are met. These three conditions, according to Sarantakos (1997:430), refer to independence, normality and homogeneity of variance.

- *Independence of observations:* The observations that make up the data should be independent of one another, meaning that each observation or measurement should not be influenced or manipulated by any other observation or measurement (Pallant, 2020:213-214).

- *Normality of distribution:* For parametric techniques, it is assumed that the populations from which the samples are taken are normally distributed (Pallant, 2020:214).

- *Homogeneity of variance:* For parametric techniques, the assumption is made that samples are obtained from populations of equal variances, with the test for homogeneity being conducted utilising the Levene test for equality of variance. If the significance value is less than 0.05, this would mean that the variances between the groups are not equal, concluding that the homogeneity of variance has been violated. However, if the significance value is greater than 0.05, this would mean that the variances between the groups are equal, concluding that the homogeneity of variance has not been violated (Pallant, 2020:214-215).

5.7.2.3 Structural equation model

The aim of this research is to promote sustainable business performance of SMEs in the South African construction industry. To achieve this aim, it is vital to establish an appropriate model to evaluate a series of simultaneous hypotheses about the impact of latent variables and manifest variables on the other variables, and to consider the measurement error. According to Lei (2009:495), a structural equation model (SEM) is a statistical tool to accomplish this. A typical SEM is comprised of two components, the first being a confirmatory factor analysis model, relating the latent variables to all their corresponding manifest variables (indicators), taking the measurement error into consideration. The first component pertaining to the SEM can be regarded as a regression model, which regresses the manifest variables with a small number of latent variables. The second component of the SEM is also a regression type structural equation, regressing the endogenous (dependent) latent variables with the linear terms of some endogenous and exogenous (independent) latent variables (Lei, 2009:496; Hoyle, 2012:6). As latent variables are arbitrary, it is not possible to directly analyse them with techniques in ordinary regression based on raw observation. However, from a conceptual perspective, SEMs are expressed by the familiar regression type model application, established from basic assumptions upon which the interpretation of the model is verified.

5.7.2.3.1 Assumptions in SEM

As with other research, research in the field of construction management requires that the researcher generate certain assumptions regarding the data to guide the accurate interpretation of the model developed through data analysis. Hence, Klein (2012:113) stipulates that for SEM, five basic assumptions are outlined: the presumed cause (e.g., X) must occur before the effect (e.g., Y); there is a relation or an observed covariation between X and Y; isolation exists, implying no other plausible explanations of the covariation between X and Y; the observed distributions equal those assumed by the method utilised to estimate relations; and the trend of causal relation is correctly specified that X indeed causes Y, or X and Y cause each other in a reciprocal manner. It is therefore imperative to establish in SEM a chronological precedence between the variables.

5.8 Validity and reliability assurance of the research outcome

5.8.1 Validity

According to Taherdoost (2016:28), the term *validity* reflects how well the collected data covers the actual area of investigation. Simply put, validity means to measure what is intended to be measured (Punch, 2014:237). Or in other words, the measurement of validity in research means the extent to which an instrument measures what it claims to measure. The issue of validity in research is related to an available approximation to the truth of a given proposition, inference or conclusion.

The three basic types of validity, as expressed by several scholars (Sarantakos, 2001:99; Trochim, 2006:1), were taken into consideration:

- *Context validity:* ensuring that the instrument is appropriate and the total research population is adequately sampled with the adopted measuring instrument;
- *Empirical validity:* ensuring the existence of a robust relationship between measuring instruments and the measurement outcomes; and
- *Construct validity:* establishing construct validity by relating a measuring instrument to a general theoretical framework, the instrument affixed to the concepts and theoretical assumptions that were employed.

5.8.2 Reliability

Reliability concerns the extent to which the measurement of a phenomenon provides stable and consistent results (Taherdoost, 2016:33). Simply put, reliability means consistency (Punch, 2014:237). Moreover, as Trochim (2006:1) explains, reliability has to do with the quality of measurement. However, in its everyday sense, reliability is the "consistency" of what was measured.

The considerations of reliability in this research was twofold:
- *Consistency over time:* ensuring the stability of measurement over time, that is, if the same instrument was given to similar respondents under the same circumstances at different time periods, similar results would be achieved; and
- *Internal consistency:* ensuring that the research questions to be addressed by respondents were consistent.

5.8.3 Validity and reliability assurance

To ensure that the research outcome is valid and reliable, the following steps were taken:

- *Variables:* the variables of this research were clearly defined and aligned to the research objectives (Section 3.4.2.1);

- *Population:* efforts were made for the first phase (quantitative) of the primary investigation to obtain a large population ranging from General Building (GB) and Civil Engineering (CE) contractors registered between Grades 1-6 on the construction industry development board (cidb) register of contractors across South Africa. Equal efforts were made for the second phase (qualitative) of the primary investigation to obtain a purposive sample of General Building (GB) and Civil Engineering (CE) contractors registered between Grade 1-6 on the construction industry development board (cidb) register of contractors across South Africa (Section 5.6.1 and 5.6.2);

- *Participants:* the participants were small and medium General Building (GB) and Civil Engineering (CE) construction businesses within the South African construction industry (Section 5.6.1.6 and Table 5.2);

- *Time:* sufficient time was scheduled for data collection, collation, analyses and reporting (Section 5.6.1.7 and 5.6.2);

- *Instruments:* appropriate research instruments were adopted and enhanced through the pilot study to ascertain their adequacies (Section 5.2);

- *Pilot study:* a pilot study was conducted to ascertain the research methods and techniques adopted for data collection (Section 5.2);

- *Triangulation:* multiple research techniques and approaches were explored for data and information collection enabling the demerits of one approach to be corrected by the merits of another method (Section 5.3 and 5.7);

- *Mechanical recording and Statistical Software Analyses*: mechanical recording systems were adopted, and a voice recorder used for structured interviews. Appropriate instruments were used for data analyses, SPSS (Section 5.6.2 and 5.7);

- *Participant information:* the accuracy of the research methods and sequence of data collection were checked during the pilot study (Section 5.2); and

- *CSR model validation:* the qualitative data collection phase (structured interviews) allowed the researcher to obtain a deeper understanding of the findings in the quantitative data collection phase (questionnaire survey), giving direction in terms of the constructs of the CSR model to be developed (Section 5.3 and Chapters 6; 7 & 8).

5.9 Chapter summary

This chapter presented the research methods utilised in this study. Exhaustive clarification on methodological justification, including the philosophical stance of the research and the research approach for the purpose of data collection, were given. The study adopts a mixed method approach in the form of an explanatory sequential design consisting of a quantitative first phase and qualitative second phase. The chapter also explained that both descriptive and inferential statistical techniques – which include percentiles, frequencies, mean scores, FA utilising PCA, and ANOVA – were utilised in the analysis of the quantitative data. On the other hand, deductive thematic analysis was utilised to analyse the qualitative data stemming from the structured interviews to gain deeper insight into the quantitative data gathered, giving direction in terms of the constructs of the CSR model to be developed. Chapter 6 presents the quantitative data, data analysis and a discussion of quantitative data findings.

CHAPTER 6

DATA PRESENTATION ANALYSIS AND DISCUSSION

6.1 Introduction

In Chapter 5, the pilot study conducted for this research was elaborated on, with much focus on the significance of the pilot study. Thereafter, the methodological approach, research philosophy and research reasoning were clarified, followed by the procedures to gather and analyse data related to the research questions. Chapter 5, in addition, explained the process of the questionnaire development and administration, sampling techniques and methods of data analysis. This present chapter focuses on the quantitative data analysis and discussion, as quantitative data was analysed using both descriptive and inferential statistical techniques, with inferences drawn to confirm the research conceptual framework.

6.2 Response rate

Of 480 questionnaire surveys delivered via email to respondents, 110 were suitably completed and returned using LimeSurvey, an overall response rate of 23%. The response rate was considered suitable within the domain of construction management. The questionnaire distribution compared to responses received in terms of the different provinces is reported in Table 6.1

Table 6.1: Questionnaire distribution vs responses received

Province	Distributed	Received	Percentage
Western Cape	84	51	60.7
Northern Cape	38	4	10.5
North West	38	2	5.3
Mpumalanga	38	7	18.4
Limpopo	38	2	5.3
Kwa Zulu Natal	84	11	13.1
Gauteng	84	18	21.4
Free State	38	3	7.9
Eastern Cape	38	12	31.6
Total	*480*	*110*	*22.9*

6.3 Interpretation of Likert-scale results

The first set of data presented in this chapter unpacks the background information of the respondents and their businesses. Thereafter, data specific to the research constructs are presented in the following order:

- The identification of how SMEs in the South African construction industry perceive the relationship between the integration of CSR and sustainable business performance;

- The identification of CSR drivers influencing CSR practices of SMEs in the South African construction industry;
- The identification of challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR: and
- The establishment of CSR activities that need to be considered by SMEs in the South African construction industry to achieve sustainable business performance.

These analyses were undertaken as a preamble to the development of the CSR model that is presented in Chapter 8. Except for the inferential statistics, the majority of the Likert-scale type questions were deliberated based on the measurement scale indicated in Table 6.2 and where necessary, percentages were utilised in the discussions. The analysis dealt primarily with mean scores and standard deviation. Thus, given the descriptive nature of the results, the use of hierarchy was suitable for presenting the results.

Table 6.2: Definition of terms for the 4-point Likert-scale

Section	Mean score range	Meaning
6.5	1.00 – 1.75 1.76 – 2.50 2.51 – 3.25 3.26 – 4.00	1= Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree
6.6	1.00 – 1.75 1.76 – 2.50 2.51 – 3.25 3.26 – 4.00	1 = Not a driver 2 = Limited driver 3 = Significant driver 4 = Highly significant driver
6.7	1.00 – 1.75 1.76 – 2.50 2.51 – 3.25 3.26 – 4.00	1= Strongly Disagree 2 = Disagree 3 = Agree 4 = Strongly Agree
6.8	1.00 – 1.75 1.76 – 2.50 2.51 – 3.25 3.26 – 4.00	1 = Slightly important 2 = Moderately important 3 = Important 4 = Very important

6.4 Analysis of respondents' demographic information

The survey respondents for this study were drawn from GB and CE contractors who are registered on the cidb register of contractors, across all nine provinces in South Africa between Grades 1 and 6. As per Section 1.2 of this study, contractors registered on the cidb register of contractors between Grades 1 and 6 constitute the SME cluster of contractors in South Africa.

6.4.1 SME owner profiles

Analyses pertaining to the profiles of SME owners are presented in the subsequent sections. The data is discussed and interpreted utilising frequencies and percentages in tables capturing the following information: the gender and age of SME owners, the construction work experience and the education of SME owners.

6.4.1.1 Gender and age of SME owner

Analysis of the data retrieved from the questionnaire survey (as shown in Table 6.3) reveals that 82.7% of the respondents are male SME owners whereas 16.4% of the respondents are female SME owners. Based on this statistic, it is clear that males still dominate the construction industry in terms of construction business ownership, especially at the SME level; however, females are entering the construction industry not just as construction workers but as construction business owners at an SME level. The statistic is fairly supported by the cidb (2021:37) who indicate that approximately 27% of construction SMEs in South Africa are owned by women, leaving roughly 73% of construction SMEs owned by men. Other studies conducted by BigRentz, Inc. (2021: 1) and Winke (2021: 1) from a global perspective also support the statistic, indicating that of the registered construction businesses globally, which include SMEs, approximately 13% are owned by women leaving roughly 87% owned by men. The statistics of this study also illustrates diversity and openness to gender as 1% of the SMEs fall into the category of other. These statistics taking into consideration the supporting statistics on business ownership can therefore be generalised across South Africa, and even other developing and developed countries globally.

Also in Table 6.3, and with regards to SME owner age groups, approximately 36% of the owners were between 31 and 40 years old, with roughly 35% occupying the age group 41 to 50 years old. In addition, roughly 17% of the SME owners were between 51 and 70 years old, leaving 13% of the SME owners inhabiting the age group of 20 to 30 years old. This statistic clearly suggests that most of the SME owners who partook in the questionnaire survey could be classified between middle age and older adulthood, indicating that the respondents (SME owners) have sufficient general life experience, contributing to their maturity level being considered adequate.

Table 6.3: SME owner gender and age bracket

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Gender of SME owner	Male	91	82.7	82.7	82.7
	Female	18	16.4	16.4	99.1
	Other	1	0.9	0.9	100.0
	Total	**110**	**100.0**	**100.0**	
Age bracket of SME owner	20-30	14	12.7	12.7	12.7
	31-40	39	35.5	35.5	48.2
	41-50	38	34.5	34.5	82.7
	51-60	15	13.6	13.6	96.4
	61-70	4	3.6	3.6	100.0
	Total	**110**	**100.0**	**100.0**	

6.4.1.2 Construction related experience and education of SME owner

Table 6.4 data shows that of the SME owners who partook in the questionnaire survey, 39% obtained between 1 and 5 years of construction related experience; 23% have acquired between 6 and 10 years of construction related experience; another 23% have obtained between 11 and 15 years of experience; with just 7% acquiring between 16 to 20 years of construction related experience; leaving 8% of SME owners securing between 21 and 25 years of construction related experience. Further analysis shows that approximately 61% of the SME owners have an average of 16 years (8+13+18+23/4 = 16 years) of construction related experience, indicating that majority of the respondents are significantly experienced in the construction sector, strengthening the validity and reliability of their responses.

Table 6.4: Years of construction related experience pertaining to SME owners

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Years of construction related experience pertaining to SME owners	1-5 yrs	43	39.1	39.1	39.1
	6-10 yrs	25	22.7	22.7	61.8
	11-15 yrs	25	22.7	22.7	84.5
	16-20 yrs	8	7.3	7.3	91.8
	21-25 yrs	9	8.2	8.2	100
	Total	**110**	**100.0**	**100.0**	

Table 6.5 data confirms that roughly 71% of the SME owners have obtained some form of construction related education and training qualification. With this said, around 42% of SME owners who make up the 71% have obtained a construction related qualification from various universities across South Africa. Of the 42%, about 15% of SME owners obtained a National Diploma in Civil Engineering; 9% acquired a National Diploma in Building; 6% qualified with a Bachelor of Technology in Construction Management; 4% obtained a Bachelor of Technology in Civil Engineering; 3% acquired a Bachelor of Technology in Quantity Surveying; 2% qualified with a Bachelor of Science in Construction Management; 1% obtained a Bachelor of Science in Civil Engineering; with another 1% acquiring a National Diploma in Architecture; and lastly, 1% acquiring a Master's of Science in Project Management (Construction).

Moreover, roughly 29% of the SME owners who make up the 71% have obtained a construction related qualification from various public and private technical and vocational education and training colleges (TVET) across South Africa. Of the 29%, approximately 16% of the SME owners obtained a qualification in bricklaying; 3% qualified with a Certificate in Building and Civil Engineering; 2% acquired a qualification in tiling; 2% obtained a qualification in carpentry; 1% in plastering; 1% in plumbing; with 1% acquiring a Certificate in Construction Project Management; 1% obtaining a Certificate in Road Construction; 1% a Certificate in Construction Maintenance; and finally, 1% obtaining a certificate by participating in contractor development programmes (CDPs).

Of the approximate 29% of the data remaining, it is noteworthy that roughly 23% of the SME owners who partook in the questionnaire survey indicated that they obtained other qualifications not construction specific, but rather in other fields such as Business Management, Education, Internet Technology, Mechanical Engineering or Electrical Engineering. Approximately 3% of the remaining 29% of SME owners indicated that they obtained only a Matric Certificate, with roughly 3% of SME owners indicating that they have acquired no qualification whatsoever. It can thus be deduced from the above analysis that the respondents' representations are of SME owners who are mostly qualified and competent, and whose judgements and information given in the questionnaire survey can be considered reliable and valid.

Table 6.5: Construction related education and training of SME owners

Variable		Approximate Percentage
Construction related (university) education and training of SME owner	ND Civil Engineering	15%
	ND Building	9%
	BTech Construction Management	6%
	BTech Civil Engineering	4%
	BTech Quantity Surveying	3%
	BSc Construction Management	2%
	BSc Civil Engineering	1%
	ND Architecture	1%
	MSc Project Management (Construction)	1%
Variable		**Approximate Percentage**
Construction related (TVET) education and training of SME owner	Qualified Bricklayer	16%
	Cert. Building and Civil Engineering	3%
	Qualified Tiler	2%
	Qualified Carpenter	2%
	Qualified Plasterer	1%
	Qualified Plumber	1%
	Cert. Construction Project Management	1%
	Cert. Road Construction	1%
	Cert. Construction Maintenance	1%
	Cert. Contractor Development Programme	1%

Table 6.5: (Continued)

Other education and training of SME owner	Qualifications in: Business Management; Education; Internet Technology, and Mechanical Engineering	23%
	Matric Certificate	3%
SME owner with no Qualification	None	3%

6.4.2 Organisational profiles of SMEs

The organisational profiles of the SMEs are presented in the sections below. The data is discussed and interpreted utilising frequencies and percentages in tables and percentages for figures which are captured for the following information: SME operational base; the operational years of each SME and business growth; the number of employees working for each SME; the SME cidb class of work and cidb grade, and the SME BBBEE level.

6.4.2.1 SME operational base

This research as indicated by Table 6.6, is conceptualised to cover South Africa entirely, hence the need arose for a South African geographical operational base of the SME owners and their respective businesses. It should be noted that the operational base of SMEs indicated by the data does not limit SMEs who participated in this study from obtaining work beyond their operational base boarders (interprovincial work opportunities). The operational base of SMEs is thus only indicative of where the SMEs headquarters are situated. Consequently, data shows the location (operational base) of the SMEs as follows: 11% are located in the Eastern Cape; 3% are situated in the Free State; 16% in Gauteng Province; 10% in KwaZulu-Natal; 2% in the Limpopo Province; 6% in Mpumalanga Province; 2% in the North West Province; 4% in the Northern Cape; with 46% of the SMEs located in the Western Cape. These results confirm that majority of SMEs have established their operational base in the Western Cape, Gauteng, Eastern Cape and KwaZulu-Natal.

This is, however, disconnected from the fact that these four provinces are the largest provinces in South Africa by population and that a large volume of construction, including both GB and CE projects, are executed in these provinces. Furthermore, analysis also suggests that a rational percentage of SMEs whose operational bases are in the lesser populated provinces of South Africa also participated in the questionnaire survey, thereby allowing for the results of the questionnaire survey to be generalised within South Africa.

Table 6.6: Location of SMEs

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Province that SME organisations are located in	Eastern Cape	12	10.9	10.9	10.9
	Free State	3	2.7	2.7	13.6
	Gauteng	18	16.4	16.4	30.0
	KwaZulu-Natal	11	10.0	10.0	40.0
	Limpopo	2	1.8	1.8	41.8
	Mpumalanga	7	6.4	6.4	48.2
	North West	2	1.8	1.8	50.0
	Northern Cape	4	3.6	3.6	53.6
	Western Cape	51	46.4	46.4	100.0
	Total	**110**	**100.0**	**100.0**	

6.4.2.2 Operational years of SMEs and their business growth

Results presented in Table 6.7 indicate that approximately 52% of the SMEs have been operational between 1 and 5 years. In addition, roughly 25% of the SMEs have been operational between 6 and 10 years, with 14% of the SME owners indicating that their organisations have been operational between 11 and 15 years, leaving approximately 3% of SMEs stipulating that they have been operational between 16 and 20 years, with another 3% indicating that they have been operational between 21 and 25 years. Lastly, approximately 5% of SME owners stipulated that their organisations have been operational for more than 25 years.

Half of the SMEs who partook in the questionnaire survey have been operational between 1 and 5 years which, according to the Department of Trade and Industry (DTI) (2008), implies that these SMEs are in the baby business phase. Despite this statistic, it is important to note that 54% of the SMEs (see Figure 6.1) have rapidly improved their cidb grade, from Grade 1 to other grades in less than 5 years of existence, a sign of quick and positive growth and performance and implying that the number of operational years does not necessarily determine the growth rate. Rather, relevant theoretical and practical construction related experience that the SMEs have obtained (see Section 6.4.1.2), leads to quicker and more positive business growth. This sentiment is shared by others, namely Rogerson (2001a:117); Martinez, Mora and Vila (2007:104); Guzman and Santos (2001:217); Fielden (2000:296) and Barreira (2004:43).

Approximately half the SMEs have been operational between 6 and 25 years or more. Thus, based on the positive business progression and growth of the SMEs surveyed for this study, including their operational years, their contribution to the study data is considered significant and dependable.

Table 6.7: Operational years of SMEs

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Number of years the SME owners' organisations have been operational	1-5	57	51.8	51.8	51.8
	6-10	27	24.5	24.5	76.4
	11-15	15	13.6	13.6	90.0
	16-20	3	2.7	2.7	92.7
	21-25	3	2.7	2.7	95.5
	More than 25	5	4.5	4.5	100.0
	Total	**110**	**100.0**	**100.0**	

Figure 6.1: SMEs progression through cidb grades in comparison with their years of existence

6.4.2.3 Number of employees working for the SMEs

Data in Table 6.8 shows that approximately 4% of the SMEs surveyed have no employees, indicating that these SME owners are the only individuals employed by their businesses. Adding to this statistic, roughly 32% of SMEs have employed between 1 and 5 employees, with 61% of SMEs employing between 6 and 60 employees. This leaves approximately 4% of SMEs employing 61 or more employees in their businesses. Moreover, it should be noted with reference to the data collected under this specific section, that the number of employees employed by the SME does not necessarily determine the magnitude of work that the SME is able to undertake.

This view is buttressed by the fact that of the 32% of SMEs who have employed between 1 and 5 employees, 6% assume construction works at a cidb Grade 2 level; 4% assume construction works at a cidb Grade 3 level; with 2% of SMEs each assuming construction works at a cidb Grade 4, 5 or 6 level. Once again, this type of statistic serves as an indicator that the SMEs which have undertaken the questionnaire survey seem to be innovative in their approach to business, pertaining especially to the number of employees and the size of work they are

able to undertake. This gives the impression that these SMEs conduct their businesses by what is known as a *lean approach*, indicating knowledgeability with regards to their business practices, buttressing the aforementioned (see Section 6.4.1.2) that SMEs are experienced, qualified and competent. Based on these facts, the researcher has full confidence that SME contributions towards the data is of a highly significant nature.

Table 6.8: Number of SME employees

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Number of employees working for the SME	0	4	3.6	3.6	3.6
	1-5	35	31.8	31.8	35.4
	6-60	67	60.9	60.9	96.3
	61 and more	4	3.6	3.6	100.0
	Total	**110**	**100.0**	**100.0**	

6.4.2.4 SMEs cidb class of work and cidb grade

In addition to the data concerning SME operational bases, operational years, business improvement and number of employees, the data also revealed (see Table 6.9) that nearly 45% of the SMEs who partook in the questionnaire survey are registered for both the GB and CE classes of work. Roughly 28% of the SMEs indicated that they are registered in the CE class of work, with the remaining 26% registered as GB contractors. In terms of SME cidb grade, the data also revealed that roughly 42% of the SMEs surveyed are Grade 1 contractors; nearly 24% are Grade 2 contractors; 9% of the SMEs are registered as Grade 3 contractors; with approximately 12% registered as Grade 4; 5% of the SMEs registered as Grade 5 contractors; and 8% as Grade 6 contractors. When asked about the number of years the SMEs have been registered in their respective cidb grades, the data established that around 36% of SMEs have been registered in their cidb grade between 1 and 2 years; 30% were registered in their cidb grade between 3 and 4 years; 13% were registered in their cidb grade between 5 and 6 years; 5% between 7 and 8 years; roughly 16% between 9 and 10 years.

The results for this particular section of data clearly indicate that all SMEs participating in this study comply with the research delineation focusing on GB and CE contractors, registered on the cidb register of contractors between Grades 1 to 6, as Grades 1 to 6 represent the SME cluster as described by Windapo *et al.* (2020:9) and the cidb (2020:1). Based on the results under this section, it is apparent that SME clusters who have responded to the questionnaire survey are considered highly essential as this research attempts to develop a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance.

Table 6.9: SMEs cidb classes of work and cidb grade

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
cidb class of work that the SME organisation is registered in	Both	50	45.5	45.5	45.5
	CE	31	28.2	28.2	73.6
	GB	29	26.4	26.4	100.0
	Total	**110**	**100.0**	**100.0**	

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
cidb grade that the SME organisation is registered in	Grade 1	46	41.8	41.8	41.8
	Grade 2	26	23.6	23.6	65.5
	Grade 3	10	9.1	9.1	74.5
	Grade 4	13	11.8	11.8	86.4
	Grade 5	6	5.5	5.5	91.8
	Grade 6	9	8.2	8.2	100.0
	Total	**110**	**100.0**	**100.0**	

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
Number of years the SME organisation has been registered in the selected cidb grade	1-2	40	36.4	36.4	36.4
	3-4	33	30.0	30.0	66.4
	5-6	14	12.7	12.7	79.1
	7-8	6	5.5	5.5	84.5
	9-10	17	15.5	15.5	100.0
	Total	**110**	**100.0**	**100.0**	

6.4.2.5 SMEs BBBEE level

According to data from Table 6.10, based on the BBBEE levels of the SMEs, almost 92% are registered as BBBEE level 1 businesses; roughly 4% as BBBEE level 2 businesses; approximately 2% as level 3; nearly 1% as level 4 businesses; and another 1% registered as level 5. These results clarify that majority of the SMEs which have responded to the questionnaire survey are 100% black-owned; the results are representative of positive transformation in the construction industry. In addition, even though the majority of the SMEs are black-owned, it is noteworthy that the results under this particular section also show diversity in that approximately 8% of the SMEs indicated that they are registered between BBBEE level 2 and 5. These results can be generalised within South Africa, particularly towards the South African construction industry.

Table 6.10: SME BBBEE Level and number of years registered in the BBBEE Level

Variable		Frequency	Percent	Valid Percent	Cumulative Percent
BBBEE level of the SME organisation	Level 1	101	91.8	91.8	91.8
	Level 2	4	3.6	3.6	95.5
	Level 3	3	2.7	2.7	98.2
	Level 4	1	0.9	0.9	99.1
	Level 5	1	0.9	0.9	100.0
	Total	**110**	**100.0**	**100.0**	

6.5 SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance: Objective 1

As a means to ascertain how SMEs in the South African construction industry perceive the relationship between the integration of CSR and SBP, SMEs which partook in the questionnaire survey were asked to give their perceptions from both an internal and external organisational perspective. Section 6.4 provided the researcher with evidence that the responses from the SMEs can be considered reliable. However, in addition, the researcher decided that as a spot-check, each set of data relative to the research constructs (objectives) which include this set of data specific to SME perceptions of the relationship between the integration of CSR and SBP, should undergo a reliability analysis utilising Cronbach's alpha. This measures the internal consistency of a group of items, such as the responses from the SMEs towards the relationship between the integration of CSR and SBP, from both an internal and external organisational perspective. Maree and Pietersen (2007:216) contend that a Cronbach's alpha coefficient should be interpreted as highly reliable at 0.90 and above; moderately reliable at 0.80 and above; and low reliability at 0.70 and above. In addition, Nunnally (1978; cited by Pallant, 2020:6) agrees that a Cronbach's alpha above 0.70 is acceptable. The results presented in Appendix E 1 show that the internal consistency for SME perceptions based on the relationship between the integration of CSR and sustainable business performance from both an internal and external perspective is highly reliable and acceptable: the Cronbach's alpha values are all above 0.70 with the total Cronbach's alpha coefficient at 0.987.

Further to this data reliability, Table 6.11 presents the descriptive data pertaining to SME perception of the relationship between the integration of CSR and SBP from an internal and external organisational perspective. All 29 variables listed in Table 6.11 have mean scores (MSs) between 2.51 and 3.25, indicating that SMEs in the South African construction industry agree with all variables, taking into consideration their internal and external organisational perceptions, that there is a positive relationship between the integration of CSR and SBP. Further, data interpretation of the top four MSs relative to SME perception regarding the relationship between the integration of CSR and SBP from an internal organisational perspective, it is clear that "CSR improves the organisation's prestige" was ranked the highest (MS = 2.96), followed by "CSR increases the organisational ability to attract good and quality staff" (MS = 2.95); "CSR improves the organisation's efficiency" (MS = 2.94); and "CSR improves employee dedication, motivation, loyalty, commitment, respect and efficiency" (MS = 2.93). However, although SMEs also agree that "CSR improves their organisation's financial

performance" (MS = 2.85) and "the organisation's products and services" (MS = 2.83), these two variables were ranked the lowest. In addition to the MSs and ranking of the variables relative to all the "internal organisational perceptions", it is evident from the total average percentages that approximately 74% of the SMEs agree that the integration of CSR positively contributes to SBP.

Analysing the data of the top four MSs relative to SME perceptions regarding the relationship between the integration of CSR and SBP from an external organisational perspective, it is evident that "CSR positively contributes to the credibility of the organisation" was ranked the highest (MS = 2.99), followed by "CSR improves the organisation's corporate image and reputation with various stakeholders (employees, customers/clients, investors, government, suppliers and the community)" (MS = 2.98); "CSR increases business relations and new business opportunity" (MS = 2.97); and "CSR positively contributes to giving back to the community" (MS = 2.96). Conversely, although SMEs still agree that "CSR reduces regulatory oversight" (MS = 2.79) and "allows the organisation to access funding opportunities" (MS = 2.77), these two variables were ranked the lowest. Adding to the MSs and ranking of the variables relative to all the "external organisational perceptions", it is evident from the total average percentages that approximately 75% of the SMEs agree that the integration of CSR positively contributes to SBP.

Table 6.11: Frequencies and descriptive statistics: SME perceptions based on the relationship between the integration of CSR and sustainable business performance

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Strongly Disagree	Disagree	Agree	Strongly Agree			
		1	2	3	4			
	Internal Organisational Perceptions							
C41_A_F	CSR improves the organisation's prestige, contributing to SBP	6.4	18.2	48.2	27.3	2.96	0.845	1
C41_A_H	CSR increases the organisational ability to attract good and quality staff contributing to SBP	8.2	15.5	50.0	26.4	2.95	0.866	2
C41_A_C	CSR improves the organisation's efficiency allowing for SBP	5.5	19.1	51.8	23.6	2.94	0.805	3
C41_A_B	CSR improves employee dedication, motivation, loyalty, commitment, respect, and efficiency that contributes to SBP	4.5	20.0	53.6	21.8	2.93	0.775	4
C41_A_L	CSR improves the organisation's risk and crises management contributing to SBP	5.5	20.9	50.0	23.6	2.92	0.814	5

Table 6.11: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Strongly Disagree	Disagree	Agree	Strongly Agree			
		1	2	3	4			
C41_A_G	CSR allows for long-term return on investment and increase in productivity contributing to SBP	6.4	20.0	49.1	24.5	2.92	0.836	6
C41_A_M	CSR allows for long-term sustainability of the organisation and society contributing to SBP	7.3	17.3	52.7	22.7	2.91	0.830	7
C41_A_J	CSR improves the organisation's capacity for learning and innovation, ultimately allowing for SBP	8.2	17.3	52.7	21.8	2.88	0.843	8
C41_A_I	CSR improves operating cost reductions that contributes to SBP	5.5	22.7	50.9	20.9	2.87	0.803	9
C41_A_A	CSR positively impacts the organisations business processes, which contributes to SBP	6.4	18.2	58.2	17.3	2.86	0.772	10
C41_A_E	CSR positively contributes to the longevity of the organisation allowing for SBP	7.3	20.9	50.0	21.8	2.86	0.840	11
C41_A_D	CSR positively contributes to an organisation's legal obligations allowing for SBP	8.2	18.2	52.7	20.9	2.86	0.840	12
C41_A_K	CSR improves the organisation's financial performance, contributing to SBP	7.3	20.0	52.7	20.0	2.85	0.822	13
C41_A_N	CSR improves products and services that contributes to SBP	6.4	23.6	50.9	19.1	2.83	0.811	14
C41_TAP1	*Total average percentages*	*6.7*	*19.4*	*51.7*	*22.3*		*74*	
	External Organisational Perceptions							
C41_B_D	CSR positively contributes to the credibility of the organisation allowing for SBP	6.4	12.7	56.4	24.5	2.99	0.796	1
C41_B_A	CSR improves the organisation's corporate image and reputation with various stakeholders (employees, customers/clients, investors, government, suppliers and the community) all of which contributes to SBP	7.3	13.6	52.7	26.4	2.98	0.835	2
C41_B_F	CSR increases business relations and new business opportunity contributing to SBP	5.5	15.5	55.5	23.6	2.97	0.784	3
C41_B_E	CSR positively contributes to giving back to the community allowing for SBP	8.2	13.6	51.8	26.4	2.96	0.856	4
C41_B_B	CSR enhances the organisation's brand value contributing to SBP	5.5	17.3	52.7	24.5	2.96	0.801	5

Table 6.11: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Strongly Disagree	Disagree	Agree	Strongly Agree			
		1	2	3	4			
C41_B_J	CSR improves the business trust and understanding between the business and its customers contributing to SBP	5.5	19.1	50.0	25.5	2.95	0.817	6
C41_B_C	CSR allows for positive reactions (client satisfaction) from clients that contributes to SBP	8.2	14.5	51.8	25.5	2.95	0.855	7
C41_B_K	CSR improves partnership opportunities with transitional organisations, contributing to SBP	8.2	15.5	51.8	24.5	2.93	0.854	8
C41_B_L	CSR improves the organisation's influence in the industry and market share contributing to SBP	6.4	19.1	53.6	20.9	2.89	0.805	9
C41_B_M	CSR increases the appeal to investors and financial analysts contributing to SBP	8.2	16.4	53.6	21.8	2.89	0.839	10
C41_B_H	CSR improves the organisation's competitiveness ultimately allowing better turnover which contributes to SBP	9.1	18.2	50.9	21.8	2.85	0.866	11
C41_B_G	CSR allows for organisations to receive recognition by international credit organisations, contributing to SBP	10.0	17.3	50.9	21.8	2.85	0.880	12
C41_B_O	CSR improves client retention that contributes to SBP	7.3	21.8	51.8	19.1	2.83	0.822	13
C41_B_I	CSR reduces regulatory oversight which contributes to SBP	7.3	25.5	48.2	19.1	2.79	0.836	14
C41_B_N	CSR allows the organisation to access funding opportunities contributing to SBP	10.0	21.8	49.1	19.1	2.77	0.874	15
C41_TAP2	Total average percentages	7.5	17.5	52.1	23.0		75.1	

6.5.1 ANOVA: SME perceptions based on the relationship between the integration of CSR and SBP

Further to the descriptive statistics in Table 6.11, an ANOVA test was conducted, with results reported in Table 6.12, Table 6.13 and Table 6.14. Results confirm that there is no statistically significant difference between the SMEs and their internal and external organisational perceptions based on the relationship between the integration of CSR and SBP: $F_{(5, 104)} = 0.62$, $p = 0.68$, and the calculated eta squared effect of size was small, with a value of 0.03.

Table 6.12: Statistics of SME perceptions based on the relationship between the integration of CSR and SBP

SMEs	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Grade 1	46	3.00	0.802	0.118	2.77	3.24	1	4
Grade 2	26	2.73	0.731	0.143	2.44	3.03	1	4
Grade 3	10	2.91	0.512	0.162	2.54	3.28	2	4
Grade 4	13	3.01	0.521	0.145	2.69	3.32	2	4
Grade 5	6	2.80	0.380	0.155	2.40	3.20	2	3
Grade 6	9	2.77	0.772	0.257	2.17	3.36	1	4
Total	**110**	**2.90**	**0.710**	**0.068**	**2.77**	**3.03**	**1**	**4**

Table 6.13: Test of homogeneity of variances

Levene Statistic	df1	df2	Sig.
1.108	5	104	0.361

Table 6.14: ANOVA on SME perceptions based on the relationship between the integration of CSR and sustainable business performance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.596	5	0.319	0.622	0.683
Within Groups	53.365	104	0.513		
Total	54.960	109			

Calculation of effect of size for the ANOVA test:

$$EtaSquared = \frac{Sum\ of\ Squares\ Between\ Groups}{Total\ Sum\ of\ Squares}$$

According to Cohen (1988:284-7, cited by Pallant, 2020:268), the proposed guidelines for interpreting the values for EtaSquared are reported as follows: 0.01 and above = small effect; 0.06 and above = medium effect; and 0.14 and above = large effect.

EtaSquared = 1.596 / 54.960 = 0.03

6.6 CSR drivers influencing the CSR practices of SMEs: Objective 2

6.6.1 International CSR drivers influencing the CSR practices of SMEs

The analysis in Section 6.5 established that the SMEs who partook in the questionnaire survey agree that there is a positive relationship between the practice of CSR and SBP. Based on this finding and as part of the model development process for this research study, it is critical to identify the CSR drivers that influence the CSR practices of SMEs in the South African construction industry from both an international and national perspective. Hence, as per the findings of this section (see Table 6.15), SMEs were firstly asked to evaluate various international CSR drivers that influence their organisation's CSR practices. These international CSR drivers were categorised under (four) sub-headings: international standardisation; investment incentives; stakeholder activism; and supply chain reliability. As part of the data reliability testing, Appendix E 2 indicates that the internal consistency for the international CSR drivers influencing the CSR practices of SMEs is reliable and acceptable as the Cronbach's alpha values for all the variables are above 0.70, with the total Cronbach's alpha coefficient at 0.979.

Analysing the descriptive results (see Table 6.15), it is evident that all 15 variables listed have mean scores (MSs) between 1.76 and 2.50, indicating that although limited, SMEs in the South African construction industry's CSR practices are driven by international CSR drivers. Thus, interpreting the data in terms of the top two MSs relative to "international standardisation", it is apparent that CSR practices being driven by "the international organisations of standardisation (ISO) 26000 a standard referring to social responsibility" ranked the highest (MS = 2.25), followed by "integrated reporting which provides insights into the nature and quality of the organisation's relationships with its key stakeholders" (MS = 2.23). Conversely, CSR practices being driven by "global reporting initiative (GRI) standards, which allows their organisations to publicly report on a range of economic, environmental and social impacts to their business, which includes organisations reporting on their positive or negative contributions towards sustainable development", ranked last (MS = 2.09). Adding to the MSs and variable ranking pertaining to "international standardisation", it is apparent from the total average percentage that roughly 66% of the SMEs rated the variables as drivers towards CSR practices within their businesses.

Deducing the data in terms of the top two MSs relative to "investment incentives", CSR practices being driven by "incentives received through social investments on the Information and Communications Technology (ICT) Sustainability Index" ranked first (MS = 1.97), followed by "incentives received through social investments on the Financial Times Stock Exchange

(FTSE) 4-Good" (MS = 1.92). On the contrary, CSR practices being driven by "incentives received through social investments on the Dow Jones Sustainability Index" ranked last (MS = 1.90).

Observing the data relative to "stakeholder activism", it is clear that CSR practices being driven through "business associations who advocate economic growth, development, peace and prosperity allowing for the building of inclusive entrepreneurship ecosystems" ranked first (MS = 2.14); and "trade unions who internally communicate and conduct negotiations between employees and management of organisations and externally are unencumbered by corporate rules and regulations making it easy to disseminate and monitor the compliance by organisations" ranked second (MS = 2.07). Furthermore, CSR practices being driven through "development agencies who engage organisations to increase the developmental impact of their business operations", "international NGOs who partner with organisations advocating that organisations contribute to the reconstruction of the global public domain where organisations practice their businesses" and "the media as an activist for CSR" ranked third, fourth and fifth, respectively.

Lastly, data pertaining to the only MS in relation to "supply chain reliability" makes evident that CSR practices being driven by "the international organisations of standardisation (ISO) 20400 a standard referring to sustainable procurement" is also a limited driver towards SME CSR practices in their businesses, scoring a MS of 2.14.

Even though the MSs pertaining to this section illustrated that SME CSR practices in the South African construction industry are limitedly driven by international CSR drivers, it is evident from the overall total average percentages (see Table 6.15) that 60% of the SMEs rated the variables as drivers towards CSR practices in their businesses. Furthermore, as part of the model development process for this study, a further analysis on the international CSR drivers was conducted using factor analysis (FA) with the aid of practical component analysis (PCA) as an extraction method. The FA results relative to the underlying international drivers influencing CSR practices of SMEs in the South African construction industry are illustrated in Section 6.6.2.

Table 6.15: Mean statistics for international CSR drivers influencing CSR practices of SMEs

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Not a Driver	Limited Driver	Significant Driver	Highly Significant Driver			
		1	2	3	4			
CSR practices being driven by international standardisation								
C21_A_D	CSR practices being driven by the International Organisations of Standardisation (ISO) 26000. (A standard referring to Social Responsibility)	32.7	25.5	26.4	15.5	2.25	1.077	1
C21_A_C	CSR practices being driven by Integrated Reporting. (This provides insights into the nature and quality of the organisation's relationships with its key stakeholders)	28.2	36.4	20.0	15.5	2.23	1.029	2
C21_A_E	CSR practices being driven by the International Organisations of Standardisation (ISO) 14000. (A standard referring to Environmental Management)	35.5	25.5	22.7	16.4	2.20	1.099	3
C21_A_A	CSR practices being driven by International Social and Environmental Accreditation and Labelling (ISEAL) Alliance 2012. (A set of global standards and codes of business practice pertaining to environmental and social standards)	36.4	29.1	16.4	18.2	2.16	1.113	4
C21_A_B	CSR practices being driven by Global Reporting Initiative (GRI) Standards. (Allowing organisations to publicly report on a range of economic, environmental and social impacts to their business, which includes organisations reporting on their positive or negative contributions towards sustainable development)	36.4	32.7	16.4	14.5	2.09	1.054	5
C21_TAP1	*Total average percentages*	*33.8*	*29.8*	*20.4*	*16.0*		*66.2*	
CSR practices driven by investment incentives								
C21_B_D	CSR practices being driven by incentives received through social investments on the Information and Communications Technology (ICT) Sustainability Index	45.5	25.5	15.5	13.6	1.97	1.079	1
C21_B_B	CSR practices being driven by incentives received through social investments on the Financial Times Stock Exchange (FTSE) 4-Good	50.0	20.9	16.4	12.7	1.92	1.085	2

Table 6.15: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Not a Driver	Limited Driver	Significant Driver	Highly Significant Driver			
		1	2	3	4			
C21_B_C	CSR practices being driven by incentives received through social investments on the Financial Times Stock Exchange (FTSE) /Johannesburg Stock Exchange (JSE) Responsibility Investment Index (RII)	48.2	22.7	18.2	10.9	1.92	1.050	3
C21_B_A	CSR practices being driven by incentives received through social investments on the Dow Jones Sustainability Index	49.1	25.5	11.8	13.6	1.90	1.075	4
C21_TAP2	*Total average percentages*	*48.2*	*23.7*	*15.5*	*12.7*		*51.9*	
	CSR practices driven by Stakeholder activism							
C21_C_D	CSR practices being driven through business associations. (Who advocate economic growth, development, peace and prosperity allowing for the building of inclusive entrepreneurship ecosystems)	35.5	32.7	14.5	17.3	2.14	1.088	1
C21_C_B	CSR practices being driven through trade unions. (Who internally communicate and conduct negotiations between employees and management of organisations and externally are unencumbered by corporate rules and regulations making it easy to disseminate and monitor the compliance by organisations)	39.1	30.0	15.5	15.5	2.07	1.081	2
C21_C_A	CSR practices being driven through development agencies. (Who engage organisations to increase the developmental impact of their business operations)	39.1	30.9	13.6	16.4	2.07	1.090	3
C21_C_C	CSR practices being driven through international NGOs. (Who partner with organisations advocating that organisations contribute to the reconstruction of the global public domain where organisations practice their businesses)	43.6	26.4	14.5	15.5	2.02	1.100	4
C21_C_E	CSR practices driven by the media as an activist for CSR	43.6	29.1	13.6	13.6	1.97	1.062	5
C21_TAP3	*Total average percentages*	*40.2*	*29.8*	*14.3*	*15.7*		*59.8*	
	CSR practices driven by Supply chain reliability							
C21_D_A	CSR practices being driven by the International Organisations of Standardisation (ISO) 20400. (A standard referring to Sustainable Procurement)	38.2	27.3	17.3	17.3	2.14	1.113	1
C21_TAP4	*Total average percentages*	*38.2*	*27.3*	*17.3*	*17.3*		*61.9*	
C21_OTAP	*Overall total average percentages*	*40.1*	*27.7*	*16.9*	*15.4*		*60*	

6.6.2 Identifying underlying international CSR drivers that influence CSR practices of SMEs

To thoroughly identify the international CSR drivers that influence the CSR practices of SMEs within the South African construction industry, factor analysis (FA) was performed with the extraction method known as principal components analysis (PCA) to reduce and further classify the variables for the model development. The benefits and justification for the use of PCA, when confronted with the task of identifying underlying variables influencing a specific objective, have been exhaustively discussed in Section 5.7.2.1.

6.6.2.1 KMO Adequacy and Bartlett's Sphericity Test

According to Pallant (2020:189), there are three main steps in conducting FA utilising PCA. The first step is to test the suitability of the data that will undergo FA by conducting a Kaiser-Meyer-Olkin (KMO) measure of the sampling adequacy and Bartlett's Test of Sphericity, which in this case was conducted for the variables (international CSR drivers) that influence the CSR practices among SMEs in the South African construction industry. Table 6.16 depicts the results of the KMO and Bartlett's Test of Sphericity. These two statistical measures provide the minimum standard that data should meet to be adequate for FA, utilising PCA. Numerous other authors (Pallant, 2020:190; Tabachnick & Fidell, 2013) stipulate that the value of KMO ranges between 0 and 1, with 0.60 regarded as the minimum value for good factor analysis. The Bartlett test indicates the strength of relationship among variables. The significant level of Bartlett's test is a requirement for the data to be suitable for analysis (Field, 2013:673). The level of significance for the Bartlett's test should be $p < 0.05$ for FA to be considered appropriate. The tests in Table 6.16 display a KMO value of 0.925 which is greater than 0.6 and less than 1, while the Bartlett's Sphericity value is $p = 0.000$ (i.e. $p < 0.05$). These results confirm that factor analysis could be conducted with the data.

Table 6.16: KMO and Bartlett's Sphericity Test on variables (international CSR drivers) influencing the CSR practices of SMEs

Test		Value	Remark
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.925	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	1350.561	Significant and adequate for FA utilising PCA
	df	45	
	Sig.	0.000	

6.6.2.2 Principal components factors (international CSR drivers) influencing CSR practices of SMEs

According to Pallant (2020:190), after establishing the appropriateness and suitability of the research data via KMO Adequacy and Bartlett's Sphericity test, the next step is to conduct what is known as *factor extraction*, which, according to Pallant (2020:190), involves determining the smallest number of factors that can be used to best represent the interrelationships among the set of variables. According to Pallant (2020:190), there are many approaches that can be utilised to extract the number of underlying factors from the data observed. Noting this point, it is evident that some of the most widespread extraction techniques utilised in research are principal components, principal factor, image factoring, maximum likelihood, alpha factoring, unweighted least squares and generalised least squares. In addition to the extraction techniques, there are also a number of techniques that support a researcher's decision concerning the number of factors to retain. These techniques are known as Kaiser's criterion, scree test and parallel analysis (Pallant, 2020).

To extract the components influencing SME CSR practices, PCA was adopted as the approach in conjunction with Kaiser's criterion using eigenvalues and varimax as the rotational method. The significant factors according to Kaiser's criterion are those factors with eigenvalues above 1. In Table 6.17, two components with eigenvalues greater than 1 were extracted from the variables pertaining to international CSR drivers influencing CSR practices of SMEs. The eigenvalues of the two extracted components are 7.569 and 1.009. This result indicates that the first component is capable of explaining 75.69% of the variance, whereas the second component is capable of explaining 10.09% of the variance. However, the two components combined are capable of explaining 85.79% of the total variance, demonstrating that these components have a highly significant influence on SME CSR practices.

Table 6.17: Total variance explained by factors (international CSR drivers) influencing CSR practices of SMEs

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.569	75.694	75.694	7.569	75.694	75.694	4.413	44.127	44.127
2	1.009	10.094	85.788	1.009	10.094	85.788	4.166	41.661	85.788
3	0.331	3.309	89.097						
4	0.278	2.778	91.875						
5	0.212	2.117	93.992						

Table 6.17: (Continued)

6	0.203	2.032	96.025						
7	0.133	1.333	97.357						
8	0.116	1.161	98.519						
9	0.081	0.814	99.332						
10	0.067	0.668	100.000						
Extraction Method: Principal Component Analysis									

To further confirm the number of components that can be retained, a Catell's scree test was administered on the variables; as indicated by Figure 6.2 (scree plot), two components are retained because the two components are situated above the elbow on the scree plot, meaning these components contribute to the most variance in the data set, which confirms the results displayed in Table 6.17.
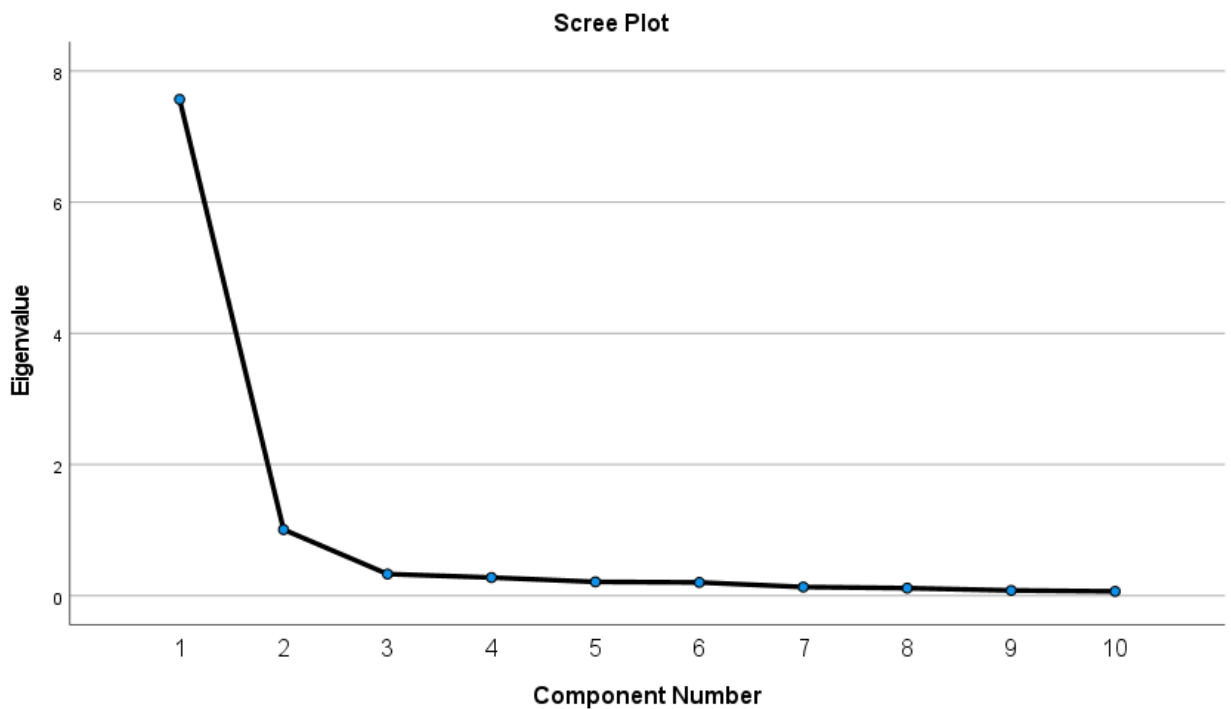
Figure 6.2: Catell's scree plot for international CSR drivers influencing CSR practices of SMEs

6.6.2.3 Presenting the summary of factor analysis on factors (international CSR drivers) influencing CSR practices of SMEs

Fifteen variables (international CSR drivers) were initially assessed to determine the most significant international CSR drivers that influence CSR practices of SMEs. However, with the initial assessment, five of the 15 variables had strong cross-loadings (75% and more) and were

subsequently deleted. Hence the FA was conducted utilising the 10 remaining variables. The descriptive statistics were calculated as the first step of the analysis, and thereafter, FA utilising PCA was adopted in the second stage. To perform factor analysis, the appropriateness of the data was assessed and results reported in Section 6.6.2.1. The Kaiser-Meyer-Olkin value was 0.925, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at $p = 0.000$ ($p < 0.5$), supporting the factorability of the correlation matrix.

The FA utilising PCA revealed two components with eigenvalues greater than 1, explaining 75.69% and 10.09% of the variance respectively. A careful scrutiny of the scree plot indicated a clear break after the second component; hence, the study retained the two components for further investigation. This study adopts the use of varimax rotation to aid the interpretation of the two components retained as well as for loading the variables. The results in Table 6.18 reveal that both components illustrate strong loadings, with all variables loaded above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the components as all variable (international CSR drivers) communalities values are above 0.4, though the lowest communalities value of 0.784 is exhibited by C21_C_B: CSR practices being driven through trade unions (who internally communicate and conduct negotiations between employees and management of organisations and externally are unencumbered by corporate rules and regulations, making it easy to monitor the compliance by organisations), indicating that the variable contributed the least to the component. However, there was a positive correlation between the two components as evident from the total variance (85.79%) explained by the components. Considering the loading pattern of the factors influencing SME CSR practices, the variables that converge on component 1 represent *'CSR practices driven by global standardisation'*, while component 2 could be regarded as *'CSR practices driven by stakeholder activism'*.

Table 6.18: Pattern/structure coefficients for international CSR drivers influencing the CSR practices of SMEs

Coding	Variables	Component		Communalities
		1	2	
C21_A_C	CSR practices being driven by Integrated Reporting. (This provides insights into the nature and quality of the organisation's relationships with its key stakeholders)	**0.880**	0.364	0.906
C21_A_A	CSR practices being driven by International Social and Environmental Accreditation and Labelling (ISEAL) Alliance 2012. (A set of global standards and codes of business practice pertaining to environmental and social standards)	**0.859**	0.393	0.892
C21_A_E	CSR practices being driven by the International Organisations of Standardisation (ISO) 14000. (A standard referring to Environmental Management)	**0.846**	0.391	0.869
C21_A_D	CSR practices being driven by the International Organisations of Standardisation (ISO) 26000. (A standard referring to Social Responsibility)	**0.845**	0.435	0.903

Table 6.18: (Continued)

Coding	Variables	Component 1	Component 2	Communalities
C21_A_B	CSR practices being driven by Global Reporting Initiative (GRI) Standards. (Allowing organisations to publicly report on a range of economic, environmental and social impacts to their business, which includes organisations reporting on their positive or negative contributions towards sustainable development)	**0.844**	0.397	0.870
C21_C_D	CSR practices being driven through business associations. (Who advocate economic growth, development, peace and prosperity allowing for the building of inclusive entrepreneurship ecosystems)	0.331	**0.852**	0.835
C21_C_E	CSR practices driven by the media as an activist for CSR	0.361	**0.848**	0.849
C21_C_C	CSR practices being driven through international NGOs. (Who partner with organisations advocating that organisations contribute to the reconstruction of the global public domain where organisations practice their businesses)	0.382	**0.829**	0.834
C21_C_A	CSR practices being driven through development agencies. (Who engage organisations to increase the developmental impact of their business operations)	0.442	**0.801**	0.836
C21_C_B	CSR practices being driven through trade unions. (Who internally communicate and conduct negotiations between employees and management of organisations and externally are unencumbered by corporate rules and regulations making it easy to disseminate and monitor the compliance by organisations)	0.421	**0.779**	0.784
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization a. Rotation converged in 3 iterations				

Factor 1: CSR practices driven by global standardisation includes five variables: CSR practices being driven by Integrated Reporting (this provides insight into the nature and quality of the organisation's relationships with its key stakeholders); CSR practices being driven by International Social and Environmental Accreditation and Labelling (ISEAL) Alliance 2012 (a set of global standards and codes of business practice pertaining to environmental and social standards); CSR practices being driven by the International Organisations of Standardisation (ISO) 14000 (a standard referring to Environmental Management); CSR practices being driven by the International Organisations of Standardisation (ISO) 26000 (a standard referring to Social Responsibility): and CSR practices being driven by Global Reporting Initiative (GRI) standards (allowing organisations to report publicly on a range of economic, environmental and social impacts to their business, including reports on their positive or negative contributions towards sustainable development).

Factor 2: CSR practices driven by stakeholder activism includes five variables: CSR practices being driven through business associations (who advocate economic growth, development, peace and prosperity, allowing for the building of inclusive entrepreneurship ecosystems); CSR

practices driven by the media as an activist for CSR; CSR practices being driven through international NGOs (who partner with organisations advocating that organisations contribute to the reconstruction of the global public domain where organisations practice their businesses); CSR practices being driven through development agencies (who engage organisations to increase the developmental impact of their business operations); CSR practices being driven through trade unions (who internally communicate and conduct negotiations between employees and management of organisations and externally are unencumbered by corporate rules and regulations, making it easy to monitor the compliance by organisations).

6.6.3 National CSR drivers influencing CSR practices of SMEs

As part of the questionnaire survey, SMEs were asked to evaluate various national CSR drivers that influence their organisation's CSR practices. These national CSR drivers were categorised under six sub-headings: political reforms; cultural tradition; socio-economic priorities; maintaining market access; governance gaps; and crises response. Appendix E 3 indicates that the internal consistency for the national CSR drivers influencing the CSR practices of SMEs is reliable and acceptable, as the Cronbach's alpha values for all the variables are above 0.70, with the total Cronbach's alpha coefficient at 0.988.

The results (see Table 6.19) are indicative of the extent to which various national CSR drivers influence CSR practices of SMEs. As with the international CSR drivers, all 33 variables listed in Table 6.19 have MSs between 1.76 and 2.50, clearly indicating that although limited, SMEs in the South African construction industry's CSR practices are driven by national CSR drivers. Data from Table 6.19, relative to "political reforms", makes evident that CSR practices being driven by "Broad-Based Black Economic Empowerment (BBBEE)" ranked the highest as indicated by the MS 2.49; followed by "collective business action for social upliftment" (MS = 2.39); and "corporate governance" (MS = 2.38), all of which aim to deliver democracy and restore the injustices of the past. Conversely, CSR practices being driven through "political mechanisms such as subsidise being provided to organisations for undertaking CSR activities" (MS = 2.15), and "political mechanisms such as the deploying of 'soft' regulations" (MS = 2.05) ranked eighth and ninth, respectively.

With reference to "cultural tradition", results suggest that CSR practices being driven by "humanism (Ubuntu) practices within various demographics" ranked the highest (MS = 2.35); accompanied by "cultural values within various demographics" (MS = 2.23). On the other hand,

CSR practices driven by "religious values within various demographics" was ranked least (MS = 2.15).

Data relating to "socio-economic priorities" clearly illustrates that CSR practices driven by "the provision of infrastructure development" ranked the highest (MS = 2.35), followed by "the provision of adequate education" (MS = 2.34), and "the provision of poverty alleviation practices" (MS = 2.27), all of which are needed in developing communities struggling with socio-economic development challenges. This leaves CSR practices being driven by "green marketing challenges in society", "consumer protection challenges in society", and "climate change challenges" ranked sixth, seventh and eighth, respectively.

Similarly, data relative to "maintaining market access" affirms that CSR practices being driven by "competitive advantage to maintain market access" are also considered a limited driver towards the SME CSR practices in their businesses, scoring a MS of 2.33. Despite this statistic, it is worthy to note from the total average percentages reported, that approximately 74% of the SMEs rate this variable as a driver towards CSR practices in their businesses.

Findings relative to "governance gaps", in addition, suggest that CSR practices driven by "governance gaps that fail to provide adequate education to communities in need" ranked the highest (MS = 2.41), accompanied by "governance gaps that fail to provide adequate roads to developing communities in need" (MS = 2.39), while CSR practices driven by "governance gaps that fail to provide adequate housing to developing communities in need" received the lowest ranking (MS = 2.32).

Lastly, based on the findings in relation to "crises response", it is evident that CSR practices driven by "health-related crises, such as COVID-19" ranked the highest (MS = 2.50) followed by "social crises such as widespread unemployment" (MS = 2.43). Furthermore, CSR practices driven by "environmental crises such as climate change, etc." was ranked least (MS = 2.24).

Even though the MSs pertaining to this section illustrated that CSR practices of SMEs in the South African construction industry are limitedly driven by national CSR drivers, the overall total average percentages show that 71% of the SMEs rated the variables as drivers towards CSR practices in their businesses. Furthermore, as part of the model development process for this study, a further analysis on the national CSR drivers was conducted using factor analysis (FA) with the aid of practical component analysis (PCA) as an extraction method. FA results

relative to the underlying national drivers that influence the CSR practices of SMEs in the South African construction industry are illustrated in the subsequent section.

Table 6.19: Mean statistics for national CSR drivers influencing CSR practices of SMEs

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Not a Driver	Limited Driver	Significant Driver	Highly Significant Driver			
		1	2	3	4			
Political reforms								
C22_A_B	CSR practices being driven by Broad-Based Black Economic Empowerment (BBBEE) to deliver democracy and to restore the injustices of the past	22.7	30.0	22.7	24.5	2.49	1.098	1
C22_A_D	CSR practices being driven by collective business action for social upliftment	21.8	38.2	19.1	20.9	2.39	1.050	2
C22_A_C	CSR practices being driven by corporate governance to deliver democracy and to restore the injustices of the past	23.6	36.4	18.2	21.8	2.38	1.075	3
C22_A_E	CSR practices being driven by collective business action for business ethics	24.5	34.5	20.9	20.0	2.36	1.064	4
C22_A_A	CSR practices being driven through affirmative action to deliver democracy and to restore the injustices of the past	30.0	26.4	24.5	19.1	2.33	1.101	5
C22_A_G	CSR practices being driven through political mechanisms that stimulate new and existing business associations.	30.9	34.5	17.3	17.3	2.21	1.067	6
C22_A_F	CSR practices being driven through political mechanism in the form of ministerial leadership	29.1	37.3	19.1	14.5	2.19	1.018	7
C22_A_H	CSR practices being driven through political mechanisms such as subsidise being provided to organisations for undertaking CSR activities	32.7	33.6	20.0	13.6	2.15	1.030	8
C22_A_I	CSR practices being driven through political mechanisms such as the Deploying of 'soft' regulations	30.0	34.5	35.5	0.0	2.05	0.811	9
C22_TAP1	*Total average percentages*	*27.3*	*33.9*	*21.9*	*16.9*		*72.7*	
Cultural tradition								
C22_B_E	CSR practices being driven by humanism (Ubuntu) practices within various demographics	30.0	27.3	20.0	22.7	2.35	1.138	1
C22_B_A	CSR practices being driven by cultural values within various demographics	30.0	34.5	18.2	17.3	2.23	1.064	2
C22_B_C	CSR practices being driven by communitarianism practices within various demographics	31.8	31.8	20.9	15.5	2.20	1.056	3

Table 6.19: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Not a Driver	Limited Driver	Significant Driver	Highly Significant Driver			
		1	2	3	4			
C22_B_D	CSR practices being driven by charity practices within various demographics	30.9	35.5	17.3	16.4	2.19	1.054	4
C22_B_B	CSR practices being driven by religious values within various demographics	37.3	28.2	17.3	17.3	2.15	1.107	5
C22_TAP2	*Total average percentages*	*32.0*	*31.5*	*18.7*	*17.8*		*68*	
	Socio-economic priorities							
C22_C_C	CSR practices being driven by the provision of infrastructure development needed in developing communities that struggle with socio-economic development challenges	29.1	27.3	22.7	20.9	2.35	1.114	1
C22_C_D	CSR practices being driven by the provision of adequate education needed in developing communities that struggle with socio-economic development challenges	27.3	30.9	22.7	19.1	2.34	1.078	2
C22_C_B	CSR practices being driven by the provision of poverty alleviation practices needed in developing communities that struggle with socio-economic development challenges	28.2	29.1	30.0	12.7	2.27	1.013	3
C22_C_A	CSR practices being driven by the provision of adequate health-care needed in developing communities that struggle with socio-economic development challenges	30.9	30.0	20.0	19.1	2.27	1.100	4
C22_C_F	CSR practices driven by fair trade challenges in society	29.1	32.7	20.9	17.3	2.26	1.064	5
C22_C_G	CSR practices driven by green marketing challenges in society	30.9	31.8	21.8	15.5	2.22	1.053	6
C22_C_E	CSR practices driven by consumer protection challenges in society	32.7	29.1	23.6	14.5	2.20	1.056	7
C22_C_H	CSR practices driven by climate change challenges	35.5	26.4	25.5	12.7	2.15	1.051	8
C22_TAP3	*Total average percentages*	*30.5*	*29.7*	*23.4*	*16.5*		*69.6*	
	Maintaining market access							
C22_D_A	CSR practices driven by competitive advantage to maintain market access	26.4	34.5	19.1	20.0	2.33	1.076	1
C22_TAP4	*Total average percentages*	*26.4*	*34.5*	*19.1*	*20.0*		*73.6*	
	Governance gaps							
C22_E_E	CSR practices driven by governance gaps that fail to provide adequate education to communities in need	28.2	26.4	21.8	23.6	2.41	1.136	1
C22_E_B	CSR practices driven by governance gaps that fail to provide adequate roads to developing communities in need	27.3	30.0	19.1	23.6	2.39	1.126	2

Table 6.19: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Not a Driver	Limited Driver	Significant Driver	Highly Significant Driver			
		1	2	3	4			
C22_E_C	CSR practices driven by governance gaps that fail to provide adequate electricity supply to developing communities in need	27.3	29.1	22.7	20.9	2.37	1.099	3
C22_E_D	CSR practices driven by governance gaps that fail to provide adequate health-care to communities in need	29.1	29.1	18.2	23.6	2.36	1.139	4
C22_E_A	CSR practices driven by governance gaps that fail to provide adequate housing to developing communities in need	30.0	29.1	20.0	20.9	2.32	1.116	5
C22_TAP5	*Total average percentages*	*28.4*	*28.7*	*20.4*	*22.5*		*71.6*	
	Crises response							
C22_F_D	CSR practices driven by health-related crises, such as COVID-19	29.1	22.7	17.3	30.9	2.50	1.210	1
C22_F_B	CSR practices driven by social crises such as widespread unemployment, etc.	28.2	25.5	21.8	24.5	2.43	1.145	2
C22_F_A	CSR practices driven by economic crises such as an economic recession, etc.	30.0	25.5	20.0	24.5	2.39	1.158	3
C22_F_E	CSR practices driven by industrial crises such as when organisational systems fail causing a ripple effect on stakeholders and the surrounding society	30.0	26.4	21.8	21.8	2.35	1.130	4
C22_F_C	CSR practices driven by environmental crises such as climate change, etc.	31.8	31.8	17.3	19.1	2.24	1.100	5
C22_TAP6	*Total average percentages*	*29.8*	*26.4*	*19.6*	*24.2*		*70.2*	
C21_OTAP	*Overall total average percentages*	*29.1*	*30.8*	*20.5*	*19.7*		*71*	

6.6.4 Identifying underlying national CSR drivers that influence CSR practices of SMEs

Though the most significant national CSR drivers influencing CSR practices of SMEs were identified in the preceding section, via descriptive statistics by ranking in hierarchical order, there is a high possibility that some national CSR drivers may be interrelated through an underlying structure of primary factors. Thus, FA was performed.

6.6.4.1 KMO Adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity Test on the variables (national CSR drivers) influencing the CSR practices of SMEs, the analysis of results (see Table 6.20) revealed a KMO measure of sampling adequacy at 0.933, which is greater than 0.6 and less than 1, signifying that the sample is satisfactory for FA. Secondly, the Bartlett's Sphericity Test shows

the p value is = 0.000 which is less than 0.05. Both of these tests recommend that FA can be conducted with the data.

Table 6.20: KMO and Bartlett's Test on variables (national CSR drivers) influencing CSR practices of SMEs

Test		Value	Remark
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.933	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	3646.999	Significant and adequate for FA utilising PCA
	df	231	
	Sig.	0.000	

6.6.4.2 Principal components factors (national CSR drivers) influencing CSR practices of SMEs

Adopting PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotational method, Table 6.21 shows that three components have eigenvalues greater than 1. These were extracted from the variables pertaining to national CSR drivers influencing CSR practices of SMEs. The eigenvalues of the three extracted components are 15.69, 1.46 and 1.05 respectively. This result indicates that the first component is capable of explaining 71.33% of the variance, the second component is capable of explaining 6.62% of the variance, and the third component is capable of explaining 4.77% of the variance. Combined, the three components are capable of explaining 82.72% of the total variance, affirming that these components have a highly significant influence on SME CSR practices.

Table 6.21: Total variance explained by factors (national CSR drivers) influencing CSR practices of SMEs

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	15.692	71.327	71.327	15.692	71.327	71.327	7.650	34.774	34.774
2	1.456	6.617	77.945	1.456	6.617	77.945	6.546	29.753	64.527
3	1.050	4.773	82.718	1.050	4.773	82.718	4.002	18.190	82.718
4	0.813	3.696	86.413						
5	0.589	2.678	89.092						
6	0.374	1.700	90.792						
7	0.342	1.554	92.346						
8	0.265	1.204	93.551						
9	0.216	0.980	94.531						
10	0.186	0.844	95.374						
11	0.180	0.818	96.192						

Table 6.21: (Continued)

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
12	0.160	0.729	96.921						
13	0.127	0.577	97.498						
14	0.106	0.481	97.979						
15	0.088	0.400	98.378						
16	0.079	0.359	98.738						
17	0.078	0.355	99.092						
18	0.060	0.271	99.364						
19	0.056	0.253	99.616						
20	0.040	0.182	99.798						
21	0.029	0.130	99.929						
22	0.016	0.071	100.000						
Extraction Method: Principal Component Analysis									

To further confirm the number of components that can be retained, a Catell's scree test was performed on the variables and, as indicated by Figure 6.3 (scree plot), three components are retained because three components are situated above the elbow on the scree plot, meaning that these components contribute to the most variance in the data set, which confirms the results displayed in Table 6.21.
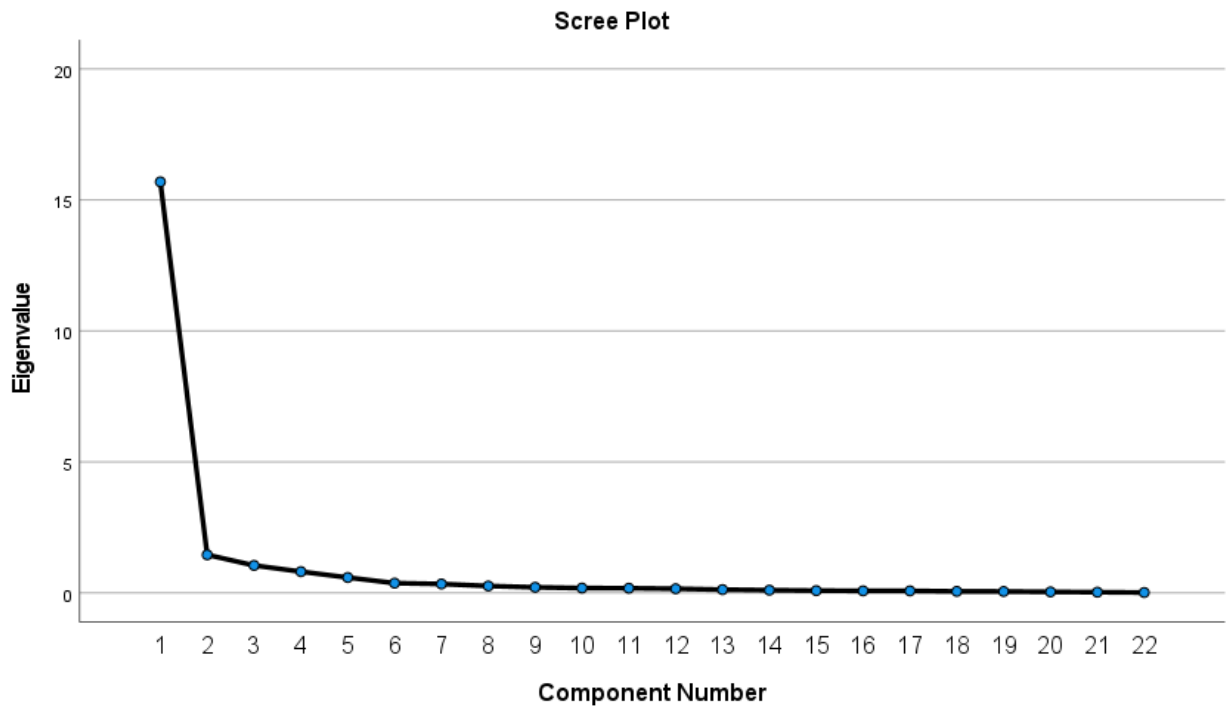
Figure 6.3: Catell's scree plot for national CSR drivers influencing CSR practices of SMEs

6.6.4.3 Summary of FA on factors (national CSR drivers) influencing CSR practices of SMEs

In total, 33 variables (national CSR drivers) were assessed to determine the most significant national CSR drivers influencing CSR practices of SMEs. With the initial assessment, 11 of the 33 variables had strong cross-loadings (75% and more) and were subsequently deleted. Hence, the FA was conducted utilising the 22 remaining variables. The descriptive statistics were calculated as the first step of the analysis, and thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was assessed and results reported in Section 6.6.4.1. The Kaiser-Meyer-Olkin value was 0.933, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at $p = 0.000$ ($p < 0.5$), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed three components with eigenvalues greater than 1, explaining 71.33%, 6.62% and 4.77% of the variance respectively. A careful scrutiny of the scree plot indicated a clear break after the third component; hence, the study retained the three components for further investigation. This study adopts the use of varimax rotation to aid the interpretation of the three components retained as well as for loading the variables. The results (see Table 6.22) reveal that all three components demonstrate strong loadings, with all variables loaded above 0.3 on the rotated components matrix. The

communalities values show that the variables fit well into the components as all the variable (national CSR drivers) communalities values are above 0.4, though the lowest communalities value of 0.643 is exhibited by C22_A_B: CSR practices being driven by Broad-Based Black Economic Empowerment (BBBEE) to deliver democracy and to restore the injustices of the past, which means that this variable contributed the least to the component. However, there was a positive correlation between the three components as evident from the total variance (82.72%) explained by the components. Considering the loading pattern of the factors influencing SME CSR practices, the variables that converge on component 1 represent "CSR practices driven by socio-economic priorities and concerns". Component 2 is considered "CSR practices driven by political reforms". Component 3 could be regarded as "CSR practices driven by culture and tradition".

Table 6.22: Pattern/structure coefficients for national CSR drivers influencing CSR practices of SMEs

Coding	Variables	Component			Communalities
		1	2	3	
C22_F_D	CSR practices driven by health-related crises, such as COVID-19	**0.846**			0.859
C22_F_E	CSR practices driven by industrial crises such as when organisational systems fail causing a ripple effect on stakeholders and the surrounding society	**0.826**	0.334		0.878
C22_F_A	CSR practices driven by economic crises such as an economic recession etc.	**0.813**		0.332	0.854
C22_F_B	CSR practices driven by social crises such as widespread unemployment, etc.	**0.804**		0.335	0.822
C22_E_D	CSR practices driven by governance gaps that fail to provide adequate health-care to communities in need	**0.768**	0.453		0.866
C22_E_E	CSR practices driven by governance gaps that fail to provide adequate education to communities in need	**0.765**	0.440	0.304	0.871
C22_E_B	CSR practices driven by governance gaps that fail to provide adequate roads to developing communities in need	**0.738**	0.510		0.872
C22_E_C	CSR practices driven by governance gaps that fail to provide adequate electricity supply to developing communities in need	**0.734**	0.502		0.874
C22_F_C	CSR practices driven by environmental crises such as climate change, etc.	**0.723**	0.373	0.337	0.775

Table 6.22: (Continued)

Coding	Variables	Component 1	Component 2	Component 3	Communalities
C22_E_A	CSR practices driven by governance gaps that fail to provide adequate housing to developing communities in need	**0.696**	0.498	0.358	0.860
C22_A_G	CSR practices being driven through political mechanisms that stimulate new and existing business associations.		**0.829**		0.814
C22_A_F	CSR practices being driven through political mechanism in the form of ministerial leadership		**0.829**		0.825
C22_A_A	CSR practices being driven through affirmative action to deliver democracy and to restore the injustices of the past	0.433	**0.745**		0.785
C22_A_C	CSR practices being driven by corporate governance to deliver democracy and to restore the injustices of the past	0.436	**0.718**	0.311	0.803
C22_A_E	CSR practices being driven by collective business action for business ethics	0.445	**0.714**		0.795
C22_A_I	CSR practices being driven through political mechanisms such as the deploying of 'soft' regulations	0.357	**0.701**		0.682
C22_A_H	CSR practices being driven through political mechanisms such as subsidise being provided to organisations for undertaking CSR activities	0.420	**0.699**	0.367	0.800
C22_A_B	CSR practices being driven by Broad-Based Black Economic Empowerment (BBBEE) to deliver democracy and to restore the injustices of the past	0.321	**0.688**		0.643
C22_B_B	CSR practices being driven by religious values within various demographics	0.388	0.340	**0.803**	0.912
C22_B_A	CSR practices being driven by cultural values within various demographics	0.417	0.308	**0.782**	0.880
C22_B_C	CSR practices being driven by communitarianism practices within various demographics		0.421	**0.781**	0.876
C22_B_D	CSR practices being driven by charity practices within various demographics	0.421	0.359	**0.738**	0.850

Extraction Method: Principal Component Analysis
 Rotation Method: Varimax with Kaiser Normalization
a.   Rotation converged in six6 iterations

Factor 1: CSR practices driven by socio-economic priorities and concerns includes 10 variables: CSR practices driven by health-related crises, such as COVID-19; CSR practices driven by industrial crises such as when organisational systems fail causing a ripple effect on stakeholders and the surrounding society; CSR practices driven by economic crises such as an economic recession; CSR practices driven by social crises such as widespread unemployment; CSR practices driven by governance gaps that fail to provide adequate health-care to communities in need; CSR practices driven by governance gaps that fail to provide adequate education to communities in need; CSR practices driven by governance gaps that fail to provide adequate roads to developing communities in need; CSR practices driven by governance gaps that fail to provide adequate electricity supply to developing communities in need; CSR practices driven by environmental crises such as climate change; and CSR practices driven by governance gaps that fail to provide adequate housing to developing communities in need.

Factor 2: CSR practices driven by political reforms includes eight variables: CSR practices being driven through political mechanisms that stimulate new and existing business associations; CSR practices being driven through political mechanism in the form of ministerial leadership; CSR practices being driven through affirmative action to deliver democracy and to restore the injustices of the past; CSR practices being driven by corporate governance to deliver democracy and to restore the injustices of the past; CSR practices being driven by collective business action for business ethics; CSR practices being driven through political mechanisms such as the deploying of 'soft' regulations; CSR practices being driven through political mechanisms such as subsidies being provided to organisations for undertaking CSR activities; and CSR practices being driven by Broad-Based Black Economic Empowerment (BBBEE) to deliver democracy and to restore the injustices of the past.

Factor 3: CSR practices driven by culture and tradition includes four variables: CSR practices being driven by religious values within various demographics; CSR practices being driven by cultural values within various demographics; CSR practices being driven by communitarianism practices within various demographics; and CSR practices being driven by charity practices within various demographics.

6.6.5 ANOVA: CSR drivers influencing CSR practices of SMEs

ANOVA test results reported in Table 6.23, Table 6.24 and Table 6.25 confirm that there was no statistically significant difference pertaining to the MSs of SMEs in relation to CSR drivers

influencing their CSR practices: $F_{(5, 104)} = 1.89$, $p = 0.10$, and the calculated eta squared effect of size was medium with a value of 0.08.

Table 6.23: Statistics of CSR drivers influencing CSR practices of SMEs

SMEs	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Grade 1	46	2.41	0.914	0.135	2.14	2.68	1	4
Grade 2	26	2.06	0.870	0.171	1.71	2.41	1	4
Grade 3	10	2.56	0.959	0.303	1.87	3.25	1	4
Grade 4	13	1.70	0.716	0.198	1.27	2.13	1	3
Grade 5	6	2.02	0.945	0.386	1.03	3.02	1	3
Grade 6	9	2.28	0.715	0.238	1.74	2.83	1	3
Total	**110**	**2.23**	**0.892**	**0.085**	**2.06**	**2.40**	**1**	**4**

Table 6.24: Test of homogeneity of variance

Levene Statistic	df1	df2	Sig.
0.630	5	104	0.677

Table 6.25: ANOVA on CSR drivers influencing CSR practices of SMEs

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	7.236	5	1.447	1.893	.102
Within Groups	79.519	104	0.765		
Total	**86.756**	**109**			

Calculation of effect of size for the ANOVA test:

$$EtaSquared = \frac{Sum\ of\ Squares\ Between\ Groups}{Total\ Sum\ of\ Squares}$$

EtaSquared = 7.236 / 86.756 = 0.08

6.7 SME CSR implementation challenges: Objective 3

The preceding Sections 6.5 and 6.6 clarify the relationship between the integration of CSR and SBP, as well as the international and national CSR drivers through a thorough data analysis. As part of the research objectives of this study, this section aims to identify and evaluate the challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR in their businesses. As part of the investigation, CSR implementation challenges will be identified and evaluated on a normative management level, strategic management level, operative management level and environmental management level.

As part of the research constructs, this set of data specific to SME CSR implementation challenges should undergo a reliability analysis utilising Cronbach's alpha which is presented in Appendix E 4. Appendix E 4 indicates that the internal consistency for SME CSR implementation challenges is reliable and acceptable as the Cronbach's alpha values for all the variables are above 0.70, with the total Cronbach's alpha coefficient at 0.936.

Continuing from the reliability test, the results (see Table 6.26) present the implementation challenges that SMEs experience on different management levels pertaining to CSR. The 26 variables listed in Table 6.26 present mean scores (MSs) between 2.91 and 3.45, indicating opinions of SMEs in the South African construction industry ranging between agree and strongly agree. The data relative to the CSR implementation challenges at the "normative management level" makes evident that "lack of integration in the SMEs culture and the SMEs business norms" ranked first (MS = 3.22) and "lack of integration in the SMEs culture and the SMEs business objectives" ranked second (MS = 3.16). Finally, "lack of commitment and motivation of SME managers and owners towards CSR" ranked last (MS = 2.98).

According to the data comparative to the CSR implementation challenges at the "strategic management level", "SMEs have limited financial resources to undertake CSR practices" ranked the highest (MS = 3.45), followed by "SMEs have limited human resources to undertake CSR practices" (MS = 3.36), and "SMEs have limited media support to undertake CSR practices" (MS = 3.27), with "Reluctance of SMEs to communicate CSR practices internally to the business" ranking least (MS = 3.01).

Based on the data relating to the CSR implementation challenges at the "operative management level", it is apparent that "SMEs find it difficult to adapt CSR practices and standards to their internal business process" ranked first (3.31) and "lack of CSR skills and knowledge" ranked second (MS = 3.30). On the contrary, "high levels of bureaucracy" ranked

last (MS = 3.05). Furthermore, from the MSs and ranking of the variables relative to the "operative management level", and from the total average percentages, nearly 88% of the SMEs agree that the variables are representative of challenges with regard to the implementation of CSR in their businesses.

Lastly, data pertaining to CSR implementation challenges at the "environmental management level" shows that "poor collaboration among SMEs" ranked first (MS = 3.34), "unstable economic conditions" ranked second (MS = 3.31), and "lack of CSR culture in SMEs" ranked third (MS = 3.25). Conversely, "poor supplier care by SMEs" ranked sixth (MS = 2.92) and "poor customer care by SMEs" ranked seventh (MS = 2.91).

Holistically, it is evident from the overall total average percentages (reported in Table 6.26) that nearly 85% of the SMEs agree that the variables across all four management levels are representative of their challenges pertaining to the implementation of CSR in their businesses. Further to the descriptive statistics in Table 6.26, an ANOVA test was performed on the data, represented in the subsequent section.

Table 6.26: Mean statistics and frequencies pertaining to SME CSR implementation challenges

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Strongly Disagree	Disagree	Agree	Strongly Agree			
		1	2	3	4			
	Normative management level							
C31_A_B	Lack of integration in the SMEs culture and the SMEs business norms	2.7	10.9	48.2	38.2	3.22	0.747	1
C31_A_A	Lack of integration in the SMEs culture and the SMEs business objectives	4.5	8.2	53.6	33.6	3.16	0.761	2
C31_A_C	Lack of integration in the SMEs culture and the SMEs business values	4.5	12.7	52.7	30.0	3.08	0.780	3
C31_A_D	Lack of commitment and motivation of SME managers and owners towards CSR	10.0	13.6	44.5	31.8	2.98	0.928	4
C31_TAF1	*Total average percentages*	*5.4*	*11.4*	*49.8*	*33.4*		*83.2*	
	Strategic management level							
C31_B_C	SMEs have limited financial resources to undertake CSR practices	2.7	5.5	35.5	56.4	3.45	0.725	1
C31_B_D	SMEs have limited human resources to undertake CSR practices	3.6	4.5	43.6	48.2	3.36	0.739	2
C31_B_J	SMEs have limited media support to undertake CSR practices	4.5	4.5	50.0	40.9	3.27	0.753	3
C31_B_H	SMEs have limited information to undertake CSR practices	3.6	7.3	48.2	40.9	3.26	0.750	4
C31_B_K	SMEs find it difficult to justify or legitimise CSR efforts, since benefits are challenging to measure	3.6	10.0	43.6	42.7	3.25	0.783	5

Table 6.26: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Strongly Disagree	Disagree	Agree	Strongly Agree			
		1	2	3	4			
C31_B_I	SMEs have limited legal support to undertake CSR practices	4.5	8.2	45.5	41.8	3.25	0.792	6
C31_B_F	SMEs have limited knowledge to undertake CSR practices	3.6	9.1	51.8	35.5	3.19	0.748	7
C31_B_G	SMEs have limited awareness to undertake CSR practices	5.5	10.9	43.6	40.0	3.18	0.837	8
C31_B_E	SMEs have limited time to undertake CSR practices	3.6	12.7	46.4	37.3	3.17	0.788	9
C31_B_B	Reluctance of SMEs to communicate CSR practices externally to the business	8.2	12.7	47.3	31.8	3.03	0.883	10
C31_B_A	Reluctance of SMEs to communicate CSR practices internally to the business	9.1	13.6	44.5	32.7	3.01	0.914	11
C31_TAF2	*Total average percentages*	*4.8*	*9.0*	*45.5*	*40.7*		*86.2*	
	Operative management level							
C31_C_D	SMEs find it difficult to adapt CSR practices and standards to their internal business process	0.0	7.3	54.5	38.2	3.31	0.602	1
C31_C_C	Lack of CSR skills and knowledge	0.9	10.0	47.3	41.8	3.30	0.685	2
C31_C_B	Standardised CSR guidelines are too complex and inapplicable for SMEs	0.9	11.8	54.5	32.7	3.19	0.670	3
C31_C_A	High levels of bureaucracy	6.4	10.9	53.6	29.1	3.05	0.811	4
C31_TAF3	*Total average percentages*	*2.1*	*10.0*	*52.5*	*35.5*		*88*	
	Environmental management level							
C31_D_C	Poor collaboration among SMEs	1.8	9.1	42.7	46.4	3.34	0.720	1
C31_D_A	Unstable economic conditions	2.7	2.7	55.5	39.1	3.31	0.660	2
C31_D_E	Lack of CSR culture in SMEs	1.8	10.9	48.2	39.1	3.25	0.719	3
C31_D_B	Negative government regulations and policies	2.7	11.8	46.4	39.1	3.22	0.759	4
C31_D_G	The location of the SME business	7.3	10.9	49.1	32.7	3.07	0.854	5
C31_D_F	Poor supplier care by SMEs	5.5	25.5	40.9	28.2	2.92	0.869	6
C31_D_D	Poor customer care by SMEs	8.2	21.8	40.9	29.1	2.91	0.914	7
C31_TAF4	*Total average percentages*	*4.3*	*13.2*	*46.2*	*36.2*		*82.4*	
C31_OTAF	*Overall total average percentages*	*4.2*	*10.9*	*48.5*	*36.5*		*85*	

6.7.1 ANOVA: SME CSR implementation challenges

The ANOVA test results (reported in Table 6.27, Table 6.28 and Table 6.29) confirm that there was no statistically significant difference pertaining to the MSs of SMEs in relation to CSR implementation challenges: $F_{(5, 104)} = 1.33$, $P = 0.26$, and the calculated eta squared effect of size was medium with a value of 0.06.

Table 6.27: Statistics of SME CSR implementation challenges

SMEs	N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Grade 1	46	3.20	0.540	0.080	3.04	3.36	2	4
Grade 2	26	3.32	0.425	0.083	3.15	3.49	3	4
Grade 3	10	3.00	0.203	0.064	2.85	3.14	3	4
Grade 4	13	3.22	0.401	0.111	2.98	3.46	3	4
Grade 5	6	2.99	0.616	0.252	2.34	3.63	2	4
Grade 6	9	2.97	0.512	0.171	2.57	3.36	2	4
Total	**110**	**3.18**	**0.483**	**0.046**	**3.09**	**3.27**	**2**	**4**

Table 6.28: Test of homogeneity of variances

Levene Statistic	df1	df2	Sig.
2.963	5	104	0.015

Table 6.29: ANOVA on SME CSR implementation challenges at a strategic management level

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.534	5	0.307	1.333	0.256
Within Groups	23.940	104	0.230		
Total	**25.475**	**109**			

Calculation of effect of size for the ANOVA test:

$$EtaSquared = \frac{Sum\ of\ Squares\ Between\ Groups}{Total\ Sum\ of\ Squares}$$

EtaSquared = 1.534 / 25.475 = 0.06

6.8 CSR activities considered by SMEs to achieve sustainable business performance: Objective 4

The preceding sections (namely Section 6.5, Section 6.6 and Section 6.7) have clarified the relationship between the integration of CSR and SBP, the international and national CSR drivers, and the CSR implementation challenges, through rigorous data analysis. As part of the model development process for this research study, this section aims to establish the CSR activities that need to be considered by SMEs in the South African construction industry to achieve SBP by measuring the level of importance that SMEs attach to activities, relative to each CSR dimension. As part of this section, SMEs were first asked to evaluate the CSR activities associated to the employee dimension. Thereafter, SMEs were asked to evaluate the CSR activities associated with the following dimensions: shareholder dimension; customer dimension; supplier and partner dimension; environment and resources dimension; community dimension; competitors dimension; and NGOs dimension.

6.8.1 CSR activities associated with the CSR employee dimension

The CSR activities that influence the CSR employee dimension were categorised under eight sub-dimensions: occupational health and safety of employees; legal working hours and rest time; wages and welfare; staff employment; education and training; freedom of association and bargaining; harmonious labour/management relationship; and human rights measures.

Section 6.4 provided evidence that the responses from the SMEs can be considered reliable. However, in addition, the researcher decided that as with Sections 6.5, 6.6 and 6.7, a spot-check for this set of data specific to the CSR activities associated with CSR employee dimension should undergo a reliability analysis utilising Cronbach's alpha (as presented in Appendix E 5). Appendix E 5 indicates that internal consistency for the CSR activities is reliable and acceptable as the Cronbach's alpha values for all CSR activities are above 0.70, with the total Cronbach's alpha coefficient at 0.986.

Continuing from the reliability test, the results in Table 6.30 present the level of importance that SMEs attach to CSR activities under the sub-dimensions related to the CSR "employee dimension". Thus, observing the data relative to the "occupational health and safety of employees", it is evident that "providing a safe working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)", ranked first (MS = 3.72), "providing a healthy working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)" ranked second (MS = 3.71)

and "providing safety inductions for employees" ranked third (MS = 3.71). Although SMEs indicated that CSR activities "contribute towards design review from construction hazard perspective", "regular health checks" and "providing access to on-site and off-site facilities e.g. staff areas, drinking water, food" are all very important, these three CSR activities ranked the lowest, with MSs reflecting 3.59, 3.55 and 3.54, respectively. Furthermore, with the MSs and the ranking of the CSR activities relative to the "occupational health and safety of employees", the total average percentages disclosed that nearly 95% of the SMEs rated the CSR activities as very important.

Analysing the data relative to the "legal working hours and rest time", all three CSR activities indicate MSs between 3.26 and 4.00, representing that SMEs consider CSR activities as very important. Deducing from the data, it is evident that "compliance with working hours' regulation" is the top ranked CSR activity indicating an MS of 3.52. Conversely, "allocate appropriate working hours according to the type of work" ranked least (3.46).

Further, observing the data relative to "wages and welfare", it is once again clear that all seven CSR activities listed have MSs between 3.26 and 4.00, indicative that SMEs consider CSR activities to be very important. A closer observation of the data in terms of the top three MSs reveal that "no delay in payment wages and allowances according to the contract of employment" ranked first (MS = 3.57), "awareness of all employees on the various components that constitute their wages" ranked second (MS = 3.50), and "commitments to improve staff welfare" ranked third (MS = 3.49). On the contrary, "guarantee the professional minimum wage" ranked least with an MS of 3.45.

Interpreting the data in relation to top two MSs relative to "staff employment", it is evident that "the organisation abides by laws regarding the non-employment of child labour" ranked first (MS = 3.60), and "provide fair job opportunities" ranked second (MS = 3.57). Conversely, "all employees are formally contracted" ranked sixth (MS = 3.50).

Further analysis of the data in Table 6.30 relative to "education and training" shows that all five CSR activities listed have MSs between 3.26 and 4.00, indicating that the SMEs consider these CSR activities as very important. Interpreting the data in terms of the top MS, it is revealed that "employees are aware of relevant organisational values" ranked first (MS = 3.53). Conversely, "career guidance plan in place for employees" ranked last (MS = 3.45).

Observing the data in relation to "freedom of association and bargaining", it is apparent that two of the seven CSR activities listed have MSs between 3.26 and 4.00, indicating that SMEs consider these CSR activities to be very important. The remaining five CSR activities have MSs between 2.51 and 3.25 suggesting that SMEs consider these CSR activities to be only important. A closer observation of the data in terms of the top three MSs discloses that, "an effective and confidential system in place for employee complaints" ranked first (MS = 3.36); "an effective and confidential procedure in place to manage employee complaints" ranked second (MS = 3.35); and "employees have the right of association and freedom to join trade unions" ranked third (MS = 3.24). Moreover, as per the MSs, "the organisation supports the existence of trade unions"; "negotiate employee benefits with trade unions"; "the organisation supports the maintenance of communication and dialog with trade unions at all times"; and "the organisation supports the functions of trade unions" were ranked fourth, fifth, sixth and seventh, respectively.

Analysing the data relative to "harmonious labour/management relationship", it is evident that four of the five CSR activities listed have MSs between 3.26 and 4.00, indicating that SMEs consider these CSR activities to be very important. The remaining one variable has an MS between 2.51 and 3.25 suggesting that SMEs consider this variable to be only important. A closer look at the data in terms of the top MSs reveals that, "appropriate information channels to inform employees about any organisational changes" ranked first (MS = 3.31); and that, "systems in place to manage employees who are sick and no longer able to continue in existing capacity"; "employees who are experiencing personal problems receive appropriate support"; and "employees' representation and participation in corporate decision-making" ranked second, third and fourth, respectively.

Interpreting the data in relation to human rights measures, all 11 CSR activities listed have MSs between 3.26 and 4.00, implying that SMEs consider these CSR activities to be very important. Observing the data closely in terms of the top three MSs, it is evident that, "prohibit harassment of the employees" ranked first (MS = 3.63); "prohibits abuse of the employees" ranked second (MS = 3.58); and "human rights policies in place to assess and deal with human rights performance" ranked third (MS = 3.52). Furthermore, "prohibits corporal punishment towards employees"; "human rights procedures in place to assess and deal with human rights performance"; "employees are not forced to work beyond what they are legally entitled to do"; "organisational values do not interfere with employee legal rights" are ranked fourth, fifth, sixth and seventh, respectively.

Lastly, it is evident that from the overall total average percentages reported in Table 6.30 relative to the CSR employee dimension that nearly 91% of the SMEs rated the CSR activities under the sub-dimensions to be very important, giving the researcher a guide as to how important the CSR activities associated with this CSR employee dimension are in terms of its consideration by SMEs in the South African construction industry to achieve SBP. As part of the model development process for this study, further analysis on the CSR activities in relation to the CSR employee dimension was conducted utilising FA with the aid of PCA as an extraction method. The FA results relative to the underlying CSR activities associated with CSR employee dimension are reported in the subsequent section.

Table 6.30: Mean statistics and frequencies: CSR activities associated with CSR employee dimension

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important	Moderately important	Important	Very important			
		1	2	3	4			
	Occupational health and safety of employees							
C51_A_A	Providing a safe working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)	0.9	3.6	18.2	77.3	3.72	0.577	1
C51_A_B	Providing a healthy working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)	0.9	2.7	20.9	75.5	3.71	0.564	2
C51_A_E	Providing safety inductions for employees	2.7	0.9	19.1	77.3	3.71	0.626	3
C51_A_D	Providing health training for employees	1.8	0.9	22.7	74.5	3.70	0.583	4
C51_A_F	Providing safety training for employees	0.9	3.6	20.0	75.5	3.70	0.583	5
C51_A_N	Effective emergency management procedures in place pertaining to: (e.g. injuries, accidents, and occupational diseases)	0.9	4.5	19.1	75.5	3.69	0.602	6
C51_A_T	Participation of employees' representatives in Occupational Health and Safety Commission	0.9	2.7	23.6	72.7	3.68	0.574	7
C51_A_M	Regular maintenance of construction machinery and equipment	1.8	2.7	22.7	72.7	3.66	0.625	8
C51_A_I	Establishment of a responsibility system for construction safety	0.9	2.7	26.4	70.0	3.65	0.582	9
C51_A_P	Regular inspections of employees work practices	0.9	3.6	24.5	70.9	3.65	0.597	10
C51_A_C	Providing health inductions for employees	0.9	4.5	23.6	70.9	3.65	0.615	11

Table 6.30: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important 1	Moderately important 2	Important 3	Very important 4			
C51_A_G	Establishment of a self-awareness system for construction safety	0.9	3.6	25.5	70.0	3.65	0.599	12
C51_A_O	Effective safety supervision in place pertaining to: (e.g. injuries, accidents, and occupational diseases)	0.9	3.6	26.4	69.1	3.64	0.602	13
C51_A_S	Participation of employers representatives in Occupational Health and Safety Commission	0.9	3.6	26.4	69.1	3.64	0.602	14
C51_A_J	Improving the responsibility system for construction safety	0.9	3.6	26.4	69.1	3.64	0.602	15
C51_A_H	Improving the self-awareness system for construction safety	1.8	1.8	29.1	67.3	3.62	0.620	16
C51_A_R	Regular notification of health check results	0.9	5.5	24.5	69.1	3.62	0.635	17
C51_A_L	Contribute towards design review from construction hazard perspective	0.9	3.6	30.9	64.5	3.59	0.610	18
C51_A_Q	Regular health checks	1.8	7.3	24.5	66.4	3.55	0.711	19
C51_A_K	Providing access to on-site and off-site facilities e.g. Staff areas, drinking water, food	2.7	4.5	29.1	63.6	3.54	0.713	20
C51_TAP1	*Total average percentages*	*1.3*	*3.5*	*24.2*	*71.1*		*95.3*	
	Legal working hours and rest time							
C51_B_C	Process to manage the weekly maximum overtime and average working time	2.7	2.7	34.5	60.0	3.52	0.687	1
C51_B_A	Compliance with working hours regulation	3.6	2.7	31.8	61.8	3.52	0.726	2
C51_B_B	Allocate appropriate working hours according to the type of work	3.6	3.6	35.5	57.3	3.46	0.738	3
C51_TAP2	*Total average percentages*	*3.3*	*3.0*	*33.9*	*59.7*		*93.6*	
	Wages and welfare							
C51_C_D	No delay in payment wages and allowances according to the contract of employment	2.7	3.6	27.3	66.4	3.57	0.697	1
C51_C_B	Awareness of all employees on the various components that constitute their wages	1.8	5.5	33.6	59.1	3.50	0.687	2
C51_C_E	Commitments to improve staff welfare	1.8	3.6	38.2	56.4	3.49	0.660	3
C51_C_G	Additional remuneration for overtime work	3.6	2.7	34.5	59.1	3.49	0.726	4
C51_C_F	Give special allowances to employees under special work conditions	1.8	5.5	35.5	57.3	3.48	0.687	5
C51_C_C	Process in place to ensure wages are not altered for disciplinary purposes	3.6	4.5	33.6	58.2	3.46	0.750	6
C51_C_A	Guarantee the professional minimum wage	2.7	7.3	31.8	58.2	3.45	0.750	7

Table 6.30: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important 1	Moderately important 2	Important 3	Very important 4			
C51_TAP3	*Total average percentages*	*2.6*	*4.7*	*33.5*	*59.2*		*92.7*	
Staff employment								
C51_D_D	The organisation abides by laws regarding the non-employment of child labour	2.7	4.5	22.7	70.0	3.60	0.706	1
C51_D_A	Provide fair job opportunities	0.9	2.7	34.5	61.8	3.57	0.598	2
C51_D_E	Human resources policy in place to attract qualified staff	3.6	5.5	24.5	66.4	3.54	0.762	3
C51_D_F	Human resource policy in place to retain qualified staff	3.6	3.6	29.1	63.6	3.53	0.738	4
C51_D_B	Provide equitable job opportunities	2.7	3.6	32.7	60.9	3.52	0.700	5
C51_D_C	All employees are formally contracted	2.7	5.5	30.9	60.9	3.50	0.726	6
C51_TAP4	*Total average percentages*	*2.7*	*4.2*	*29.1*	*63.9*		*93*	
Education and training								
C51_E_D	Employees are aware of relevant organisational values	0.9	4.5	35.5	59.1	3.53	0.631	1
C51_E_A	Appropriate training for the job, as well as specific OHS and W training	1.8	4.5	32.7	60.9	3.53	0.673	2
C51_E_C	Employees are aware of relevant organisational rules	3.6	2.7	31.8	61.8	3.52	0.726	3
C51_E_B	Employees are aware of relevant organisational regulations	2.7	2.7	36.4	58.2	3.50	0.687	4
C51_E_E	Career guidance plan in place for employees	3.6	6.4	31.8	58.2	3.45	0.773	5
C51_TAP5	*Total average percentages*	*2.5*	*4.2*	*33.6*	*59.6*		*93.2*	
Freedom of association and bargaining								
C51_F_E	An effective and confidential system in place for employee complaints	1.8	9.1	40.0	49.1	3.36	0.726	1
C51_F_G	An effective and confidential procedure in place to manage employee complaints	1.8	8.2	42.7	47.3	3.35	0.711	2
C51_F_A	Employees have the right of association and freedom to join trade unions	4.5	12.7	37.3	45.5	3.24	0.845	3
C51_F_B	The organisation supports the existence of trade unions	7.3	12.7	36.4	43.6	3.16	0.914	4
C51_F_F	Negotiate employee benefits with trade unions	8.2	13.6	36.4	41.8	3.12	0.936	5
C51_F_D	The organisation supports the maintenance of communication and dialog with trade unions at all times	10.0	11.8	36.4	41.8	3.10	0.967	6
C51_F_C	The organisation supports the functions of trade unions	9.1	13.6	36.4	40.9	3.09	0.953	7
C51_TAP6	*Total average percentages*	*6.1*	*11.7*	*37.9*	*44.3*		*82.2*	

Table 6.30: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important	Moderately important	Important	Very important			
		1	2	3	4			
	Harmonious labour/management relationship							
C51_G_B	Appropriate information channels to inform employees about any organisational changes	4.5	5.5	44.5	45.5	3.31	0.775	1
C51_G_D	Systems in place to manage employees who are sick and no longer able to continue in existing capacity	3.6	9.1	40.0	47.3	3.31	0.787	2
C51_G_C	Employees who are experiencing personal problems receive appropriate support	5.5	5.5	45.5	43.6	3.27	0.800	3
C51_G_A	Employees representation and participation in corporate decision-making	5.5	12.7	40.0	41.8	3.18	0.859	4
C51_TAP7	*Total average percentages*	*4.8*	*9.1*	*42.5*	*44.6*		*87.1*	
	Human rights measures							
C51_H_D	Prohibit harassment of the employees	1.8	2.7	26.4	69.1	3.63	0.633	1
C51_H_E	Prohibits abuse of the employees	2.7	2.7	28.2	66.4	3.58	0.682	2
C51_H_H	Human rights policies in place to assess and deal with human rights performance	1.8	3.6	35.5	59.1	3.52	0.660	3
C51_H_I	Human rights procedures in place to assess and deal with human rights performance	1.8	4.5	36.4	57.3	3.49	0.674	4
C51_H_F	Prohibits corporal punishment towards employees	3.6	3.6	32.7	60.0	3.49	0.739	5
C51_H_G	Employees are not forced to work beyond what they are legally entitled to do	3.6	3.6	34.5	58.2	3.47	0.738	6
C51_H_C	Organisational values do not interfere with employee legal rights	3.6	4.5	38.2	53.6	3.42	0.747	7
C51_H_J	Employees are provided with appropriate cultural environment	5.5	5.5	39.1	50.0	3.34	0.816	8
C51_H_K	Employees are provided with appropriate cultural facilities	5.5	6.4	40.0	48.2	3.31	0.821	9
C51_H_A	Organisational values do not interfere with employee beliefs	5.5	8.2	39.1	47.3	3.28	0.836	10
C51_H_B	Organisational values do not interfere with employee customs	6.4	6.4	40.9	46.4	3.27	0.845	11
C51_TAP8	*Total average percentages*	*3.8*	*4.7*	*35.5*	*56.0*		*91.5*	
C51_OTAP	*Overall total average percentages*	*3.4*	*5.6*	*33.8*	*57.3*		*91.1*	

6.8.1.1 Identifying the underlying CSR activities that influence the CSR employee dimension

Though the most significant CSR activities that influence the CSR employee dimension were identified in the preceding section via the descriptive statistics by ranking in hierarchical order, it is likely that some of the CSR activities under the sub-dimensions may be interrelated through an underlying structure of primary factors. Thus, FA was performed.

6.8.1.1.1 KMO adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity Test on the variables (CSR activities) associated with employee dimension, the analysis of the results (Table 6.31) firstly revealed that the KMO measure of sampling adequacy is 0.873, greater than 0.6 and less than 1, signifying that the sample is satisfactory for FA. Secondly, it is evident by the Bartlett's Sphericity Test that the p value = 0.000 which is less than 0.05. Both of these tests recommend that FA can be conducted with the data.

Table 6.31: KMO and Bartlett's Test on variables (CSR activities) associated with CSR employee dimension

Test		Value	Remark
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.873	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	8554.584	Significant and adequate for FA utilising PCA
	df	1485	
	Sig.	0.000	

6.8.1.1.2 Principal component factors (CSR activities) associated with CSR employee dimension

Adopting PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotational method, Table 6.32 shows eight components with eigenvalues greater than 1. They were extracted from the variables (CSR activities) associated with employee dimension. The eigenvalues of the eight extracted components are 29.598; 4.843; 2.683; 2.130; 1.544; 1.281; 1.167; and 1.035 respectively. Component 1, the one with the highest eigenvalue, is capable of explaining 53.82% of the variance whereas component 8, the least component, is capable of explaining 1.88% of the variance in the data. Combined, however, the eight components are able to explain 80.51% of the total variance, demonstrating that these components have a highly significant influence on the employee dimension.

Table 6.32: Total variance explained by factors (CSR activities) associated with CSR employee dimension

Comp onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumula tive %
1	29.598	53.815	53.815	29.598	53.815	53.815	12.914	23.480	23.480
2	4.843	8.806	62.621	4.843	8.806	62.621	9.230	16.781	40.261
3	2.683	4.878	67.498	2.683	4.878	67.498	6.836	12.429	52.690
4	2.130	3.873	71.371	2.130	3.873	71.371	5.213	9.478	62.168
5	1.544	2.807	74.178	1.544	2.807	74.178	3.868	7.033	69.201
6	1.281	2.330	76.508	1.281	2.330	76.508	2.730	4.963	74.164
7	1.167	2.122	78.630	1.167	2.122	78.630	2.257	4.103	78.267
8	1.035	1.882	80.512	1.035	1.882	80.512	1.235	2.245	80.512
9	0.968	1.760	82.272						
10	0.837	1.522	83.794						
11	0.776	1.410	85.204						
12	0.731	1.329	86.533						
13	0.677	1.231	87.765						
14	0.621	1.128	88.893						
15	0.506	0.920	89.813						
16	0.460	0.837	90.650						
17	0.415	0.754	91.404						
18	0.405	0.735	92.139						
19	0.353	0.643	92.782						
20	0.334	0.608	93.390						
21	0.307	0.558	93.948						
22	0.278	0.506	94.454						
23	0.266	0.484	94.938						
24	0.250	0.455	95.393						
25	0.240	0.437	95.829						
26	0.217	0.394	96.224						
27	0.191	0.348	96.571						
28	0.182	0.331	96.902						
29	0.165	0.299	97.202						
30	0.139	0.253	97.455						
31	0.138	0.251	97.706						
32	0.129	0.235	97.941						
33	0.119	0.217	98.158						
34	0.116	0.210	98.368						
35	0.111	0.201	98.569						
36	0.100	0.182	98.751						
37	0.089	0.162	98.913						
38	0.076	0.138	99.051						
39	0.067	0.122	99.173						

Table 6.32: (Continued)

Comp onent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulati ve %
40	0.055	0.101	99.273						
41	0.054	0.098	99.372						
42	0.049	0.090	99.461						
43	0.044	0.080	99.541						
44	0.039	0.070	99.611						
45	0.035	0.064	99.676						
46	0.034	0.061	99.737						
47	0.028	0.052	99.789						
48	0.024	0.043	99.832						
49	0.021	0.038	99.869						
50	0.017	0.030	99.900						
51	0.016	0.029	99.929						
52	0.013	0.024	99.953						
53	0.012	0.021	99.974						
54	0.007	0.014	99.988						
55	0.007	0.012	100.000						
Extraction Method: Principal Component Analysis									

A further confirmatory analysis using Catell's scree plot was conducted on the variables to establish if these eight components can be retained. The results (Figure 6.4) show that eight components are retained.
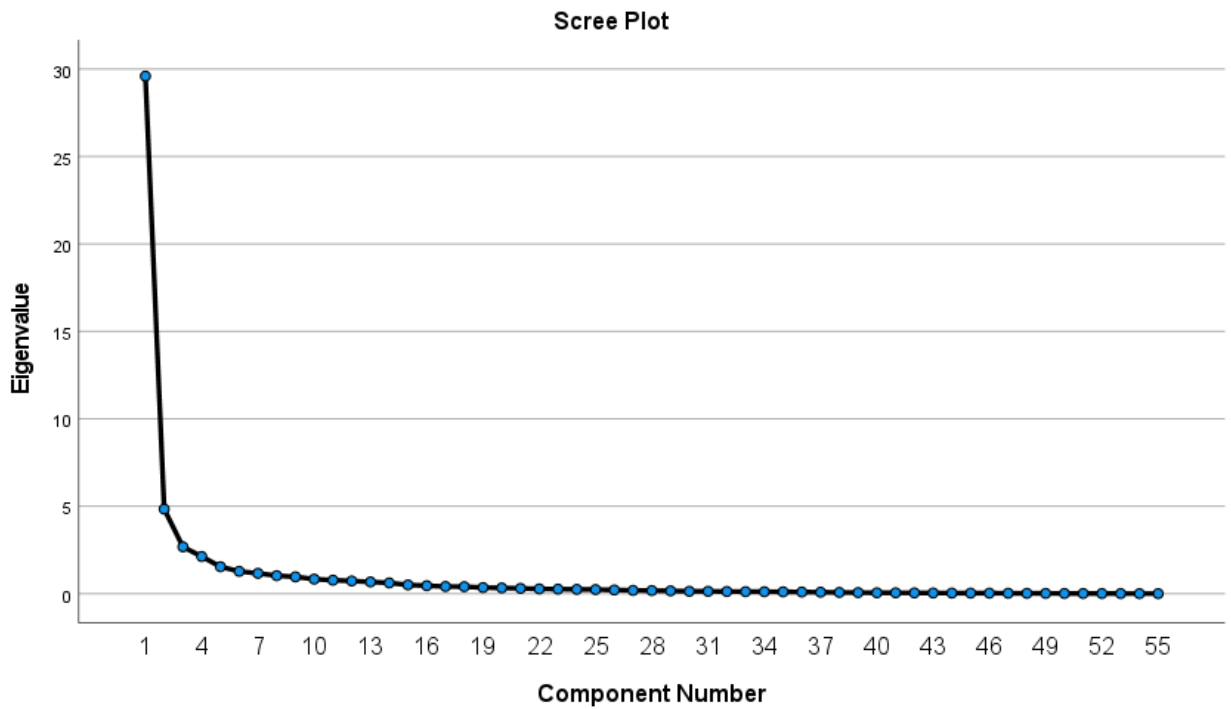
Figure 6.4: Catell's scree plot for factors (CSR activities) associated with CSR employee dimension

In addition to the scree plot, a further confirmatory analysis to reach a conclusion with regards to the number of components to be retained, is needed. According to Pallant (2020:191), parallel analysis can determine the components before making a decision based on the number of components to retain. Again, Pallant (2020:191) affirms that parallel analysis involves comparing the size of the eigenvalues with those obtained through a randomly generated data set of the same size using the Monte Carlo parallel analysis application package. Table 6.33 shows the corresponding random eigenvalues from the parallel analysis for the first eight components as 2.7230; 2.5385; 2.3887; 2.2846; 2.1803; 2.0806; 1.9912; and 1.9100 respectively, whereas the initial eigenvalues of the eight components are 29.598; 4.843; 2.683; 2.130; 1.544; 1.281; 1.167; and 1.035. The fundamental assumption of parallel analysis is that if the initial eigenvalue obtained from the PCA results is larger than the randomly generated eigenvalue from the parallel analysis, the factor is to be retained. However, if the eigenvalue obtained from the PCA results is lower than that of the randomly generated eigenvalue from the parallel analysis, the factor must be rejected. Hence, only three components could be retained since their initial eigenvalues are greater than the random eigenvalues. This allowed the researcher to force a three-factor extraction on SPSS. The fourth (2.130 < 2.2846), fifth (1.544 < 2.1803), sixth (1.281 < 2.0806), seventh (1.167 < 1.9912) and eighth (1.035 < 1.9100) components were rejected since their initial eigenvalues are lower than the random eigenvalues generated from the parallel analysis.

Table 6.33: Comparison of PCA eigenvalue with parallel analysis eigenvalue

Component Number	Initial eigenvalue from PCA	Random eigenvalue from parallel analysis	Decision
1	29.598	2.7230	Accept
2	4.843	2.5385	Accept
3	2.683	2.3887	Accept
4	2.130	2.2846	Reject
5	1.544	2.1803	Reject
6	1.281	2.0806	Reject
7	1.167	1.9912	Reject
8	1.035	1.9100	Reject

6.8.1.1.3 Summary of FA on CSR activities associated with CSR employee dimension

In total, 63 variables (CSR activities) were assessed to determine the most significant variables that influence CSR employee dimension. However, with the initial assessment, eight of the 63 variables had strong cross-loading (75% and more) and were subsequently deleted. So the FA was conducted utilising the 55 remaining variables. The descriptive statistics were calculated as the first step of the analysis; thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was assessed and the results reported in Section 6.8.1.1.1 The Kaiser-Meyer-Olkin value was 0.873, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at p = 0.000 (p < 0.5), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed eight components with eigenvalues greater than 1, explaining 80.51% of the total variance in the 55 variables associated with employee dimension. A careful scrutiny of the scree plot indicated a clear break after the eighth component; conversely, the Monte Carlo parallel analysis showed that three of the eight components have their initial eigenvalues greater than the random eigenvalues from the parallel analysis. Thus, the study retained the three components for further analysis. As a result, a three-component solution was accepted and the analysis was re-run extracting three components. The three components extracted accounted for 67.50% of the total variance in the 55 variables associated with CSR employee dimension (Table 6.32).

This study adopts the use of varimax rotation to aid the interpretation of the three components retained as well as for loading the variables. The results (Table 6.34) reveal that all three components have strong loadings, with most variables loaded substantially above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the components as all variable communalities values are above 0.4, though the lowest communalities value of 0.496 is exhibited by "C51_A_Q Regular health checks", showing that

the variable contributed the least to the component. However, there was a positive correlation between the three components as evident from the total variance (67.50%) explained by the components. Considering the loading pattern of the factors associated with employee dimension, the variables that converge on component 1 represent *"Employee rights, remuneration and recruitment"*, while component 2 could be regarded as *"Occupational Health and Safety of employees and training"*, with component 3 representing *"Employees freedom of association and bargaining"*

Table 6.34: Pattern/structure coefficients for variables (CSR activities) associated with CSR employee dimension

Coding	Variables	Component			Communalities
		1	2	3	
C51_H_I	Human rights procedures in place to assess and deal with human rights performance	**0.822**			0.746
C51_C_B	Awareness of all employees on the various components that constitute their wages	**0.794**	0.313		0.759
C51_H_H	Human rights policies in place to assess and deal with human rights performance	**0.793**			0.748
C51_C_E	Commitments to improve staff welfare	**0.784**	0.305		0.760
C51_H_G	Employees are not forced to work beyond what they are legally entitled to do	**0.769**			0.684
C51_H_C	Organisational values do not interfere with employee legal rights	**0.762**			0.659
C51_C_D	No delay in payment wages and allowances according to the contract of employment	**0.749**	0.305		0.667
C51_H_E	Prohibits abuse of the employees	**0.734**			0.593
C51_C_G	Additional remuneration for overtime work	**0.728**			0.600
C51_H_J	Employees are provided with appropriate cultural environment	**0.726**			0.632
C51_C_C	Process in place to ensure wages are not altered for disciplinary purposes	**0.717**	0.307		0.673
C51_H_D	Prohibit harassment of the employees	**0.703**			0.564
C51_H_K	Employees are provided with appropriate cultural facilities	**0.701**			0.603
C51_E_B	Employees are aware of relevant organisational regulations	**0.698**	0.410		0.706
C51_G_C	Employees who are experiencing personal problems receive appropriate support	**0.697**	0.314		0.645
C51_B_B	Allocate appropriate working hours according to the type of work	**0.694**	0.330		0.621

Table 6.34: (Continued)

Coding	Variables	Component 1	Component 2	Component 3	Communalities
C51_F_E	An effective and confidential system in place for employee complaints	**0.692**	0.309	0.315	0.674
C51_H_F	Prohibits corporal punishment towards employees	**0.686**			0.553
C51_G_B	Appropriate information channels to inform employees about any organisational changes	**0.683**		0.309	0.642
C51_H_B	Organisational values do not interfere with employee customs	**0.661**			0.510
C51_B_C	Process to manage the weekly maximum overtime and average working time	**0.655**	0.305	0.348	0.644
C51_G_D	Systems in place to manage employees who are sick and no longer able to continue in existing capacity	**0.654**	0.310		0.595
C51_H_A	Organisational values do not interfere with employee beliefs	**0.654**			0.506
C51_D_E	Human resources policy in place to attract qualified staff	**0.649**		0.335	0.587
C51_G_A	Employees representation and participation in corporate decision-making	**0.648**		0.411	0.651
C51_D_F	Human resource policy in place to retain qualified staff	**0.646**			0.556
C51_B_A	Compliance with working hours regulation	**0.639**	0.393		0.608
C51_D_B	Provide equitable job opportunities	**0.637**	0.391		0.560
C51_D_D	The organisation abides by laws regarding the non-employment of child labour	**0.629**	0.449		0.626
C51_D_C	All employees are formally contracted	**0.613**		0.331	0.551
C51_C_A	Guarantee the professional minimum wage	**0.553**	0.333	0.325	0.522
C51_A_I	Establishment of a responsibility system for construction safety		**0.840**		0.855
C51_A_F	Providing safety training for employees		**0.835**		0.774
C51_A_H	Improving the self-awareness system for construction safety		**0.832**		0.784
C51_A_J	Improving the responsibility system for construction safety	0.321	**0.822**		0.830
C51_A_A	Providing a safe working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)		**0.820**		0.734
C51_A_N	Effective emergency management procedures in place pertaining to: (e.g. injuries, accidents, and occupational diseases)	0.392	**0.809**		0.808
C51_A_E	Providing safety inductions for employees		**0.808**		0.732

Table 6.34: (Continued)

Coding	Variables	Component 1	Component 2	Component 3	Communalities
C51_A_M	Regular maintenance of construction machinery and equipment	0.346	**0.803**		0.765
C51_A_D	Providing health training for employees		**0.787**		0.735
C51_A_G	Establishment of a self-awareness system for construction safety		**0.782**		0.713
C51_A_O	Effective safety supervision in place pertaining to: (e.g. injuries, accidents, and occupational diseases)	0.384	**0.772**		0.743
C51_A_C	Providing health inductions for employees		**0.737**		0.646
C51_A_S	Participation of employers representatives in Occupational Health and Safety Commission	0.365	**0.728**		0.725
C51_A_P	Regular inspections of employees work practices	0.451	**0.710**		0.708
C51_A_L	Contribute towards design review from construction hazard perspective	0.308	**0.707**	0.344	0.713
C51_A_B	Providing a healthy working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)	0.417	**0.702**		0.666
C51_A_T	Participation of employees' representatives in Occupational Health and Safety Commission	0.329	**0.696**		0.679
C51_A_K	Providing access to on-site and off-site facilities e.g. Staff areas, drinking water, food	0.402	**0.610**		0.568
C51_A_Q	Regular health checks		**0.576**	0.315	0.496
C51_F_D	The organisation supports the maintenance of communication and dialog with trade unions at all times	0.328		**0.841**	0.844
C51_F_C	The organisation supports the functions of trade unions	0.352		**0.827**	0.844
C51_F_F	Negotiate employee benefits with trade unions	0.302		**0.821**	0.819
C51_F_B	The organisation supports the existence of trade unions	0.371		**0.784**	0.788
C51_F_A	Employees have the right of association and freedom to join trade unions	0.351	0.393	**0.656**	0.708
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization a. Rotation converged in 5 iterations					

Factor 1: Employee rights, remuneration and recruitment includes 31 variables (CSR activities): Human rights procedures in place to assess and deal with human rights performance; Awareness of all employees on the various components that constitute their

wages; Human rights policies in place to assess and deal with human rights performance; Commitments to improve staff welfare; Employees are not forced to work beyond what they are legally entitled to do; Organisational values do not interfere with employee legal rights; No delay in payment wages and allowances according to the contract of employment; Prohibits abuse of the employees; Additional remuneration for overtime work; Employees are provided with appropriate cultural environment; Process in place to ensure wages are not altered for disciplinary purposes; Prohibit harassment of the employees; Employees are provided with appropriate cultural facilities; Employees are aware of relevant organisational regulations; Employees who are experiencing personal problems receive appropriate support; Allocate appropriate working hours according to the type of work; An effective and confidential system in place for employee complaints; Prohibits corporal punishment towards employees; Appropriate information channels to inform employees about any organisational changes; Organisational values do not interfere with employee customs; Process to manage the weekly maximum overtime and average working time; Systems in place to manage employees who are sick and no longer able to continue in existing capacity; Organisational values do not interfere with employee beliefs; Human resources policy in place to attract qualified staff; Employees representation and participation in corporate decision-making; Human resource policy in place to retain qualified staff; Compliance with working hours regulation; Provide equitable job opportunities; The organisation abides by laws regarding the non-employment of child labour; All employees are formally contracted; and Guarantee the professional minimum wage.

Factor 2: Occupational health and safety of employees and training includes 19 variables (CSR activities): Establishment of a responsibility system for construction safety; Providing safety training for employees; Improving the self-awareness system for construction safety; Improving the responsibility system for construction safety; Providing a safe working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures); Effective emergency management procedures in place pertaining to: (e.g. injuries, accidents, and occupational diseases); Providing safety inductions for employees; Regular maintenance of construction machinery and equipment; Providing health training for employees; Establishment of a self-awareness system for construction safety; Effective safety supervision in place pertaining to: (e.g. injuries, accidents, and occupational diseases); Providing health inductions for employees; Participation of employers representatives in Occupational Health and Safety Commission; Regular inspections of employees work practices; Contribute towards design review from construction hazard perspective; Providing a healthy working environment (e.g. construction machinery and equipment, labour protection appliances and technical

measures); Participation of employees' representatives in Occupational Health and Safety Commission; Providing access to on-site and off-site facilities e.g. Staff areas, drinking water, food; and Regular health checks.

Factor 3 *Employees freedom of association and bargaining* includes 5 variables (CSR activities): The organisation supports the maintenance of communication and dialog with trade unions at all times; The organisation supports the functions of trade unions; Negotiate employee benefits with trade unions; The organisation supports the existence of trade unions; and Employees have the right of association and freedom to join trade unions.

6.8.2 CSR activities associated with shareholder dimension

The CSR activities associated with CSR shareholder dimension were characterised under four sub-dimensions: Shareholder legal revenues; Accurate disclosure of corporate status and development prospects; Decision-making participation; and Shareholder relationship management system. As with all other sections relative to the research constructs, this section specific to the CSR activities associated with CSR shareholder dimension was subject to a reliability analysis, utilising Cronbach's alpha presented in Appendix E 6. Appendix E 6 proves that the internal consistency for the CSR activities is reliable and acceptable as the Cronbach's alpha values for all the CSR activities are above 0.70, with the total Cronbach's alpha coefficient at 0.949.

Following the reliability test, the results (Table 6.35) present the level of importance that SMEs attach to the CSR activities under the sub-dimensions related to the "CSR shareholder dimension". Data relative to "shareholder legal revenues" makes evident that four of the of the five listed CSR activities have MSs between 3.26 and 4.00, indicating that SMEs consider these four CSR activities as very important. The remaining variable has an MS between 2.51 and 3.25, suggesting that SMEs consider this variable to be only important. A closer observation of the data in terms of the top two MSs discloses that, "enhance their shareholder profits" ranked first (MS = 3.40) and "increase in value of shareholder shares" ranked second (MS = 3.32). Moreover, as per the MSs, "enhance their shareholder revenues"; "maintain their shareholder profits"; and "maintain their shareholder revenues" were ranked third, fourth and fifth, respectively.

Interpreting the data associated with "accurate disclosure of corporate status and development prospects", it is apparent that all three CSR activities have MSs between 3.26 and 4.00, indicating that SMEs consider these three CSR activities as very important. Further data

observation of the top MSs shows that, "accurate information on corporate financial performance" ranked first (MS = 3.36), while "accurate information on corporate financial performance" and "accurate information on corporate sustainable development prospects (e.g. social and environmental performance)" ranked second and third, respectively.

Analysing the data relative to "decision-making participation", both CSR activities have MSs between 3.26 and 4.00, inferring that SMEs view these CSR activities as very important. Furthermore, "shareholders' participation in decision-making regarding corporate income distribution" ranked the highest of the two CSR activities indicating an MS of 3.34. In addition to the MSs and ranking of the CSR activities relative to "decision-making participation", the total average percentage indicates that approximately 94% of the SMEs rated the CSR activities as very important.

Lastly, data pertaining to "shareholder relationship management system" confirms that both CSR activities have MSs between 3.26 and 4.00, which once again infers that SMEs consider these CSR activities as very important. A closer look at the data reveals that "establish the sense of being responsible to shareholders" ranked the highest of the two CSR activities, presenting an MS of 3.39.

Holistically, it is clear that from the overall total average percentages reported in Table 6.35 relative to the CSR shareholder dimension that roughly 91% of the SMEs rated the CSR activities as very important, guiding the researcher as to the importance of the CSR activities associated with the CSR shareholder dimension in terms of consideration by SMEs in the South African construction industry to achieve SBP. Further to the descriptive statistics analysed for the CSR activities relative to the CSR shareholder dimension, and as part of the model development process for this study, further analysis on the CSR activities in relation to the CSR shareholder dimension was conducted utilising FA with the aid of PCA as an extraction method. The FA results relative to the underlying CSR activities that influence the CSR shareholder dimension are reported in the subsequent section.

Table 6.35: Mean statistics and frequencies: CSR activities associated with CSR shareholder dimension

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important	Moderately important	Important	Very important			
		1	2	3	4			
	Shareholder legal revenues							
C52_A_D	Enhance their shareholder profits	1.8	5.5	43.6	49.1	3.40	0.680	1
C52_A_E	Increase in value of shareholder shares	1.8	10.0	42.7	45.5	3.32	0.729	2
C52_A_C	Enhance their shareholder revenues	2.7	7.3	46.4	43.6	3.31	0.726	3
C52_A_B	Maintain their shareholder profits	4.5	7.3	41.8	46.4	3.30	0.796	4
C52_A_A	Maintain their shareholder revenues	8.2	3.6	47.3	40.9	3.21	0.858	5
C52_TAP1	*Total average percentages*	*3.8*	*6.7*	*44.4*	*45.1*		*89.5*	
	Accurate disclosure of corporate status and development prospects							
C52_B_B	Accurate information on corporate financial performance	1.8	8.2	41.8	48.2	3.36	0.713	1
C52_B_A	Accurate information on corporate financial performance	4.5	5.5	41.8	48.2	3.34	0.781	2
C52_B_C	Accurate information on corporate sustainable development prospects (e.g. social and environmental performance)	2.7	7.3	44.5	45.5	3.33	0.731	3
C52_TAP2	*Total average percentages*	*3.0*	*7.0*	*42.7*	*47.3*		*90*	
	Decision-making participation							
C52_C_B	Shareholders participation in decision-making regarding corporate income distribution	3.6	1.8	51.8	42.7	3.34	0.694	1
C52_C_A	Shareholders participation in corporate decision-making on major corporate activities	4.5	2.7	50.0	42.7	3.31	0.739	2
C52_TAP3	*Total average percentages*	*4.1*	*2.3*	*50.9*	*42.7*		*93.6*	
	Shareholder relationship management system							
C52_D_A	Establish the sense of being responsible to shareholders	3.6	2.7	44.5	49.1	3.39	0.718	1
C52_D_B	Establish the sense of being an agency of shareholder relationship management.	4.5	5.5	43.6	46.4	3.32	0.777	2
C52_TAP4	*Total average percentages*	*4.1*	*4.1*	*44.1*	*47.8*		*91.9*	
C52_OTAP	*Overall total average percentages*	*3.8*	*5.0*	*45.5*	*45.7*		*91.2*	

6.8.2.1 Identifying the underlying CSR activities that influence the CSR shareholder dimension

Although the most significant CSR activities influencing the CSR shareholder dimension were identified in the preceding section via the descriptive statistics by ranking in hierarchical order, it is quite possible that some of the CSR activities under the sub-dimensions may be interrelated through an underlying structure of primary factors. Thus, FA was performed.

6.8.2.1.1 KMO Adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity Test on the variables (CSR activities) associated with shareholder dimension, the analysis of the results illustrated in Table 6.36 firstly reveal that the KMO measure of sampling adequacy is 0.876, greater than 0.6 and less than 1, signifying that the sample is satisfactory for FA. Secondly, it is evident by the Bartlett's Sphericity Test that the p value = 0.000,less than 0.05. Both tests recommend that FA can be conducted with the data.

Table 6.36: KMO and Bartlett's Test on variables (CSR activities) associated with CSR shareholder dimension

Test		Value	Remark
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.876	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	1512.788	Significant and adequate for FA utilising PCA
	df	66	
	Sig.	0.000	

6.8.2.1.2 Principal component factors (CSR activities) associated with CSR shareholder dimension

Accepting PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotational method, Table 6.37 shows two components with eigenvalues greater than 1. These were extracted from the variables (CSR activities) associated with shareholder dimension. The eigenvalues of the two extracted components are 7.729 and 1.718, respectively. Component 1, the one with the highest eigenvalue, is capable of explaining 64.41% of the variance, whereas component 2 is capable of explaining 14.32% of the data variance. Combined, however, the two components are capable of explaining 78.73% of the total variance, which demonstrates that these components have a highly significant influence on the shareholder dimension.

Table 6.37: Total variance explained by factors (CSR activities) associated with CSR shareholder dimension

Compone nt	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulativ e %
1	7.729	64.412	64.412	7.729	64.412	64.412	4.975	41.457	41.457
2	1.718	14.315	78.726	1.718	14.315	78.726	4.472	37.269	78.726
3	0.847	7.059	85.785						
4	0.406	3.384	89.169						
5	0.383	3.190	92.359						
6	0.244	2.033	94.392						
7	0.197	1.640	96.032						
8	0.137	1.138	97.170						
9	0.130	1.079	98.249						
10	0.078	0.654	98.903						
11	0.076	0.631	99.534						
12	0.056	0.466	100.000						
Extraction Method: Principal Component Analysis									

A further confirmatory analysis using Catell's scree plot on the variables established if these two components can be retained. The result in Figure 6.5 show that two components are retained.
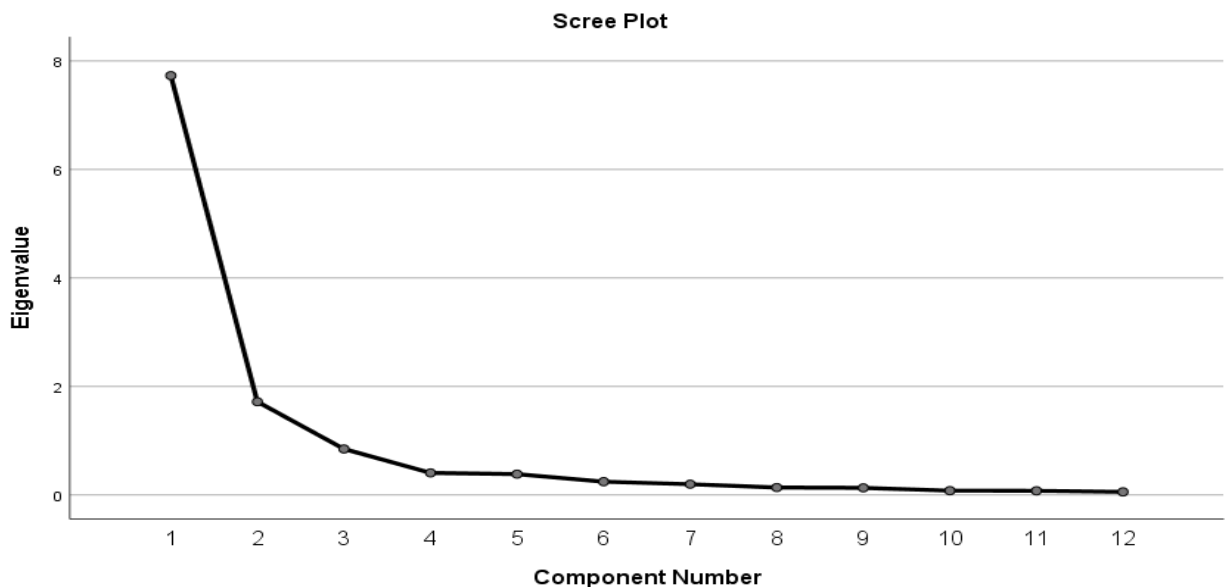
Figure 6.5: Catell's scree plot for factors (CSR activities) associated with CSR shareholder dimension

In addition to the scree plot, a further confirmatory analysis in regards to the number of components to be retained was administered utilising parallel analysis. Table 6.38 shows that the corresponding random eigenvalues from the parallel analysis for the first two components are 1.5857 and 1.4203, respectively, whereas the initial eigenvalues of the two components are 7.729 and 1.718. The fundamental assumption of parallel analysis is that if the initial eigenvalue obtained from the PCA results is larger than the randomly generated eigenvalue from the parallel analysis, the factor is to be retained. However, if the eigenvalue obtained from the PCA results is less than that of the randomly generated eigenvalue from the parallel analysis, the factor must be rejected. Hence, both components could be retained since their initial eigenvalues are greater than the random eigenvalues. This allowed the researcher to force a two-factor extraction on SPSS.

Table 6.38: Comparison of PCA eigenvalue with parallel analysis eigenvalue

Component Number	Initial eigenvalue from PCA	Random eigenvalue from parallel analysis	Decision
1	7.729	1.5857	Accept
2	1.718	1.4203	Accept

6.8.2.1.3 Summary of FA on CSR activities associated with CSR shareholder dimension

In total, 12 variables (CSR activities) were assessed to determine the most significant variables that influence CSR shareholder dimension. The descriptive statistics were calculated as the first step of the analysis; thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was assessed and the results reported in Section 6.8.2.1.1. The Kaiser-Meyer-Olkin value was 0.876, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at $p = 0.000$ ($p < 0.5$), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed two components with eigenvalues greater than 1, explaining 78.73% of the total variance in the 12 variables associated with shareholder dimension. A careful scrutiny of the scree plot indicated a clear break after the second component, with the Monte Carlo parallel analysis confirming this finding. Thus, the study retained the two components for further analysis. As a result, a two-component solution was accepted and the analysis was re-run extracting two components.

This study adopts the use of varimax rotation to aid the interpretation of the two components retained as well as for loading the variables. The results in Table 6.39 reveal that both

components illustrate strong loadings, with all variables loaded substantially above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the components as all the variables communalities values are above 0.4, though the lowest communalities value of 0.620 is exhibited by C52_D_B "Establish the sense of being an agency of shareholder relationship management", indicating that the variable contributed the least to the component. However, there was a positive correlation between the two components as evident from the total variance (78.73%) explained by the components. Considering the loading pattern of the factors associated with shareholder dimension, the variables that converge on component 1 represent *"Permissible shareholder proceeds"*, while component 2 could be regarded as *"Permissible information, participation and relationship management towards shareholders"*.

Table 6.39: Pattern/structure coefficients for variables (CSR activities) associated with CSR shareholder dimension

Coding	Variables	Component		Communalities
		1	2	
C52_C_A	Shareholders participation in corporate decision-making on major corporate activities	**0.894**		0.832
C52_C_B	Shareholders participation in decision-making regarding corporate income distribution	**0.878**		0.808
C52_D_A	Establish the sense of being responsible to shareholders	**0.866**		0.833
C52_B_A	Accurate information on corporate operating performance	**0.753**	0.402	0.728
C52_D_B	Establish the sense of being an agency of shareholder relationship management.	**0.746**		0.620
C52_B_B	Accurate information on corporate financial performance	**0.740**	0.437	0.739
C52_B_C	Accurate information on corporate sustainable development prospects (e.g. social and environmental performance)	**0.727**	0.459	0.739
C52_A_C	Enhance their shareholder revenues		**0.912**	0.887
C52_A_E	Increase in value of shareholder shares		**0.872**	0.812
C52_A_B	Maintain their shareholder profits	0.374	**0.872**	0.900
C52_A_D	Enhance their shareholder profits		**0.847**	0.803
C52_A_A	Maintain their shareholder revenues	0.351	**0.790**	0.747
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization a. Rotation converged in 3 iterations				

Factor 1: Permissible shareholder proceeds includes seven variables (CSR activities): Shareholders participation in corporate decision-making on major corporate activities; Shareholders participation in decision-making regarding corporate income distribution;

Establish the sense of being responsible to shareholders; Accurate information on corporate operating performance; Establish the sense of being an agency of shareholder relationship management; Accurate information on corporate financial performance; and Accurate information on corporate sustainable development prospects (e.g. social and environmental performance).

Factor 2: Permissible information, participation and relationship management towards shareholders includes five variables (CSR activities): Enhance their shareholder revenues; Increase in value of shareholder shares; Maintain their shareholder profits; Enhance their shareholder profits; and Maintain their shareholder revenues.

6.8.3 CSR activities associated with customer dimension

The CSR activities associated with CSR customer dimension were characterised under four sub-dimensions: Quality and safety of construction product; Customer satisfaction; Customer service culture; and Disclosure of true performance information of the organisation. This section specific to the CSR activities associated with CSR customer dimension was subject to a reliability analysis, utilising Cronbach's alpha presented in Appendix E 7. Appendix E 7 indicates that the internal consistency for the CSR activities are reliable and acceptable as the Cronbach's alpha values for all the CSR activities are above 0.70, with the total Cronbach's alpha coefficient at 0.967.

Following the reliability test, the results in Table 6.40 present the level of importance that SMEs attach to the CSR activities under the sub-dimensions related to the "CSR customer dimension". Data relative to "quality and safety of construction product" makes evident that all nine listed CSR activities have MSs between 3.26 and 4.00, indicating that SMEs consider these nine CSR activities to be very important. A closer observation of the data in terms of the top three MSs discloses that "quality of buildings and their components" ranked first (MS = 3.65); "elimination of potential safety threats to the community" ranked second (MS = 3.63); and "elimination of potential safety threats to the customer" ranked third (MS = 3.61). On the contrary, "durability of buildings and their components"; "attainment of safety requirements"; "attainment of legal requirements"; "the organisation employs a good record keeping system that enables easy response to all incidents during the construction process"; "establish a project quality management system"; and "the organisation employs a good record keeping system that enables easy analysis of all incidents during the construction process" ranked fourth, fifth, six, seventh, eighth and ninth, respectively.

Examining the data relative to "customer satisfaction" shows that all six listed CSR activities have MSs between 3.26 and 4.00, establishing that SMEs view these six CSR activities as very important. Examining the data in terms of the top two MSs, it is evident that "complete project within budget" ranked first (MS = 3.70), and "complete project on time" ranked second (MS = 3.67), leaving "the organisation has a policy to meet customers' needs" ranking the lowest (MS = 3.60). In addition to the MSs and ranking of the CSR activities relative to "customer satisfaction", the total average percentage shows that approximately 95% of the SMEs rated the CSR activities as very important.

Data pertaining to the only MS in relation to "customer service culture" shows that "has set up an appropriate asset management system (e.g. Construction maintenance and post-construction service)" is also considered as very important to SMEs, scoring an MS of 3.47.

Data relative to "innovation and development" shows that all three listed CSR activities have MSs between 3.26 and 4.00, inferring that SMEs consider these three CSR activities to be very important. Further, interpretation of the data in terms of the top MS, it is apparent that "investment on developing innovative construction technology" ranked first (MS = 3.40), leaving "investment on developing innovative construction methods" and "investment on developing innovative construction materials" ranking second and third, respectively.

Lastly, data in relation to "disclosure of true performance information of the organisation" shows that all five CSR activities have MSs between 3.26 and 4.00, supporting the notion that SMEs consider these five CSR activities to be very important. Upon a closer analysis of the data in terms of the top two MSs, it is evident that "accuracy of credit records of compliance with contract" ranked first (MS = 3.53) and "accurate information on product quality credit records" ranked second (MS = 3.50), leaving "accurate information on corporate credit records"; "accurate information on corporate tax credit records"; and "accurate information on corporate finance records" as ranked third, fourth and fifth, respectively.

Holistically, it is clear from the overall total average percentages reported in Table 6.40 relative to the CSR customer dimension that nearly 93% of the SMEs rated the CSR activities as very important, guiding the researcher as to the importance of the CSR activities associated with the CSR customer dimension in terms of consideration by SMEs in the South African construction industry to achieve SBP. Further to the descriptive statistics analysed for the CSR activities relative to the CSR customer dimension, and as part of the model development process for this study, further analysis on the CSR activities in relation to the CSR customer

dimension was conducted using FA with the aid of PCA as an extraction method. The FA results relative to the underlying CSR activities associated with CSR customer dimension are reported in the subsequent section.

Table 6.40: Mean statistics and frequencies: CSR activities associated with CSR customer dimension

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important	Moderately important	Important	Very important			
		1	2	3	4			
Quality and safety of construction product								
C53_A_A	Quality of buildings and their components	0.0	3.6	28.2	68.2	3.65	0.552	1
C53_A_F	Elimination of potential safety threats to the community	0.0	4.5	28.2	67.3	3.63	0.572	2
C53_A_E	Elimination of potential safety threats to the customer	0.9	3.6	29.1	66.4	3.61	0.607	3
C53_A_B	Durability of buildings and their components	0.0	3.6	35.5	60.9	3.57	0.566	4
C53_A_D	Attainment of safety requirements	0.0	6.4	30.0	63.6	3.57	0.613	5
C53_A_C	Attainment of legal requirements	0.9	4.5	32.7	61.8	3.55	0.629	6
C53_A_H	The organisation employs a good record keeping system that enables easy response to all incidents during the construction process	0.9	6.4	31.8	60.9	3.53	0.660	7
C53_A_I	Establish a project quality management system	2.7	6.4	27.3	63.6	3.52	0.739	8
C53_A_G	The organisation employs a good record keeping system that enables easy analysis of all incidents during the construction process	1.8	4.5	36.4	57.3	3.49	0.674	9
C53_TAP 1	*Total average percentages*	*0.8*	*4.8*	*31.0*	*63.3*	*94.3*		
Customer satisfaction								
C53_B_A	Complete project within budget	0.0	5.5	19.1	75.5	3.70	0.567	1
C53_B_B	Complete project on time	0.0	5.5	21.8	72.7	3.67	0.576	2
C53_B_F	Maintains an appropriate relationship with the supervision engineers and consultants	0.0	2.7	29.1	68.2	3.65	0.532	3
C53_B_E	Procedures in place to manage customer complaints properly	0.0	4.5	29.1	66.4	3.62	0.574	4
C53_B_D	The organisation has a policy to meet customers' expectations	1.8	2.7	27.3	68.2	3.62	0.635	5

Table 6.40: (Continued)

Coding	Variables	Response (%) Slightly important 1	Moderately important 2	Important 3	Very important 4	Mean	Std. Dev.	Rank
C53_B_C	The organisation has a policy to meet customers' needs	0.9	4.5	28.2	66.4	3.60	0.624	6
C53_TAP2	*Total average percentages*	*0.5*	*4.2*	*25.8*	*69.6*		*95.4*	
	Customer service culture							
C53_C_A	Has set up an appropriate asset management system (e.g. Construction maintenance and post-construction service)	1.8	4.5	38.2	55.5	3.47	0.673	1
C53_TAP 3	*Total average percentages*	*1.8*	*4.5*	*38.2*	*55.5*		*93.7*	
	Innovation and development							
C53_D_C	Investment on developing innovative construction technology	2.7	7.3	37.3	52.7	3.40	0.744	1
C53_D_B	Investment on developing innovative construction methods	2.7	7.3	40.0	50.0	3.37	0.740	2
C53_D_A	Investment on developing innovative construction materials	4.5	8.2	38.2	49.1	3.32	0.812	3
C53_TAP 4	*Total average percentages*	*3.3*	*7.6*	*38.5*	*50.6*		*89.1*	
	Disclosure of true performance information of the organisation							
C53_E_C	Accuracy of credit records of compliance with contract	0.9	3.6	37.3	58.2	3.53	0.616	1
C53_E_D	Accurate information on product quality credit records	1.8	2.7	39.1	56.4	3.50	0.646	2
C53_E_A	Accurate information on corporate credit records	1.8	4.5	40.0	53.6	3.45	0.672	3
C53_E_E	Accurate information on corporate tax credit records	1.8	6.4	36.4	55.5	3.45	0.699	4
C53_E_B	Accurate information on corporate finance records	1.8	6.4	40.0	51.8	3.42	0.696	5
C53_TAP 5	*Total average percentages*	*1.6*	*4.7*	*38.6*	*55.1*		*93.7*	
C53_OTAP	*Overall total average percentages*	*1.6*	*5.2*	*34.4*	*58.8*		*93.2*	

6.8.3.1. Identifying the underlying CSR activities associated with CSR customer dimension

Although the most significant CSR activities that influence the CSR customer dimension were identified in the preceding section via the descriptive statistics by ranking in hierarchical order, there is a high possibility that some of the CSR activities under the sub-dimensions may be interrelated through an underlying structure of primary factors. Thus, FA was performed.

6.8.3.1.1 KMO Adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity test on the variables (CSR activities) associated with customer dimension, the analysis of the results (see Table 6.41) firstly revealed that the KMO measure of sampling adequacy is 0.897, greater than 0.6 and less than 1, signifying that the sample is satisfactory for FA. Secondly, it is evident by the Bartlett's Sphericity Test that the p value = 0.000 which is less than 0.05. Both of these tests recommend that FA be conducted with the data.

Table 6.41: KMO and Bartlett's Test on variables (CSR activities) associated with CSR customer dimension

Test		Value	Remarks
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.897	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	2431.414	Significant and adequate for FA utilising PCA
	df	153	
	Sig.	0.000	

6.8.3.1.2 Principal component factors (CSR activities) associated with CSR customer dimension

Accepting PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotational method, Table 6.42 shows that three components have their eigenvalues greater than 1 and thus were extracted from the variables (CSR activities) associated with customer dimension. The eigenvalues of the three extracted components are 11.092; 2.206 and 1.108, respectively. Component 1, the one with the highest eigenvalue, is capable of explaining 61.62% of the variance whereas component 3, the least component, is capable of explaining 6.16% of the variance in the data. Combined, however, the three components are capable of explaining 80.04% of the total variance, demonstrating that these components have a highly significant influence on the CSR customer dimension.

Table 6.42: Total variance explained by factors (CSR activities) associated with CSR customer dimension

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	11.092	61.621	61.621	11.092	61.621	61.621	6.205	34.474	34.474
2	2.206	12.257	73.878	2.206	12.257	73.878	4.537	25.207	59.682
3	1.108	6.157	80.035	1.108	6.157	80.035	3.664	20.353	80.035
4	0.839	4.663	84.698						

Table 6.42: (Continued)

Compon ent	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
5	0.548	3.043	87.741						
6	0.421	2.337	90.078						
7	0.342	1.900	91.977						
8	0.265	1.472	93.450						
9	0.237	1.318	94.768						
10	0.188	1.046	95.815						
11	0.175	0.972	96.787						
12	0.149	0.825	97.612						
13	0.109	0.603	98.215						
14	0.103	0.573	98.789						
15	0.082	0.453	99.242						
16	0.052	0.289	99.531						
17	0.047	0.262	99.793						
18	0.037	0.207	100.000						
Extraction Method: Principal Component Analysis									

A further confirmatory analysis using Catell's scree plot was conducted on the variables to establish if these three components can be retained. The results in Figure 6.6 show that three components are retained.

Figure 6.6: Catell's scree plot for factors (CSR activities) associated with CSR customer dimension

In addition to the scree plot, a further confirmatory analysis with regards to the number of components to be retained was administered, utilising parallel analysis. It is clear from Table 6.43 that the corresponding random eigenvalues from the parallel analysis for the three components are 1.7637; 1.6183 and 1.4968, respectively, whereas the initial eigenvalues of the three components are 11.092; 2.206 and 1.108. The fundamental assumption of parallel analysis is that if the initial eigenvalue obtained from the PCA results is larger than the randomly generated eigenvalue from the parallel analysis, the factor is to be retained. However, if the eigenvalue obtained from the PCA results is less than that of the randomly generated eigenvalue from the parallel analysis, the factor must be rejected. Hence, according to Table 6.43 data, only two components could be retained since their initial eigenvalues are greater than the random eigenvalues. This allowed the researcher to force a two-factor extraction on SPSS.

Table 6.43: Comparison of PCA eigenvalue with parallel analysis eigenvalue

Component Number	Initial eigenvalue from PCA	Random eigenvalue from parallel analysis	Decision
1	11.092	1.7637	Accept
2	2.206	1.6183	Accept
3	1.108	1.4968	Reject

6.8.3.1.3 Summary of FA on (CSR activities) associated with CSR customer dimension

In total, 24 variables (CSR activities) were assessed to determine the most significant variables that influence CSR customer dimension. However, with the initial assessment, four of the 24 variables had strong cross-loading (75% and more) and were subsequently deleted. Hence, the FA was conducted utilising the 20 remaining variables, of which one variable illustrated a low communality score below 0.4, forcing the researcher to delete the variable and run the FA utilising the remaining 19 variables. On completion, another variable illustrated a strong cross-loading and FA had to be re-run one more time. The descriptive statistics were calculated as the first step of the analysis; thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was assessed and the results reported in Section 6.8.3.1.1. The Kaiser-Meyer-Olkin value was 0.897, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at $p = 0.000$ ($p < 0.5$), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed three components with eigenvalues greater than 1, explaining 80.04% of the total variance in the 18 variables associated with customer dimension. A careful scrutiny of the scree plot indicated a clear break after the third component. Further to the analysis utilising the scree plot, the Monte Carlo parallel analysis

confirmed that only the first two components could be retained. As a result, a two-component solution was accepted and the analysis was re-run extracting two components.

This study adopts the use of varimax rotation to aid the interpretation of the two components retained as well as for loading the variables. The results (see Table 6.44) reveal that both components illustrate strong loadings, with all variables loaded above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the components, as all variable communalities values are above 0.4, though the lowest communalities value of 0.537 is exhibited by C53_A_E "Elimination of potential safety threats to the customer", indicating that the variable contributed the least to the component. However, there was a positive correlation between the two components as evident from the total variance (73.88%) explained by the components. Considering the loading pattern of the factors associated with customer dimension, the variables that converge on component 1 represent *"Customer satisfaction and product safety"*, while component 2 could be regarded as *"Disclosure of financial and investment performance information of the organisation"*.

Table 6.44: Pattern/structure coefficients for variables (CSR activities) associated with CSR customer dimension

Coding	Variables	Component 1	Component 2	Communalities
C53_A_D	Attainment of safety requirements	**0.825**		0.738
C53_A_F	Elimination of potential safety threats to the community	**0.820**		0.732
C53_A_B	Durability of buildings and their components	**0.806**	0.383	0.796
C53_A_A	Quality of buildings and their components	**0.789**	0.303	0.715
C53_B_A	Complete project within budget	**0.780**		0.647
C53_B_B	Complete project on time	**0.767**	0.327	0.696
C53_B_E	Procedures in place to manage customer complaints properly	**0.760**	0.311	0.674
C53_B_F	Maintains an appropriate relationship with the supervision engineers and consultants	**0.729**	0.346	0.651
C53_A_E	Elimination of potential safety threats to the customer	**0.687**		0.552
C53_A_C	Attainment of legal requirements	**0.682**	0.339	0.580
C53_E_D	Accurate information on product quality credit records		**0.882**	0.850
C53_E_B	Accurate information on corporate finance records		**0.877**	0.844
C53_D_C	Investment on developing innovative construction technology		**0.852**	0.811
C53_E_C	Accuracy of credit records of compliance with contract	0.328	**0.848**	0.826
C53_E_A	Accurate information on corporate credit records	0.380	**0.845**	0.859
C53_D_B	Investment on developing innovative construction methods	0.351	**0.841**	0.830
C53_D_A	Investment on developing innovative construction materials		**0.810**	0.726
C53_C_A	Has set up an appropriate asset management system (e.g. Construction maintenance and post-construction service)	0.456	**0.750**	0.770
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization Rotation converged in 3 iterations				

Factor 1: Customer satisfaction and product safety includes 10 variables (CSR activities): Attainment of safety requirements; Elimination of potential safety threats to the community; Durability of buildings and their components; Quality of buildings and their components; Complete project within budget; Complete project on time; Procedures in place to manage customer complaints properly; Maintains an appropriate relationship with the supervision engineers and consultants; Elimination of potential safety threats to the customer; and Attainment of legal requirements.

Factor 2: Disclosure of financial and investment performance information of the organisation includes 10 variables (CSR activities): Accurate information on product quality credit records; Accurate information on corporate finance records; Investment on developing innovative construction technology; Accuracy of credit records of compliance with contract; Accurate information on corporate credit records; Investment on developing innovative construction methods; Investment on developing innovative construction materials; and Has set up an appropriate asset management system (e.g. Construction maintenance and post-construction service).

6.8.4 CSR activities associated with supplier and partner dimension

The CSR activities associated with the CSR supplier and partner dimension were categorised under three sub-dimensions: Maintain an appropriate partner relationship; Enhance communication with partners/suppliers; and Promote CSR performance of partners and suppliers. As with all other sections relative to the research constructs, this section specific to the CSR activities associated with the supplier and partner dimension was subject to a reliability analysis, utilising Cronbach's alpha presented in Appendix E 8. Appendix E 8 indicates that the internal consistency for the CSR activities is reliable and acceptable as the Cronbach's alpha values for all the CSR activities are above 0.70, with the total Cronbach's alpha coefficient at 0.935.

Following the reliability test, the results (Table 6.45) present the level of importance that SMEs attach to the CSR activities under the sub-dimensions related to the "CSR supplier and partner dimension". Data relative to "Maintain an appropriate partner relationship" makes evident that all five listed CSR activities have MSs between 3.26 and 4.00, indicating that SMEs consider these five CSR activities to be very important. A closer observation of the data in terms of the top two MSs discloses that "Mutual respect for business ethics", ranked first (MS = 3.65), and "Contractual obligations are met and contractors are paid in timely manner" ranked second (MS = 3.64) with a standard deviation of 0.617. "Contractual obligations are met and suppliers

are paid in timely manner"; "Mutual respect for laws"; and "Mutual respect for regulations" ranked third, fourth and fifth, respectively. In addition to the MSs and ranking of the CSR activities relative to "Maintain and appropriate partner relationship", total average percentage indicates that approximately 95% of the SMEs rated the CSR activities to be very important.

Data relative to "Enhance communication with partners/suppliers" makes clear that all three CSR activities have MSs between 3.26 and 4.00, representative of the fact that SMEs view these three CSR activities as very important. Deducing the data in terms of the top MS, it is apparent that "Effective communication with suppliers/partners" ranked first (MS = 3.44). Conversely, "Disclose organisation-to-supplier (partner) commitments and establish appropriate safeguards" and "Disclose organisation-to-supplier (partner) policies and establish appropriate safeguards" ranked second and third, respectively, with MSs of 3.34 and 3.33.

Lastly, data in relation to "Promote CSR performance of partners and suppliers" shows that both CSR activities listed have MSs between 3.26 and 4.00, implying that SMEs consider these two CSR activities to be very important. Observing the data closely, "Record the CSR commitment and performance of suppliers and partners" was the higher ranking of the two CSR activities, presenting an MS of 3.37.

Generally, as seen from the overall total average percentages (Table 6.45) relative to the CSR supplier and partner dimension that nearly 91% of the SMEs rated the CSR activities as very important, guiding the researcher as to how important the CSR activities associated with the supplier and partner dimension are in terms of consideration by SMEs in the South African construction industry to achieve SBP. As part of the model development process for this study, further analysis on the CSR activities in relation to the CSR supplier and partner dimension was conducted using FA with the aid of PCA as an extraction method. The FA results relative to the underlying CSR activities that influence the CSR supplier and partner dimension are reported in the subsequent section.

Table 6.45: Mean statistics and frequencies: CSR activities associated with supplier and partner dimension

Coding	Variables	Response (%)				Mean	Std. Dev	Rank
		Slightly important 1	Moderately important 2	Important 3	Very important 4			
	Maintain an appropriate partner relationship							
C54_A_E	Mutual respect for business ethics	0.9	5.5	21.8	71.8	3.65	0.629	1
C54_A_B	Contractual obligations are met and contractors are paid in timely manner	1.8	1.8	27.3	69.1	3.64	0.617	2
C54_A_A	Contractual obligations are met and suppliers are paid in timely manner	1.8	1.8	27.3	69.1	3.64	0.617	3
C54_A_C	Mutual respect for laws	2.7	3.6	25.5	68.2	3.59	0.695	4
C54_A_D	Mutual respect for regulations	2.7	3.6	25.5	68.2	3.59	0.695	5
C54_TAP 1	*Total average percentages*	*2.0*	*3.3*	*25.5*	*69.3*		*94.8*	
	Enhance communication with partners/suppliers							
C54_B_C	Effective communication with suppliers/partners	1.8	8.2	34.5	55.5	3.44	0.723	1
C54_B_B	Disclose organisation – to – supplier (partner) commitments and establish appropriate safeguards	3.6	9.1	37.3	50.0	3.34	0.793	2
C54_B_A	Disclose organisation – to – supplier (partner) policies and establish appropriate safeguards	1.8	10.9	40.0	47.3	3.33	0.743	3
C54_TAP 2	*Total average percentages*	*2.4*	*9.4*	*37.3*	*50.9*		*88.2*	
	Promote CSR performance of partners and suppliers							
C54_C_A	Record the CSR commitment and performance of suppliers and partners	4.5	5.5	38.2	51.8	3.37	0.788	1
C54_C_B	Assess the CSR commitment and performance of suppliers and partners	6.4	6.4	39.1	48.2	3.29	0.850	2
C54_TAP 3	*Total average percentages*	*5.5*	*6.0*	*38.7*	*50.0*		*88.7*	
C54_OTA P	*Overall total percentages*	*3.3*	*6.2*	*33.8*	*56.7*		*90.5*	

6.8.4.1 Identifying the underlying variables that influence the CSR supplier and partner dimension

Although the most significant variables that influence the CSR supplier and partner dimension were identified in the preceding section via descriptive statistics by ranking in hierarchical order, there is a high possibility that some of the variables under the sub-dimensions may be interrelated through an underlying structure of primary factors. Thus, FA was performed.

6.8.4.1.1 KMO Adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity Test on the variables (CSR activities) associated with supplier and partner dimension, the results (see Table 6.46) firstly revealed that the KMO measure of sampling adequacy is 0.806, greater than 0.6 and less than 1, signifying that the sample is satisfactory for FA. Secondly, it is evident by the Bartlett's Sphericity Test that the p value = 0.000 which is less than 0.05. Both of these tests recommend that FA can be conducted with the data.

Table 6.46: KMO and Bartlett's Test on variables (CSR activities) associated with CSR supplier and partner dimension

Test		Value	Remarks
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.806	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	1318.512	Significant and adequate for FA utilising PCA
	df	45	
	Sig.	0.000	

6.8.4.1.2 Principal component factors (CSR activities) associated with CSR supplier and partner dimension

Accepting PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotational method, two components have their eigenvalues greater than 1 and thus were extracted from the variables (CSR activities) associated with supplier and partner dimension (Table 6.47). The eigenvalues of the two extracted components are 6.391, and 1.850, respectively. Component 1, the one with the highest eigenvalue, is capable of explaining 63.91% of the variance, whereas component 2 is capable of explaining 18.50% of the data variance. Combined, however, the two components are capable of explaining 82.41% of the total variance, affirming that these components have a highly significant influence on the CSR supplier and partner dimension.

Table 6.47: Total variance explained by factors (CSR activities) associated with CSR supplier and partner dimension

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.391	63.907	63.907	6.391	63.907	63.907	4.284	42.835	42.835
2	1.850	18.501	82.408	1.850	18.501	82.408	3.957	39.572	82.408
3	0.549	5.492	87.899						
4	0.459	4.585	92.485						
5	0.235	2.348	94.832						
6	0.177	1.769	96.601						
7	0.153	1.527	98.128						
8	0.101	1.006	99.133						
9	0.051	0.511	99.644						
10	0.036	0.356	100.000						

Extraction Method: Principal Component Analysis.

A further confirmatory analysis using Catell's scree plot was conducted on the variables to establish if these two components can be retained. The results (Figure 6.7) show that two components are retained.
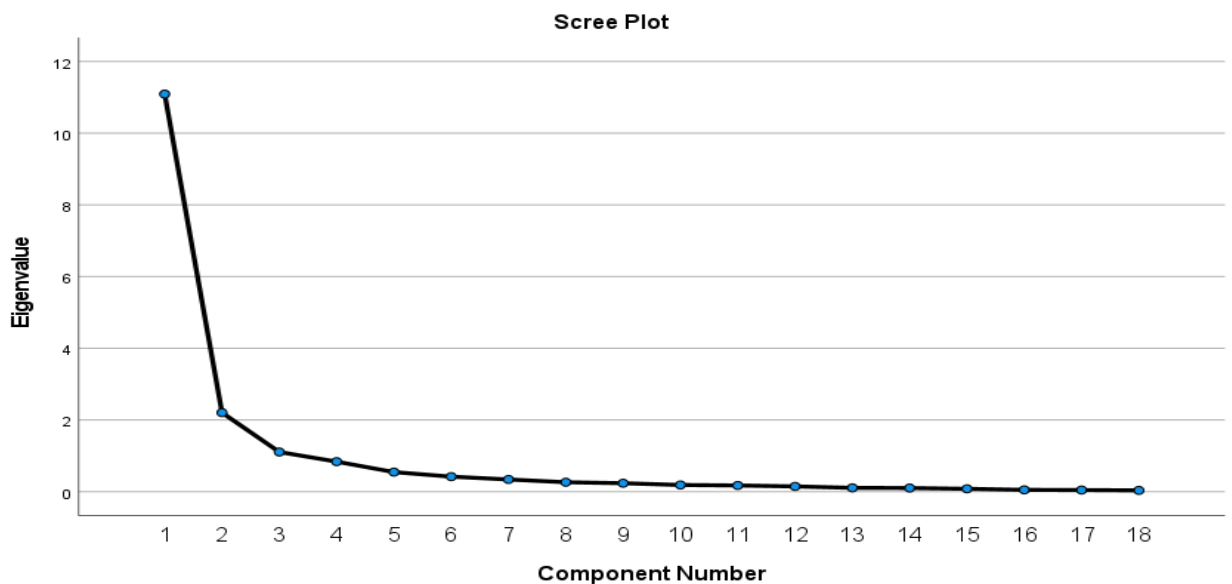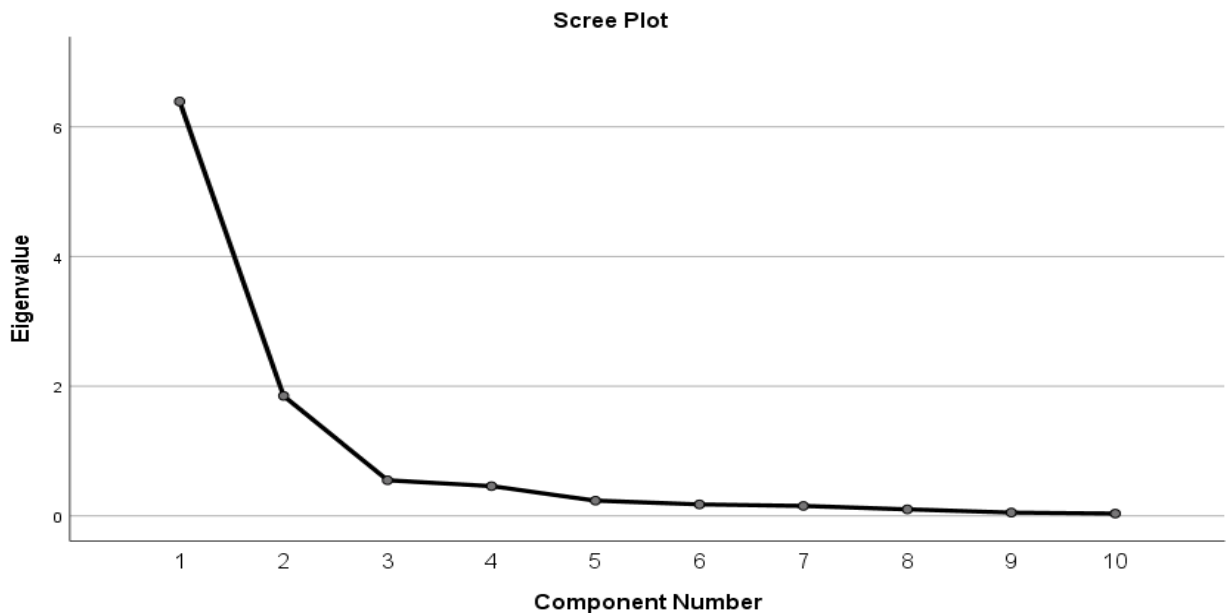

Figure 6.7: Catell's scree plot for factors (CSR activities) associated with CSR supplier and partner dimension

In addition to the scree plot, a further confirmatory analysis to reach a conclusion with regards to the number of components to be retained was administered, utilising parallel analysis. Table 6.48 shows that the corresponding random eigenvalues from the parallel analysis for the two components are 1.5186 and 1.3438, respectively, whereas the initial eigenvalues of the two components are 6.391 and 1.850. The fundamental assumption of parallel analysis is that if the initial eigenvalue obtained from the PCA results is larger than the randomly generated eigenvalue from the parallel analysis, the factor is to be retained. However, if the eigenvalue obtained from the PCA results is less than that of the randomly generated eigenvalue from the parallel analysis, the factor must be rejected. Hence, both components could be retained since their initial eigenvalues are greater than the random eigenvalues.

Table 6.48: Comparison of PCA eigenvalue with parallel analysis eigenvalue

Component Number	Initial eigenvalue from PCA	Random eigenvalue from parallel analysis	Decision
1	6.391	1.5186	Accept
2	1.850	1.3438	Accept

6.8.4.1.3 Summary of FA on CSR activities associated with CSR supplier and partner dimension

In total, 10 variables (CSR activities) were assessed to determine the most significant variables that influence CSR supplier and partner dimension. The descriptive statistics were calculated as the first step of the analysis; thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was assessed and the results reported in Section 6.8.4.1.1. The Kaiser-Meyer-Olkin value was 0.806, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at $p = 0.000$ ($p < 0.5$), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed two components with eigenvalues greater than 1, explaining 82.41% of the total variance in the 10 variables associated with supplier and partner dimension. A careful scrutiny of the scree plot indicated a clear break after the second component. Further to the analysis utilising the scree plot, the Monte Carlo parallel analysis confirmed that the two components could be retained. As a result, a two-component solution was accepted and the analysis was re-run extracting two components.

This study adopts the use of varimax rotation to aid the interpretation of the two components retained as well as for loading the variables. The results (Table 6.49) reveal that both components illustrate strong loadings, with all variables loaded substantially above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the

components as all the variable communalities values are above 0.4, though the lowest communalities value of 0.767 is exhibited by C54_A_A "Contractual obligations are met and suppliers are paid in timely manner" which indicates that the variable contributed the least to the component. However, there was a positive correlation between the two components as evident from the total variance (82.41%) explained by the components. Considering the loading pattern of the factors associated with supplier and partner dimension, the variables that converge on component 1 represent *"Preserve suitable supplier and partner relationships"*, while component 2 could be regarded as *"Promote adequate communication and CSR performance with suppliers and partners"*.

Table 6.49: Pattern/structure coefficients for variables (CSR activities) associated with CSR supplier and partner dimension

Coding	Variables	Component		Communalities
		1	2	
C54_A_D	Mutual respect for regulations	**0.903**		0.872
C54_A_C	Mutual respect for laws	**0.891**		0.852
C54_A_B	Contractual obligations are met and contractors are paid in timely manner	**0.887**		0.833
C54_A_E	Mutual respect for business ethics	**0.874**		0.835
C54_A_A	Contractual obligations are met and suppliers are paid in timely manner	**0.820**	0.307	0.767
C54_C_A	Record the CSR commitment and performance of suppliers and partners		**0.897**	0.829
C54_B_B	Disclose organisation – to – supplier (partner) commitments and establish appropriate safeguards		**0.874**	0.814
C54_C_B	Assess the CSR commitment and performance of suppliers and partners		**0.869**	0.814
C54_B_A	Disclose organisation –to – supplier (partner) policies and establish appropriate safeguards		**0.855**	0.819
C54_B_C	Effective communication with suppliers/partners	0.481	**0.759**	0.808
Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization a. Rotation converged in 3 iterations				

Factor 1: Preserve suitable supplier and partner relationships includes five variables (CSR activities): Mutual respect for regulations; Mutual respect for laws; Contractual obligations are met and contractors are paid in timely manner; Mutual respect for business ethics; and Contractual obligations are met and suppliers are paid in timely manner

Factor 2: Promote adequate communication and CSR performance with suppliers and partners includes five variables (CSR activities): Record the CSR commitment and performance of suppliers and partners; Disclose organisation-to-supplier (partner) commitments and establish

appropriate safeguards; Assess the CSR commitment and performance of suppliers and partners; Disclose organisation-to-supplier (partner) policies and establish appropriate safeguards; and Effective communication with suppliers/partners

6.8.5 CSR activities associated with CSR government dimension

The CSR activities associated with CSR government dimension were categorised under three sub-dimensions: Pay tax; Obey the requirements of laws and policy; and Provide employment opportunities. This section, specific to the CSR activities associated with CSR government dimension, was subject to a reliability analysis utilising Cronbach's alpha presented in Appendix E 9. Appendix E 9 indicates that the internal consistency for the CSR activities is reliable and acceptable as the Cronbach's alpha values for all the CSR activities are above 0.70, with the total Cronbach's alpha coefficient at 0.851.

Following the reliability test, the results (Table 6.50) present the level of importance that SMEs attach to the CSR activities under the sub-dimensions related to the "CSR government dimension". Data relative to "Pay tax" makes evident that only one variable exists, "Pay required tax payments as stipulated by law", which has an MS of 3.66, indicating that SMEs consider the variable to be very important.

Data relative to "Obey the requirements of laws and policy" shows that both CSR activities have MSs between 3.26 and 4.00, implying that SMEs consider these CSR activities as very important. Observing the data closely shows that, "Abide by the law (codes of conduct, anti-corruption, building regulation) and bear other obligations stipulated by the government" ranked the highest of the two CSR activities, presenting an MS of 3.71.

Lastly, data relative to "Provide employment opportunities" shows that only one CSR activity, "Provide employment opportunities for society", illustrates an MS of 3.60, implying that SMEs consider the CSR activity as very important. In addition to the MSs and ranking of the CSR activity relative to "Provide employment opportunities", the total average percentage indicates that approximately 96% of the SMEs rated the CSR activity to be very important.

Generally, the overall total average percentages reported in Table 6.50 relative to the CSR government dimension shows that roughly 94% of the SMEs rated the CSR activities to be very important.

Table 6.50: Mean statistics and frequencies pertaining to CSR activities associated with CSR government dimension

Coding	Variables	Response (%)				Mean	Std. Dev	Rank
		Slightly important 1	Moderately important 2	Important 3	Very important 4			
	Pay tax							
C55_A_A	Pay required tax payments as stipulated by law	1.8	3.6	20.9	73.6	3.66	0.639	1
C55_TAP 1	*Total average percentages*	*1.8*	*3.6*	*20.9*	*73.6*		*94.5*	
	Obey the requirements of laws and policy							
C55_B_A	Abide by the law (codes of conduct, anti-corruption, building regulation) and bear other obligations stipulated by the government	0.9	3.6	19.1	76.4	3.71	0.580	1
C55_B_B	Actively support the public welfare activities that government initiated	3.6	5.5	26.4	64.4	3.52	0.763	2
C55_TAP 2	Total average percentages	*2.3*	*4.6*	*22.8*	*70.4*		*93.2*	
	Provide employment opportunities							
C55_C_A	Provide employment opportunities for society	2.7	1.8	28.2	67.3	3.60	0.666	1
C55_TAP 3	*Total average percentages*	*2.7*	*1.8*	*28.2*	*67.3*		*95.5*	
C55_OTAP	**Overall total average percentages**	*2.3*	*3.3*	*24.0*	*70.4*		*94.4*	

6.8.5.1 Identifying the underlying CSR activities associated with CSR government dimension

Though the most significant CSR activities that influence the CSR government dimension were identified in the preceding section via the descriptive statistics by ranking in hierarchical order, there is a high possibility that some of the CSR activities under the sub-dimensions may be interrelated through an underlying structure of primary factors. Thus, FA was performed.

6.8.5.1.1 KMO Adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity Test on the variables (CSR activities) associated with government dimension, the analysis of the results (Table 6.51) firstly revealed that the KMO measure of sampling adequacy is 0.733, greater than 0.6 and less than 1, signifying that the sample is satisfactory for FA. Secondly, the Bartlett's Sphericity Test p value = 0.000, less than 0.05. Both of these tests recommend that FA can be conducted with the data.

Table 6.51: KMO and Bartlett's Test on variables (CSR activities) associated with CSR government dimension

Test		Values	Remarks
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.733	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	273.779	Significant and adequate for FA utilising PCA
	df	6	
	Sig.	0.000	

6.8.5.1.2 Principal component factors (CSR activities) associated with government dimension

Acknowledging PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotational method, Table 6.52 shows one component with an eigenvalue greater than 1 extracted from the variables (CSR activities) associated with CSR government dimension. The eigenvalue of the one extracted component is 2.846. This component is capable of explaining 71.15% of the variance in the data, demonstrating that it has a significant influence on the CSR government dimension.

Table 6.52: Total variance explained by factors (CSR activities) associated with CSR government dimension

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.846	71.147	71.147	2.846	71.147	71.147
2	0.578	14.439	85.587			
3	0.479	11.963	97.549			
4	0.098	2.451	100.000			
Extraction Method: Principal Component Analysis						

A further confirmatory analysis using Catell's scree plot was conducted on the variables to establish if the one component can be retained. The results in Figure 6.8 illustrate that one component is retained.
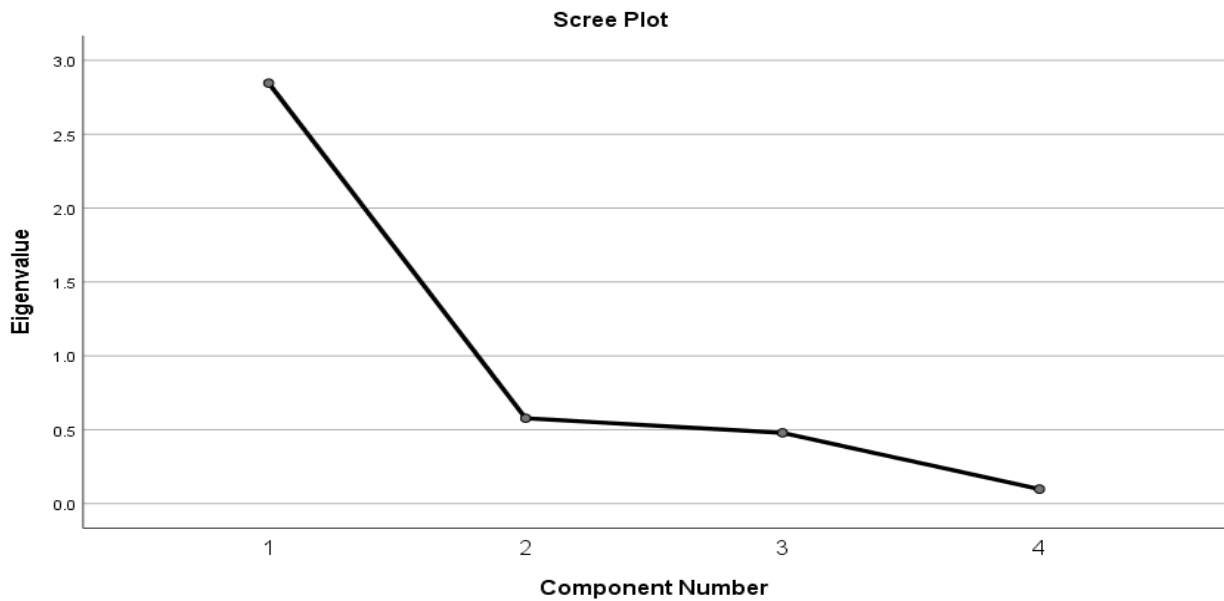
Figure 6.8: Catell's scree plot for factors (CSR activities) associated with CSR government dimension

6.8.5.1.3 Summary of FA on (CSR activities) associated with CSR government dimension

In total, four variables (CSR activities) were assessed to determine the most significant variables that influence CSR government dimension. The descriptive statistics were calculated as the first step of the analysis; thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was assessed and the results reported in Section 6.8.5.1.1. The Kaiser-Meyer-Olkin value was 0.733, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at $p = 0.000$ ($p < 0.5$), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed one component with an eigenvalue greater than 1, explaining 71.15% of the total variance in the four variables associated with CSR government dimension. A careful scrutiny of the scree plot indicated a clear break after the first component. This study adopts the use of varimax rotation to aid the interpretation of the one component retained as well as for loading the variables. The results (Table 6.53) reveal that the one component illustrates strong loadings, with all variables loaded substantially above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the components as all variable communalities values are above 0.4, though the lowest communalities value of 0.541 is exhibited by C55_B_B "Actively support the public welfare activities that government initiated" as this variable contributed the least to the component. Considering the loading pattern of the factors associated with government dimension, the

variables that converge on component 1 represent *"Conformance to the requirements of government laws and policies"*.

Table 6.53: Pattern/structure coefficients for variables (CSR activities) associated with CSR government dimension

Coding	Variables	Component 1	Communalities
C55_B_A	Abide by the law (codes of conduct, anti-corruption, building regulation) and bear other obligations stipulated by the government	**0.931**	0.868
C55_A_A	Pay required tax payments as stipulated by law	**0.900**	0.810
C55_C_A	Provide employment opportunities for society	**0.792**	0.627
C55_B_B	Actively support the public welfare activities that government initiated	**0.736**	0.541
Extraction Method: Principal Component Analysis a. 1 component extracted			

Factor 1: Conformance to the requirements of government laws and policies includes all four variables (CSR activities): Abide by the law (codes of conduct, anti-corruption, building regulation) and bear other obligations stipulated by the government; Pay required tax payments as stipulated by law; Provide employment opportunities for society; and Actively support the public welfare activities that government initiated.

6.8.6 CSR activities associated with CSR environment and resources dimension

The CSR activities associated with CSR environment and resources dimension were categorised under two sub-dimensions: Conservation of energy and resources and Environment protection. The CSR activities associated with the CSR environment and resources dimension were subject to a reliability analysis, utilising Cronbach's alpha presented in Appendix E 10. Appendix E 10 indicates that the internal consistency for the CSR activities is reliable and acceptable as the Cronbach's alpha values for all the CSR activities are above 0.70, with the total Cronbach's alpha coefficient at 0.976.

Following the reliability test, the results (Table 6.54) present the level of importance that SMEs attach to the CSR activities under the sub-dimensions related to the "CSR environment and resources dimension". Thus, data relative to "Conservation of energy and resources" makes evident that all eight CSR activities listed have MSs between 3.26 and 4.00, indicating that SMEs consider these CSR activities to be very important. Taking a closer look at the data in terms of the top three MSs, it is clear that, "The organisation encourages responsible utilisation of resources" ranked first (MS = 3.49); "The organisation trains labour force to encourage resource saving" ranked second (MS = 3.47) and "The organisation trains labour force

pertaining to the awareness of environmental protection" ranked third (MS = 3.43). The remainder, "Scientific and technological innovation (energy conservation/reduce consumption of resources) during construction process"; "The organisation promotes the use of renewable resources and alternative energy systems"; "Minimizing construction demolition waste to landfill and energy consumption"; "Land use efficiency", and "Water conservation and harvesting in construction process and building operation", ranked fourth, fifth, sixth, seventh and eighth, respectively.

In terms of "Environmental protection", all nine CSR activities listed have MSs between 3.26 and 4.00, implying that SMEs view these CSR activities as very important. Further examination of the data in terms of the top three MSs shows that, "Appropriate waste disposal processes" ranked first (MS = 3.50); "Compliance with environmental laws and regulations in the construction industry" ranked second (MS = 3.48); and "Appropriate waste recycling processes" ranked third (MS = 3.47). Conversely, "Improvement of corporate environmental management system"; "The organisation engages in R and D of building designs that improve the energy efficiency"; and "The organisation engages in appropriate R and D that encourages green construction (e.g. green building design, green materials, new construction methods)" ranked seventh, eighth and ninth, respectively, with MSs of 3.42, 3.40 and 3.36.

The overall total average percentages reported in Table 6.54 relative to the CSR environment and resources dimension show that roughly 93% of the SMEs rated the CSR activities to be very important.

Table 6.54: Mean statistics and frequencies pertaining to the CSR activities associated with CSR environment and resources dimension

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important	Moderately important	Important	Very important			
		1	2	3	4			
	Conservation of energy and resources							
C56_A_D	The organisation encourages responsible utilisation of resources	0.9	4.5	39.1	55.5	3.49	0.632	1
C56_A_G	The organisation trains labour force to encourage resource saving	1.8	4.5	38.2	55.5	3.47	0.673	2
C56_A_H	The organisation trains labour force pertaining to the awareness of environmental protection	1.8	7.3	37.3	53.6	3.43	0.710	3
C56_A_F	Scientific and technological innovation (energy conservation/reduce consumption of resources) during construction process	1.8	5.5	41.8	50.9	3.42	0.682	4

Table 6.54: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important	Moderately important	Important	Very important			
		1	2	3	4			
C56_A_E	The organisation promotes the use of renewable resources and alternative energy systems	2.7	5.5	39.1	52.7	3.42	0.722	5
C56_A_C	Minimizing construction demolition waste to landfill and energy consumption	1.8	5.5	43.6	49.1	3.40	0.680	6
C56_A_B	Land use efficiency	2.7	5.5	43.6	48.2	3.37	0.715	7
C56_A_A	Water conservation and harvesting in construction process and building operation	2.7	5.5	45.5	46.4	3.35	0.711	8
C56_TAP 1	*Total average percentages*	*2.0*	*5.5*	*41.0*	*51.5*		*92.5*	
	Environment protection							
C56_B_H	Appropriate waste disposal processes	1.8	2.7	39.1	56.4	3.50	0.646	1
C56_B_E	Compliance with environmental laws and regulations in the construction industry	0.9	5.5	38.2	55.5	3.48	0.646	2
C56_B_I	Appropriate waste recycling processes	1.8	4.5	38.2	55.5	3.47	0.673	3
C56_B_A	Construction practices that reduce pollution emissions (e.g. gas, dust, sewage, solid waste and other hazardous substances)	0.9	10.0	32.7	56.4	3.45	0.711	4
C56_B_B	Impact evaluation of the construction project on the environment during project planning, construction, and operation stages	2.7	5.5	36.4	55.5	3.45	0.724	5
C56_B_C	Establishment of corporate environmental management system	2.7	4.5	40.0	52.7	3.43	0.710	6
C56_B_D	Improvement of corporate environmental management system	1.8	4.5	43.6	50.0	3.42	0.669	7
C56_B_F	The organisation engages in R and D of building designs that improve the energy efficiency	2.7	6.4	39.1	51.8	3.40	0.732	8
C56_B_G	The organisation engages in appropriate R and D that encourages green construction (e.g. green building design, green materials, new construction methods)	5.5	3.6	40.0	50.9	3.36	0.798	9
C56_TAP 2	*Total average percentages*	*2.3*	*5.2*	*38.6*	*53.9*		*92.5*	
C56_OTAP	*Overall total average percentages*	*2.2*	*5.4*	*39.8*	*52.7*		*92.5*	

6.8.6.1 Identifying the underlying CSR activities associated with CSR environment and resources dimension

Though the most significant CSR activities that influence the CSR environment and resources dimension were identified in the preceding section, via the descriptive statistics by ranking in hierarchical order, it is likely that some of the CSR activities under the sub-dimensions may be interrelated through an underlying structure of primary factors. Thus, FA was performed.

6.8.6.1.1 KMO Adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity Test on the variables (CSR activities) associated with environment and resources dimension, the analysis of the results illustrated in Table 6.55 firstly revealed that the KMO measure of sampling adequacy is 0.906, which is greater than 0.6 and less than 1, signifying that the sample is satisfactory for FA. Secondly, it is evident from the Bartlett's Sphericity Test that the p value = 0.000, less than 0.05. Both of these tests recommend that FA be conducted with the data.

Table 6.55: KMO and Bartlett's Test on variables (CSR activities) associated with environment and resources dimension

Test		Values	Remarks
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.906	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	2364.548	Significant and adequate for FA utilising PCA
	df	136	
	Sig.	0.000	

6.8.6.1.2 Principal component factors (CSR activities) associated with environment and resources dimension

Acknowledging PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotational method, Table 6.56 reveals one component with an eigenvalue greater than 1 which was extracted from the variables (CSR activities) associated with CSR environment and resources dimension. The eigenvalue of the one extracted component is 12.335. This component is capable of explaining 72.56% of the variance in the data, demonstrating a significant influence on the CSR environment and resources dimension.

Table 6.56: Total variance explained by factors (CSR activities) associated with CSR environment and resources dimension

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.335	72.558	72.558	12.335	72.558	72.558
2	0.983	5.782	78.340			
3	0.660	3.883	82.223			
4	0.540	3.177	85.400			
5	0.413	2.429	87.829			
6	0.354	2.085	89.914			
7	0.318	1.870	91.784			
8	0.273	1.606	93.390			
9	0.243	1.431	94.821			
10	0.203	1.193	96.013			
11	0.179	1.053	97.066			
12	0.135	0.794	97.860			
13	0.116	0.680	98.540			
14	0.082	0.482	99.022			
15	0.074	0.435	99.457			
16	0.052	0.308	99.765			
17	0.040	0.235	100.000			
Extraction Method: Principal Component Analysis						

A further confirmatory analysis using Catell's scree plot was conducted on the variables to establish if the one component can be retained. The results in Figure 6.9 illustrate that the one component is retained.

Figure 6.9: Catell's scree plot for factors (CSR activities) associated with CSR environment and resources dimension

6.8.6.1.3 Summary of FA on CSR activities associated with CSR environment and resources dimension

In total, 17 variables (CSR activities) were assessed to determine the most significant variables that influence CSR environment and resources dimension. The descriptive statistics were calculated as the first step of the analysis; thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was

assessed and the results reported in Section 6.8.6.1.1. The Kaiser-Meyer-Olkin value was 0.906, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at p = 0.000 (p < 0.5), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed one component with an eigenvalue greater than 1, explaining 72.56% of the total variance in the 17 variables associated with CSR environment and resources dimension. A careful scrutiny of the scree plot indicated a clear break after the first component. This study adopts the use of varimax rotation to aid the interpretation of the one component retained as well as for loading the variables. The results (Table 6.57) reveal that the one component has strong loadings, with all variables loaded substantially above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the components as all the variable communalities values are above 0.4, though the lowest communalities value of 0.605 is exhibited by C56_A_D" The organisation encourages responsible utilisation of resources" as this variable contributed the least to the component. Considering the loading pattern of the factors associated with environment and resources dimension, the variables that converge on component 1 represent *"Environmental protection and the conservation of energy and resources"*.

Table 6.57: Pattern/structure coefficients for variables (CSR activities) associated with CSR environment and resource dimension

Coding	Variables	Component 1	Communalities
C56_B_D	Improvement of corporate environmental management system	**0.909**	0.827
C56_A_H	The organisation trains labour force pertaining to the awareness of environmental protection	**0.887**	0.786
C56_A_E	The organisation promotes the use of renewable resources and alternative energy systems	**0.883**	0.779
C56_A_A	Water conservation and harvesting in construction process and building operation	**0.882**	0.778
C56_B_A	Construction practices that reduce pollution emissions (e.g. gas, dust, sewage, solid waste and other hazardous substances)	**0.868**	0.753
C56_B_G	The organisation engages in appropriate R and D that encourages green construction (e.g. green building design, green materials, new construction methods)	**0.857**	0.734
C56_B_C	Establishment of corporate environmental management system	**0.856**	0.733
C56_A_B	Land use efficiency	**0.856**	0.733
C56_A_G	The organisation trains labour force to encourage resource saving	**0.849**	0.721
C56_A_C	Minimizing construction demolition waste to landfill and energy consumption	**0.847**	0.717
C56_B_I	Appropriate waste recycling processes	**0.846**	0.716
C56_B_B	Impact evaluation of the construction project on the environment during project planning, construction, and operation stages	**0.844**	0.712
C56_B_H	Appropriate waste disposal processes	**0.843**	0.710

Table 6.57: (Continued)

Coding	Variables	Component 1	Communalities
C56_B_F	The organisation engages in R and D of building designs that improve the energy efficiency	**0.838**	0.702
C56_A_F	Scientific and technological innovation (energy conservation/reduce consumption of resources) during construction process	**0.822**	0.675
C56_B_E	Compliance with environmental laws and regulations in the construction industry	**0.807**	0.652
C56_A_D	The organisation encourages responsible utilisation of resources	**0.778**	0.605
Extraction Method: Principal Component Analysis a. 1 component extracted			

Factor 1 Environmental protection and the conservation of energy and resources includes all 17 variables (CSR activities): Improvement of corporate environmental management system; The organisation trains labour force pertaining to the awareness of environmental protection; The organisation promotes the use of renewable resources and alternative energy systems; Water conservation and harvesting in construction process and building operation; Construction practices that reduce pollution emissions (e.g. gas, dust, sewage, solid waste and other hazardous substances); The organisation engages in appropriate R and D that encourages green construction (e.g. green building design, green materials, new construction methods); Establishment of corporate environmental management system; Land use efficiency; The organisation trains labour force to encourage resource saving minimizing construction demolition waste to landfill and energy consumption; Appropriate waste recycling processes; Impact evaluation of the construction project on the environment during project planning, construction, and operation stages; Appropriate waste disposal processes; The organisation engages in R and D of building designs that improve the energy efficiency; Scientific and technological innovation (energy conservation/reduce consumption of resources) during construction process; Compliance with environmental laws and regulations in the construction industry; and The organisation encourages responsible utilisation of resources.

6.8.7 CSR activities associated with CSR community dimension

The CSR activities associated with CSR community dimension were categorised under two sub-dimensions: Project impact on community and Build harmonious community. This section specific to the CSR activities associated with the CSR community dimension was subject to a reliability analysis, utilising Cronbach's alpha presented in Appendix E 11. Appendix E 11 indicates that the internal consistency for the CSR activities is reliable and acceptable as the

Cronbach's alpha values for all the CSR activities are above 0.70, with the total Cronbach's alpha coefficient at 0.930.

Subsequent to the reliability test, the results (Table 6.58) present the level of importance that SMEs attach to the CSR activities under the sub-dimensions related to the "CSR community dimension". Thus, data relative to "Project impact on community" makes evident that all three CSR activities listed have MSs between 3.26 and 4.00, indicating that SMEs consider these CSR activities to be very important. Taking a closer look at the data in terms of the top MS, "Maintain good communication channels with neighbours" ranked first (3.64) while "Minimise safety hazards to the community" and "Commitments to protect local environment" ranked second and third, with MSs of 3.62 and 3.53. In addition to the MSs and ranking of the CSR activities relative to "Project impact on community", the total average percentage indicates that approximately 95% of the SMEs rated the CSR activity to be very important.

Data in relation to "Build harmonious community" affirms that all four variables represent MSs between 3.26 and 4.00, confirming that SMEs view these CSR activities to be very important. Further analysing the data in terms of the top two MSs, "Business promotes work opportunities to the local community" ranked first (3.55) and "Communicate of corporate values and create long-term relationship with the local community" ranked second (3.50), while "Participate in community activities and provide some financial support where appropriate" and "Build community welfare facilities" ranked third and fourth, respectively.

The overall total average percentages reported in Table 6.58 relative to the CSR community dimension show that roughly 93% of the SMEs rated the CSR activities to be very important.

Table 6.58: Mean statistics and frequencies pertaining to CSR activities associated with CSR community dimension

Coding	Variables	Response (%)				Mean	Std. Dev	Rank
		Slightly important	Moderately important	Important	Very important			
		1	2	3	4			
	Project impact on community							
C57_A_C	Maintain good communication channels with neighbours	1.8	1.8	27.3	69.1	3.64	0.617	1
C57_A_B	Minimise safety hazards to the community	2.7	0.9	28.2	68.2	3.62	0.649	2
C57_A_A	Commitments to protect local environment	2.7	4.5	30.0	62.7	3.53	0.713	3
C57_TAP 1	*Total average percentages*	*2.4*	*2.4*	*28.5*	*66.7*		*95.2*	

Table 6.58: (Continued)

Coding	Variables	Response (%)				Mean	Std. Dev	Rank
		Slightly important 1	Moderately important 2	Important 3	Very important 4			
	Build harmonious community							
C57_B_C	Business promotes work opportunities to the local community	1.8	3.6	32.7	61.8	3.55	0.659	1
C57_B_D	Communicate of corporate values and create long-term relationship with the local community	1.8	6.4	31.8	60	3.50	0.701	2
C57_B_A	Participate in community activities and provide some financial support where appropriate	2.7	5.5	33.6	58.2	3.47	0.726	3
C57_B_B	Build community welfare facilities	2.7	10.9	28.2	58.2	3.42	0.794	4
C57_TAP 2	*Total average percentages*	*2.3*	*6.6*	*31.6*	*59.6*		*91.2*	
C57_OTAP	*Overall total average percentages*	*2.4*	*4.5*	*30.1*	*63.2*		*93.3*	

6.8.7.1 Identifying the underlying CSR activities associated with CSR community dimension

Though the most significant CSR activities that influence the CSR community dimension were identified in the preceding section, via the descriptive statistics by ranking in hierarchical order, it is highly possible that some of the CSR activities under the sub-dimensions may be interrelated through an underlying structure of primary factors. Thus, FA was performed.

6.8.7.1.1 KMO Adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity Test on the variables (CSR activities) associated with community dimension, the analysis of the results (Table 6.59) showed the KMO measure of sampling adequacy at 0.874, greater than 0.6 and less than 1, signifying that the sample is satisfactory for FA. Secondly, the Bartlett's Sphericity Test determined a p value = 0.000 which is less than 0.05. Both of these tests recommend that FA can be conducted with the data.

Table 6.59: KMO and Bartlett's Test on variables (CSR activities) associated with community dimension

Test		Values	Remarks
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.874	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	636.471	Significant and adequate for FA utilising PCA
	df	21	
	Sig.	0.000	

6.8.7.1.2 Principal component factors (CSR activities) associated with community dimension

Acknowledging PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotational method, it is clear (Table 6.60) that one component has an eigenvalue greater than 1 and was therefore extracted from the variables (CSR activities) associated with CSR community dimension. The eigenvalue of the one extracted component is 4.943, so this component is capable of explaining 70.62% of the data variance, demonstrating significant influence on the CSR community dimension.

Table 6.60: Total variance explained by factors (CSR activities) associated with CSR community dimension

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.943	70.620	70.620	4.943	70.620	70.620
2	0.783	11.182	81.802			
3	0.449	6.419	88.221			
4	0.295	4.219	92.441			
5	0.249	3.561	96.002			
6	0.162	2.314	98.316			
7	0.118	1.684	100.000			
Extraction Method: Principal Component Analysis						

A further confirmatory analysis using Catell's scree plot was conducted on the variables to establish if the one component can be retained. The result in Figure 6.10 illustrate that one component is retained.
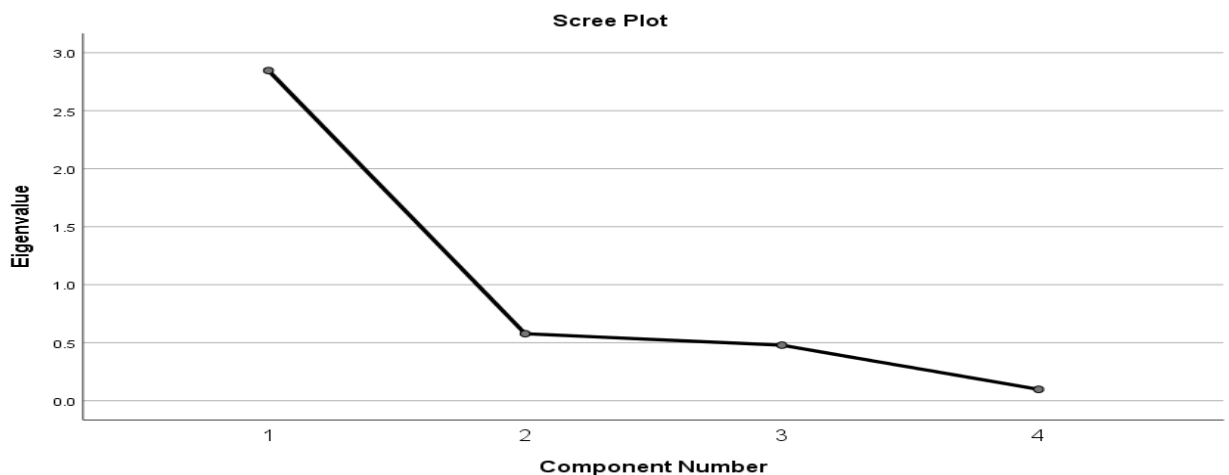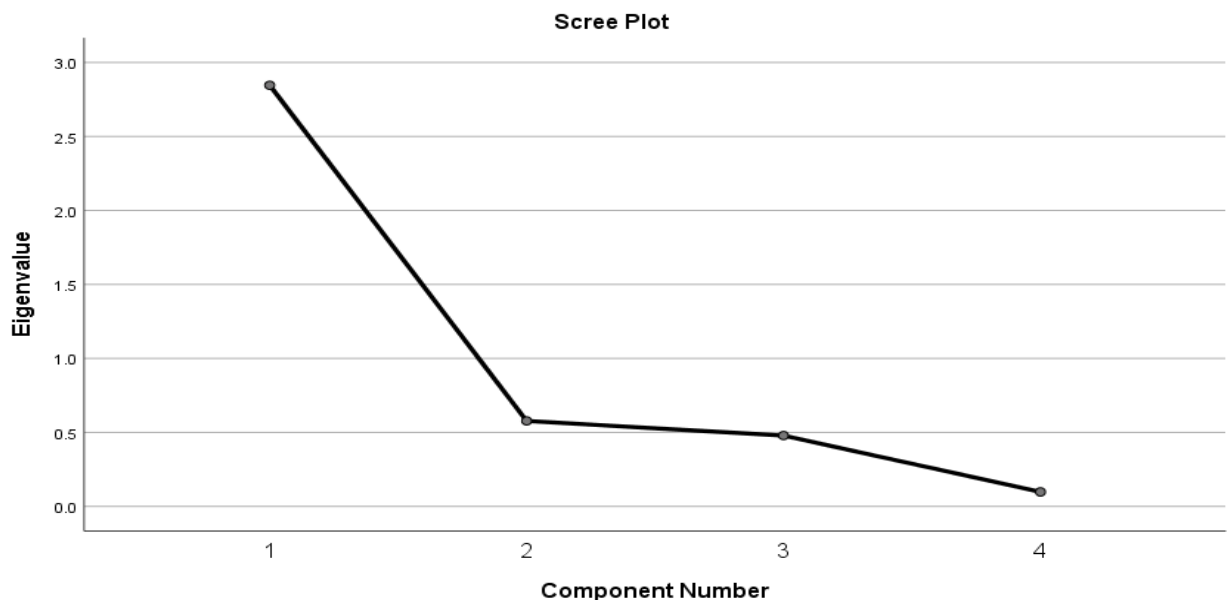

Figure 6.10: Catell's scree plot for factors (CSR activities) associated with CSR community dimension

6.8.7.1.3 Summary of FA on (CSR activities) associated with CSR community dimension

In total, seven variables (CSR activities) were assessed to determine the most significant variables that influence CSR community dimension. The descriptive statistics were calculated as the first step of the analysis; thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was assessed and the results reported in Section 6.8.7.1.1. The Kaiser-Meyer-Olkin value was 0.874, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at p = 0.000 (p < 0.5), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed one component with an eigenvalue greater than 1, explaining 70.62% of the total variance in the seven variables associated with CSR community dimension. A careful scrutiny of the scree plot indicated a clear break after the first component. This study adopts the use of varimax rotation to aid the interpretation of the one component retained as well as for loading the variables. The results (Table 6.61) reveal that the one component illustrates strong loadings, with all variables loaded substantially above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the component as all the variables communalities values are above 0.4, though the lowest communalities value of 0.606 is exhibited by C57_A_C "Maintain good communication channels with neighbours", as this variable contributed the least to the component. Considering the loading pattern of the factors associated with community dimension, the variables that converge on component 1 represent *"Community relations and construction project commitments"*.

Table 6.61: Pattern/structure coefficients for variables (CSR activities) associated with CSR community dimension

Coding	Variables	Component 1	Communalities
C57_B_A	Participate in community activities and provide some financial support where appropriate	**0.898**	0.806
C57_B_D	Communicate of corporate values and create long-term relationship with the local community	**0.872**	0.761
C57_A_B	Minimise safety hazards to the community	**0.862**	0.743
C57_B_B	Build community welfare facilities	**0.860**	0.740
C57_B_C	Business promotes work opportunities to the local community	**0.804**	0.647
C57_A_A	Commitments to protect local environment	**0.800**	0.640
C57_A_C	Maintain good communication channels with neighbours	**0.779**	0.606
Extraction Method: Principal Component Analysis a. 1 component extracted			

Factor 1 Community relations and construction project commitments includes all seven variables (CSR activities): Participate in community activities and provide some financial support where appropriate; Communicate of corporate values and create long-term relationship with the local community; Minimise safety hazards to the community; Build community welfare facilities; Business promotes work opportunities to the local community; Commitments to protect local environment; and Maintain good communication channels with neighbours.

6.8.8 CSR activities associated with the CSR competitor dimension

The CSR activities associated with the CSR competitor dimension were categorised under two sub-dimensions: Operation ethically, and Fair competition. This section specific to the CSR activities associated with the CSR competitor dimension was subject to a reliability analysis, utilising Cronbach's alpha presented in Appendix E 12. Appendix E 12 indicates that the internal consistency for the CSR activities is reliable and acceptable as the Cronbach's alpha values for all the CSR activities are above 0.70, with the total Cronbach's alpha coefficient at 0.916.

Succeeding the reliability test, the results (Table 6.62) present the level of importance that SMEs attach to the CSR activities under the sub-dimensions related to the "CSR competitor dimension". Thus, data relative to "Operation ethically" makes evident that all three CSR activities listed have MSs between 3.26 and 4.00, indicating that SMEs view the CSR activities as very important. Further analysing the data shows that, "Actively comply with the construction-related regulations of associations" ranked first (3.51), while "Establish self-regulatory mechanisms and abide by the law" and "Actively coordinate with construction-related associations" ranked second and third, with MSs of 3.46 and 3.41, respectively.

Data in relation to "Fair competition" affirms that both CSR activities listed have MSs between 3.26 and 4.00, once again implying that SMEs consider the CSR activities to be very important. "Prohibit bribery and other unacceptable business practices" ranked the highest of the two CSR activities presenting a MS of 3.62. In addition to the MSs and ranking of the CSR activity relative to "Fair competition", the total average percentage indicates that approximately 95% of the SMEs rated the CSR activity to be very important.

The overall total average percentages reported in Table 6.62 relative to the CSR competitor dimension show that roughly 94% of the SMEs rated the CSR activities to be very important.

Table 6.62: Mean statistics and frequencies pertaining to the CSR competitor dimension

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important 1	Moderately important 2	Important 3	Very important 4			
	Operation ethically							
C58_A_C	Actively comply with the construction-related regulations of associations	0.9	6.4	33.6	59.1	3.51	0.660	1
C58_A_A	Establish self-regulatory mechanisms and abide by the law	3.6	2.7	37.3	56.4	3.46	0.725	2
C58_A_B	Actively coordinate with construction-related associations	1.8	7.3	39.1	51.8	3.41	0.708	3
C58_TAP 1	*Total average percentages*	*2.1*	*5.5*	*36.7*	*55.8*		*92.5*	
	Fair competition							
C58_B_A	Prohibit bribery and other unacceptable business practices	3.6	2.7	21.8	71.8	3.62	0.717	1
C58_B_B	Boycott illegal behaviour in the construction market, maintain market order	2.7	1.8	27.3	68.2	3.61	0.665	2
C58_TAP 2	*Total average percentages*	*3.2*	*2.3*	*24.6*	*70.0*		*94.6*	
C58_OTAP	*Overall total average percentages*	*2.6*	*3.9*	*30.6*	*62.9*		*93.5*	

6.8.8.1 Identifying the underlying CSR activities associated with CSR competitor dimension

Though the most significant CSR activities that influence the CSR competitor dimension were identified in the preceding section via the descriptive statistics by ranking in hierarchical order, there is a high possibility that some of the CSR activities under the sub-dimensions may be interrelated through an underlying structure of primary factors. Thus, FA was performed.

6.8.8.1.1 KMO Adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity Test on the variables (CSR activities) associated with competitor dimension, the analysis of the results (Table 6.63) firstly revealed that the KMO measure of sampling adequacy is 0.792, greater than 0.6 and less than 1, signifying that the sample is satisfactory for FA. Secondly, it is evident by the Bartlett's Sphericity Test that the p value = 0.000 which is less than 0.05. Both of these tests recommend that FA can be conducted with the data.

Table 6.63: KMO and Bartlett's Test on CSR activities associated with the CSR associated with competitor dimension

Test		Values	Remarks
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.792	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	468.033	Significant and adequate for FA utilising PCA
	df	10	
	Sig.	0.000	

6.8.8.1.2 Principal component factors (CSR activities) associated with competitor dimension

Acknowledging PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotational method, Table 6.64 shows one component with an eigenvalue greater than 1 and thus extracted from the variables (CSR activities) associated with CSR competitor dimension. The eigenvalue of the one extracted component is 3.752. This component is capable of explaining 75.05% of the data variance, affirming its significant influence on the CSR competitor dimension.

Table 6.64: Total variance explained by factors (CSR activities) associated with CSR competitor dimension

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.752	75.045	75.045	3.752	75.045	75.045
2	0.711	14.230	89.275			
3	0.278	5.565	94.840			
4	0.134	2.681	97.521			
5	0.124	2.479	100.000			
Extraction Method: Principal Component Analysis						

A further confirmatory analysis using Catell's scree plot was conducted on the variables to establish if the one component can be retained. The results (Figure 6.11) illustrate that one component is retained.
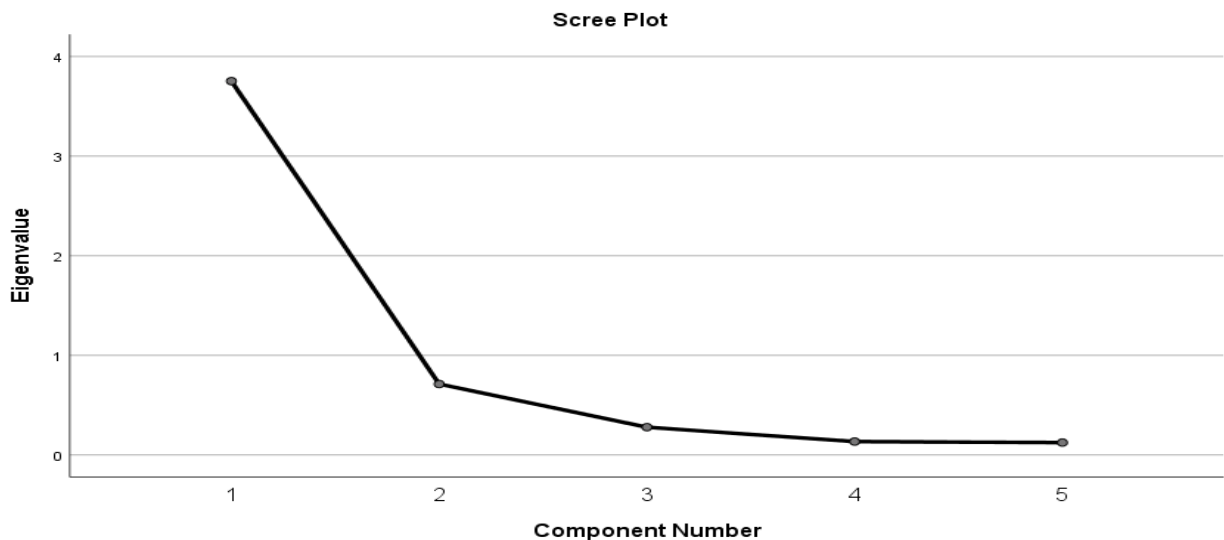
Figure 6.11: Catell's scree plot for factors (CSR activities) associated with the CSR competitor dimension

6.8.8.1.3 Summary of FA on (CSR activities) associated with CSR competitor dimension

In total, five variables (CSR activities) were assessed to determine the most significant variables that influence CSR competitor dimension. The descriptive statistics were calculated as the first step of the analysis; thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was assessed and the results reported in Section 6.8.8.1.1. The Kaiser-Meyer-Olkin value was 0.792, exceeding the recommended value of 0.6, and the Bartlett's Test of Sphericity was significant at $p = 0.000$ ($p < 0.5$), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed one component with an eigenvalue greater than 1, explaining 75.05% of the total variance in the five variables associated with the CSR competitor dimension. A careful scrutiny of the scree plot indicated a clear break after the first component. This study adopts the use of varimax rotation to aid the interpretation of the one component retained as well as for loading the variables. The results (Table 6.65) reveal that one component illustrates strong loadings, with all variables loaded substantially above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the component as all the variable communalities values are above 0.4, though the lowest communalities value of 0.682 is exhibited by C58_B_A "Prohibit bribery and other unacceptable business practices" which means the variable contributed the least to the component. Considering the loading pattern of the factors associated with competitor dimension, the variables that converge on component 1 represent *"Ethical business practices and fair competition"*.

Table 6.65: Pattern/structure coefficients for variables (CSR activities) associated with CSR competitor dimension

Coding	Variables	Component 1	Communalities
C58_A_B	Actively coordinate with construction-related associations	**0.898**	0.807
C58_A_C	Actively comply with the construction-related regulations of associations	**0.888**	0.789
C58_A_A	Establish self-regulatory mechanisms and abide by the law	**0.860**	0.739
C58_B_B	Boycott illegal behaviour in the construction market, maintain market order	**0.857**	0.735
C58_B_A	Prohibit bribery and other unacceptable business practices	**0.826**	0.682
Extraction Method: Principal Component Analysis a. 1 component extracted			

Factor 1 Ethical business practices and fair competition includes all five variables (CSR activities): Actively coordinate with construction-related associations; Actively comply with the construction-related regulations of associations; Establish self-regulatory mechanisms and abide by the law; Boycott illegal behaviour in the construction market, maintain market order; and Prohibit bribery and other unacceptable business practices

6.8.9 CSR activities associated with the CSR NGOs dimension

The CSR activities associated with the CSR NGOs dimension were categorised under one sub-dimension: Social and public service strategy. This section specific to the CSR activities associated with the NGOs dimension was subject to a reliability analysis, utilising Cronbach's alpha presented in Appendix E 13. Appendix E 13 indicates that the internal consistency for the CSR activities competitor dimension and activities is reliable and acceptable as the Cronbach's alpha values for all the CSR activities are above 0.70, with the total Cronbach's alpha coefficient at 0.938.

Following the reliability test, the results (Table 6.66) present the level of importance that SMEs attach to the CSR activities under the sub-dimension related to the "CSR NGOs dimension". Data relative to "Social and public service strategy" makes evident that all six CSR activities listed have MSs between 3.26 and 4.00, indicating that SMEs view the CSR activities to be very important. In terms of the top two MSs, "Provide care and support for disadvantaged groups where appropriate" ranked first (3.49) and "Business provides funds and sponsorships where appropriate for public and/or social welfare purposes" ranked second (3.41), while "Business provides assistance wherever appropriate for disaster prevention activities"; "Business engages in public and cultural activities, support public education"; "Business encourages its employees to take part in public welfare activities"; and "Business provides

assistance wherever appropriate for public health activities" ranked third, fourth, fifth and sixth, respectively.

Holistically, the overall total average percentages reported in Table 6.66 relative to the CSR NGOs dimension show that nearly 91% of the SMEs rated the CSR activities as very important.

Table 6.66: Mean statistics and frequencies pertaining to the CSR activities associated with the CSR NGOs dimension

Coding	Variables	Response (%)				Mean	Std. Dev.	Rank
		Slightly important 1	Moderately important 2	Important 3	Very important 4			
	Social and public service strategy							
C59_A_A	Provide care and support for disadvantaged groups where appropriate	1.8	4.5	36.4	57.3	3.49	0.674	1
C59_A_C	Business provides funds and sponsorships where appropriate for public or social welfare purposes	3.6	4.5	39.1	52.7	3.41	0.746	2
C59_A_E	Business provides assistance wherever appropriate for disaster prevention activities	3.6	5.5	39.1	51.8	3.39	0.755	3
C59_A_B	Business engages in public and cultural activities, support public education	4.5	4.5	38.2	52.7	3.39	0.779	4
C59_A_F	Business encourages its employees to take part in public welfare activities	2.7	9.1	36.4	51.8	3.37	0.765	5
C59_A_D	Business provides assistance wherever appropriate for public health activities	4.5	5.5	38.2	51.8	3.37	0.788	6
C59_TAP 1	*Total average percentages*	*3.5*	*5.6*	*37.9*	*53.0*	*90.9*		
C59_OTAP	*Overall total average percentages*	*3.5*	*5.6*	*37.9*	*53.0*	*90.9*		

6.8.9.1 Identifying the underlying CSR activities associated with CSR NGOs dimension

Though the most significant CSR activities that influence the CSR NGOs dimension were identified in the preceding section, via the descriptive statistics by ranking in hierarchical order, FA was performed to confirm whether the CSR activities under the sub-dimension are all related through an underlying structure of primary factors.

6.8.9.1.1 KMO Adequacy and Bartlett's Sphericity Test

With regards to the KMO and Bartlett's Sphericity Test on the variables (CSR activities) associated with NGOs dimension, the analysis of the results illustrated (Table 6.67) firstly that the KMO measure of sampling adequacy is 0.856, greater than 0.6 and less than 1, signifying

that the sample is satisfactory for FA. Secondly, it is evident by the Bartlett's Sphericity Test that the p value = 0.000 which is less than 0.05. Both of these tests recommend that FA can be conducted with the data.

Table 6.67: KMO and Bartlett's Test on variables (CSR activities) associated with NGOs dimension

Test		Values	Remarks
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.856	Significant and adequate for FA utilising PCA
Bartlett's Test of Sphericity	Approx. Chi-Square	610.360	Significant and adequate for FA utilising PCA
	df	15	
	Sig.	0.000	

6.8.9.1.2 Principal component factors (CSR activities) associated with NGOs dimension

Acknowledging PCA as an extraction method, together with Kaiser's criterion using eigenvalues and varimax as the rotation method, Table 6.68 shows one component with an eigenvalue greater than 1 and thus extracted from the variables (CSR activities) associated with CSR NGOs dimension. The eigenvalue of the one extracted component is 4.585. This component is capable of explaining 76.42% of the variance in the data, demonstrating a significant influence on the CSR NGOs dimension.

Table 6.68: Total variance explained by factors (CSR activities) associated with CSR NGOs dimension

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.585	76.420	76.420	4.585	76.420	76.420
2	0.494	8.241	84.661			
3	0.421	7.013	91.674			
4	0.266	4.438	96112			
5	0.149	2.488	98.600			
6	0.084	1.400	100.000			
Extraction Method: Principal Component Analysis						

A further confirmatory analysis using Catell's scree plot was conducted on the variables to establish if the one component can be retained. The results in Figure 6.12 illustrate that one component is retained.
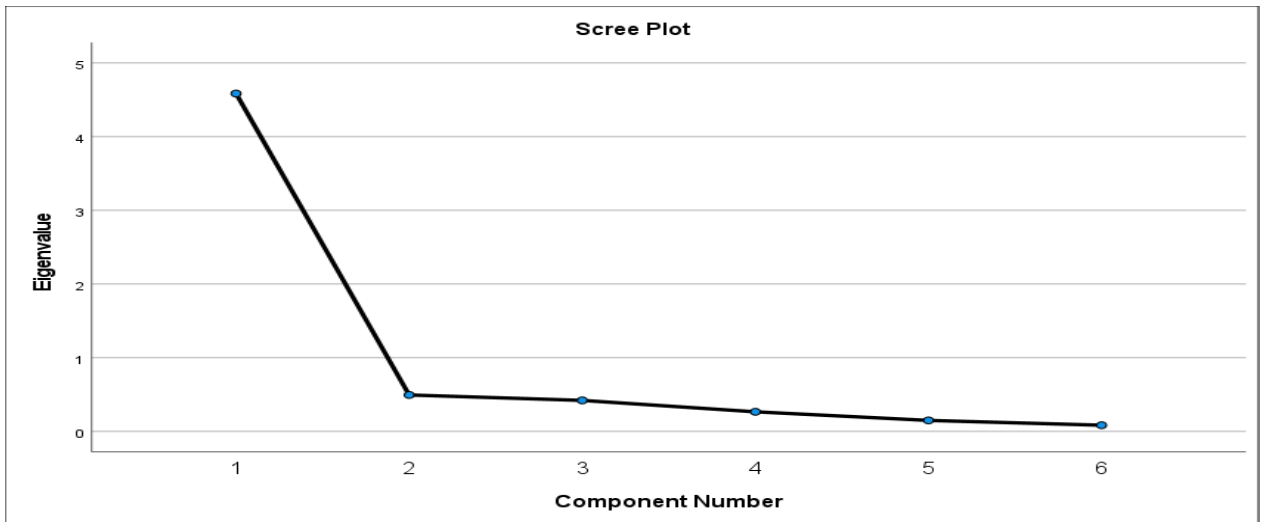
Figure 6.12: Catell's scree plot for factors (CSR activities) associated with the CSR NGOs dimension

6.8.9.1.3 Summary of FA on (CSR activities) associated with CSR NGOs dimension

In total, six variables (CSR activities) were assessed to determine the most significant variables that influence the CSR NGOs dimension. The descriptive statistics were calculated as the first step of the analysis; thereafter, FA utilising PCA as an extraction method was adopted in the second stage. To perform FA, the appropriateness of the data was assessed and the results reported in Section 6.8.9.1.1. The Kaiser-Meyer-Olkin value was 0.856, exceeding the recommended value of 0.6. and the Bartlett's Test of Sphericity was significant at p = 0.000 (p < 0.5), supporting the factorability of the correlation matrix.

The FA utilising PCA as the extraction method revealed one component with an eigenvalue greater than 1, explaining 76.42% of the total variance in the six variables associated with CSR NGOs dimension. A careful scrutiny of the scree plot indicated a clear break after the first component. This study adopts the use of varimax rotation to aid the interpretation of the one component retained as well as for loading the variables. The results (Table 6.69) reveal that one component illustrates strong loadings, with all variables loaded substantially above 0.3 on the rotated components matrix. The communalities values show that the variables fit well into the component as all variable communalities values are above 0.4, though the lowest communalities value of 0.607 is exhibited by C59_A_A "Provide care and support for disadvantaged groups where appropriate" which indicates that the variable contributed the least on the component. Considering the loading pattern of the factors associated with NGOs dimension, the variables that converge on component 1 represent *"Corporate socio-economic services"*.

Table 6.69 Pattern/structure coefficients for variables (CSR activities) associated with CSR NGOs dimension

Coding	Variables	Component 1	Communalities
C59_A_D	Business provides assistance wherever appropriate for public health activities	**0.941**	0.886
C59_A_C	Business provides funds and sponsorships where appropriate for public or social welfare purposes	**0.894**	0.799
C59_A_E	Business provides assistance wherever appropriate for disaster prevention activities	**0.887**	0.786
C59_A_B	Business engages in public and cultural activities, support public education	**0.869**	0.755
C59_A_F	Business encourages its employees to take part in public welfare activities	**0.867**	0.752
C59_A_A	Provide care and support for disadvantaged groups where appropriate	**0.779**	0.607
Extraction Method: Principal Component Analysis a. 1 component extracted			

Factor 1 Corporate socio-economic services includes all six variables (CSR activities): Business provides assistance wherever appropriate for public health activities; Business provides funds and sponsorships where appropriate for public or social welfare purposes; Business provides assistance wherever appropriate for disaster prevention activities; Business engages in public and cultural activities, support public education; Business encourages its employees to take part in public welfare activities; and Provide care and support for disadvantaged groups where appropriate.

6.8.10 ANOVA: CSR activities considered by SMEs to achieve sustainable business performance

According to the ANOVA results reported in Table 6.70, Table 6.71 and Table 6.72, there was no statistically significant difference pertaining to the MSs of SMEs in relation to the CSR activities (variables): $F_{(5, 104)} = 1.01$, $p = 0.42$. In addition, the effect size, calculated using eta squared, was 0.05, representing a small effect.

Table 6.70: Statistics of CSR activities considered by SMEs to achieve sustainable business performance

SMEs	N	Mean	Std. Dev.	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Grade 1	46	3.59	0.401	0.059	3.47	3.71	3	4
Grade 2	26	3.41	0.445	0.087	3.23	3.59	2	4
Grade 3	10	3.44	0.483	0.153	3.10	3.79	2	4
Grade 4	13	3.33	0.834	0.231	2.83	3.84	1	4
Grade 5	6	3.53	0.446	0.182	3.06	4.00	3	4
Grade 6	9	3.34	0.346	0.115	3.08	3.61	3	4
Total	**110**	**3.48**	**0.486**	**0.046**	**3.39**	**3.57**	**1**	**4**

Table 6.71: Test of homogeneity of variance

Levene Statistic	df1	df2	Sig.
1.979	5	104	0.088

Table 6.72: ANOVA on CSR activities considered by SMEs to achieve sustainable business performance

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.188	5	0.238	1.005	0.418
Within Groups	24.582	104	0.236		
Total	**25.771**	**109**			

Calculation of effect of size for the ANOVA test:

$$EtaSquared = \frac{Sum\ of\ Squares\ Between\ Groups}{Total\ Sum\ of\ Squares}$$

EtaSquared = 1.188 / 25.771 = 0.05

6.9 Discussion of findings pertaining to the research constructs

6.9.1 Objective 1

In terms of the research constructs, the first area investigated was SME (internal and external) organisational perceptions of the relationship between the integration of CSR and SBP. The data was analysed utilising both descriptive and inferential statistics, with results indicating that 74% and approximately 75% of the SMEs agreed, based on their internal and external organisational perceptions, that the integration of CSR in their businesses positively contributes to SBP. This statistic is supported by Murphy (2021:1) who insists that companies who integrate CSR into their business practice cultivate positive brand recognition, increase customer loyalty and attract top-tier employees. These elements, according to Murphy (2021:1), allow a business to increase profitability and long-term financial success, positively contributing to sustainable business performance. Turyakira *et al.* (2014:157) also acknowledge that based on global competitiveness, CSR is increasingly important to the survival and competitiveness of SMEs promoting sustainable business performance. This finding is supported by Xia *et al.* (2018: 344) who contend that the most notable perception pertaining to the integration of CSR throughout the global construction industry is that it assists in the achievement of holistic sustainability in incorporating sustainable business performance.

The four highest ranked variable relative to internal organisational perceptions of SMEs indicates that SMEs agree that the integration of CSR improves their organisation's prestige; increases the organisational ability to attract good and quality staff; improves the organisation's efficiency; and improves employee dedication, motivation, loyalty, commitment, respect and efficiency. All these points are supported by the views of several other researchers (Murphy, 2021:1; Duman *et al.*, 2016:226; Gamah, 2014:62; Bevan & Yung, 2015:303). The four highest ranked variables relative to the external organisational perceptions of SMEs indicate that SMEs agree that the integration of CSR positively contributes to the credibility of the organisation; improves the organisations corporate image and reputation with various stakeholders (employees, customers/clients, investors, government, suppliers and the community); increases business relations and new business opportunity; and positively contributes to giving back to the community. These findings align with the views of Murphy (2021:1); Duman *et al.* (2016:226); Gamah (2014:62); Bevan and Yung (2015:303); Manuere (2016:157); and Othman and Abdellatif (2011:280).

It is therefore clear that a positive perceived correlation between the integration of CSR by SMEs in the South African construction industry and SBP has been established, which is additionally supported by studies conducted by Santos (2011), Wu *et al.* (2015) and

Parameshwara and Raghurama (2013). Inferential statistics via an ANOVA test also revealed no statistically significant difference between the SMEs and their internal and external perceptions based on the relationship between the integration of CSR into their business and SBP, which is opposite to the initial stipulation in Section 1.8 that SEs and MEs have different perceptions of the relationship which exists between the integration of CSR and sustainable business performance.

6.9.2 Objective 2

The second area explored concerned the drivers that influence CSR practices of SMEs in the South African construction industry. According to the literature reviewed, CSR drivers were explored from both an international and national perspective, and the data was analysed using both descriptive and inferential statistics. The descriptive data pertaining to the international CSR drivers influencing the CSR practices of SMEs showed that all the variables had MSs between 1.76 and 2.50, implying that CSR practices by SMEs in the South African construction industry are driven only partially by international CSR drivers. However, further analyses of the data revealed that approximately 60% of the SMEs who partook in this study claim that, be it limited or highly significant, CSR practices in their businesses are in fact driven by international CSR drivers.

The data pertaining to international CSR drivers was also subjected to FA to reduce the factors under sub-international CSR drivers, namely: CSR practices driven by international standardisation; CSR practices driven by investment incentives; CSR practices driven by stakeholder activism; and CSR practices driven by supply chain reliability. The FA revealed that the international CSR drivers influencing the CSR practices of SMEs were categorised as *CSR practices driven by global standardisation*, with the two highest pattern/structure coefficients representing "CSR practices being driven by integrated reporting providing insights into the nature and quality of the organisation's relationships with its key stakeholders" and "CSR practices being driven by international social and environmental accreditation and labelling (ISEAL) Alliance 2012, a set of global standards and codes of business practice pertaining to environmental and social standards", which are both supported by Van Den Ende (2004:80) who suggests the following:

> *Organisations are facing increased demands for transparency and growing expectations that they measure, report, and continuously improve their social, environmental, and economic performance.*

The FA also revealed that the international CSR drivers influencing CSR practices of SMEs were categorised as *CSR practices driven by stakeholder activism*, with the two highest pattern/structure coefficients representing "CSR practices being driven through business associations who advocate economic growth, development, peace and prosperity allowing for the building of inclusive entrepreneurship ecosystems". This is supported by Nadkarni (2014:1) who asserts that business associations through their advocacy of CSR tend to improve the ability of organisations, big or small, to grow and to create sustainable jobs; and "CSR practices driven by media" supported by Van Den Ende (2004:3) who states,

> *Stakeholders – including shareholders, analysts, regulators, activists, labour unions, employees, community organisations, and the news media – are asking companies to be accountable not only for their own performance but for the performance of their entire supply chain, and for an ever-changing set of CSR issues.*

In terms of the national CSR drivers influencing the CSR practices of SMEs, the descriptive analysis revealed that all the variables once again had MSs between 1.76 and 2.50, implying that CSR practices by SMEs in the South African construction industry are limitedly driven by national CSR drivers. However, further data analysis revealed that nearly 71% of the SMEs who partook in this study claim that, be it limited or highly significant, CSR practices in their businesses are driven by national CSR drivers.

In addition to the descriptive analysis, the data pertaining to national CSR drivers was also subjected to FA to reduce the factors (sub-national CSR drivers), namely: CSR practices driven by political reforms; CSR practices driven by cultural tradition; CSR practices driven by socio-economic priorities; CSR practices driven by maintaining market access; CSR practices driven by governance gaps; and CSR practices driven by crises response. The FA revealed that the national CSR drivers influencing the CSR practices of SMEs were categorised as *CSR practices driven by socio-economic priorities and concerns*, with the two highest pattern/structure coefficients representing "CSR practices driven by health-related crises, such as COVID-19", supported by the views of Prowly Magazine (2020:1):

> *We're definitely in a time of need right now and transferring the ideals of CSR to the dislocation caused by COVID-19 can be of great benefit now for all of us, as employees, as consumers and most importantly, as people trying our best to get through an extremely challenging time.*

Also "CSR practices driven by industrial crises such as when organisational systems fail, causing a ripple effect on stakeholders and the surrounding society", supported by Visser (2008a:1) who opines,

> *CSR responses can be catalysed by economic, social, environmental, health-related or industrial crises.*

The third category revealed by the FA is *CSR practices driven by political reforms,* with the two highest pattern/structure coefficients representing "CSR practices being driven through political mechanisms that stimulate new and existing business associations" and "CSR practices being driven through political mechanisms in the form of ministerial leadership"; this is supported by Visser (2008a:1) who comments that CSR in countries across the globe, more specifically developing countries,

> *cannot be divorced from the socio-political policy reform process, which often drives business behaviour towards integrating social and ethical issues.*

The third category is also supported by Moon (2004:7-8) who agrees that CSR practices are driven by ministerial leadership in the UK.

The fourth category revealed by the FA is *CSR practices driven by culture and tradition*, with the highest pattern/structure coefficients representing "CSR practices being driven by religious values within various demographics", supported by Visser (2008a:10) who stipulates,

> *CSR often draws strongly on deep-rooted indigenous cultural traditions of philanthropy, business ethics and community embeddedness.*

An ANOVA test determined no statistically significant difference pertaining to the MSs of SMEs in relation to the CSR drivers influencing their CSR practices. This finding differs from the belief documented in Section 1.8, stipulating that the CSR drivers influencing SEs and MEs in the South African construction industry are conspicuously different.

6.9.3 Objective 3

The third area explored was the CSR implementation challenges pertaining to SMEs in the South African construction industry. Based on the literature reviewed, CSR implementation challenges were explored from four different management levels within the SME businesses: the normative, strategic, operative and environmental management level. Data was analysed

using both descriptive and inferential statistics. In terms of the CSR implementation challenges at the SMEs normative management level, the descriptive analysis disclosed that all the variables had MSs between 2.51 and 3.25, with approximately 83% of the SMEs in the South African construction industry agreeing that they experience CSR implementation challenges at the normative management level. Within the normative management level, SME CSR implementation challenges are particularly brought about by the "lack of CSR integration in the SMEs culture and the SMEs business norms" and "lack of CSR integration in the SMEs culture and the SMEs business objectives", a finding supported Ladzani and Seeletse (2010) who indicate that CSR and its integration into the SME culture, objectives, norms and values, particularly in the South African construction environment, is a challenge at the normative management level of these organisations. Murphy (2020:1) also agrees with this finding, stating that one of the biggest challenges SMEs face in terms of implementing CSR is the lack and differing culture and priorities within different segments of the business, suggesting poorly aligned priorities and corporate goals.

In terms of CSR implementation challenges at SME strategic management level, the descriptive analysis divulged that approximately 86% of the SMEs in the South African construction industry agree that they experience CSR implementation challenges at the strategic management level. Data revealed that within the strategic management level, SME CSR implementation challenges are particularly brought on because "SMEs have limited financial resources to undertake CSR practices" and "SMEs have limited human resources to undertake CSR practices". This finding is supported by Zou *et al.* (2021:9); Elford and Daub (2019); Abdullah *et al.* (2016); Lepoutre and Heene (2006); Ramasobana and Fatoki (2014); Chiloane-Tsoka and Rasivetshele (2014) and Manuere and Majoni (2016) who stipulate that a strategic challenge that SMEs face when concentrating on CSR practices concerns limited resources, referring not only to limitation to financial resources, but also to limitations of human resources, time, knowledge, awareness, understanding, information, legal and media support.

Based on the CSR implementation challenges at an SME operative management level, the descriptive analysis divulged that roughly 88% of the SMEs in the South African construction industry agree that they experience CSR implementation challenges at the operative management level. Data further revealed that within the operative management level, SME CSR implementation challenges are particularly brought on by the fact that "SMEs find it difficult to adapt CSR practices and standards to their internal business process" and "SMEs lack the necessary CSR skills and knowledge". Comparing these findings to previous studies, many researchers – such as Zou *et al.* (2021:10), Elford and Daub (2019) and Bello *et al.*

(2017:5) – agree with the findings as they stipulate that the lack of CSR skills and knowledge and the adaption of CSR practices and standards to SME internal business processes are regarded as a direct CSR challenge to SMEs within the operative management level, preventing them from undertaking CSR and from comprehending its importance and potential business benefits.

For CSR implantation challenges at the SME environmental management level, the descriptive analysis shows that nearly 82% of the SMEs in the South African construction industry agree that they experience CSR implementation challenges at the environmental management level. Data revealed that within the environmental management level, SME CSR implementation challenges are predominantly brought on by "poor collaboration among SMEs" and "unstable economic conditions"; these are supported by the findings of a previous study of Manuere and Majoni (2016) who state that challenges hindering SME owner-managers across all sectors globally from practicing CSR are linked particularly to unstable economic conditions, negative government regulations or policies, poor collaboration among SMEs, poor customer care and a lack of CSR culture in SMEs. The findings are also supported by Klara (2011:83), indicating that CSR implementation challenges experienced by companies within the Czech Republic are also due to economic decline.

Further investigation into the findings pertaining to CSR implementation challenges across all four management levels (normative, strategic, operative and environmental) reveals that SMEs in the South African construction industry, through the total average percentages, consider their CSR implementation challenges to be greater at the operative management level, followed by the strategic management level, normative management level and the environmental management level. In addition, the results of the ANOVA test for the CSR implantation challenges across all four management levels contradicted the researcher's belief as documented in Section 1.8, stating that the implementation challenges pertaining to the practice of CSR by SEs and MEs in the South African construction industry are substantially different.

6.9.4 Objective 4

The fourth area explored concerned the CSR activities considered by SMEs in the South African construction industry to achieve sustainable business performance. Based on the literature reviewed, CSR activities were explored from employee, shareholder, customer, supplier and partner, government, environment and resource, community, competitor, and NGOs perspectives. Data was analysed using both descriptive and inferential statistics.

In terms of the CSR employee dimension, descriptive analysis revealed that roughly 91% of the SMEs rated the CSR activities to be very important. The data pertaining to the CSR activities associated with the employee dimension was also subjected to FA in an attempt to reduce the activities under the sub-dimensions: Occupational health and safety of employees; Legal working hours and rest time; Wages and welfare; Staff employment; Education and training; Freedom of association and bargaining; Harmonious labour/management relationship; and Human rights measures. This process was followed for all the subsequent CSR dimensions (shareholder; customer; supplier and partner; government; environment and resource; community; competitor and NGOs). The FA revealed that CSR activities associated with the CSR employee dimension were categorised as: *Employee rights, remuneration and recruitment*, with the two highest pattern/structure coefficients representing "Human rights procedures in place to assess and deal with human rights performance" and "Awareness of all employees on the various components that constitute their wages"; *Occupational health and safety of employees and training*, with the two highest patter/structure coefficients representing "Establishment of a responsibility system for construction safety" and "Providing safety training for employees"; and *Employees freedom of association and bargaining*, with the two highest pattern/structure coefficients representing "The organisation supports the maintenance of communication and dialog with trade unions at all times" and "The organisation supports the functions of trade unions".

Similar to the CSR employee dimension, the descriptive analysis relative to the CSR shareholder, supplier and partner, and NGOs dimensions also revealed that roughly 91% of SMEs rated the CSR activities to be very important. Further, to the descriptive analysis, inferential statistics via FA revealed that the CSR activities associated with the CSR shareholder dimension were categorised as *Permissible shareholder proceeds*, with the two highest pattern/structure coefficients representing "Shareholder participation in corporate decision-making on major corporate activities" and "Shareholder participation in decision-making regarding corporate income distribution; and *Permissible information, participation and relationship management towards shareholders,* with the two highest pattern/structure coefficients representing "Enhance their shareholder revenues" and "Increase in value of shareholder shares".

The FA also revealed that CSR activities associated to the CSR supplier and partner dimension were categorised as *Preserve suitable supplier and partner relationships*, with the two highest patter/structure coefficients representing "Mutual respect for regulations" and "Mutual respect for laws"; and *Promote adequate communication and CSR performance with suppliers and*

partners, with the two highest pattern/structure coefficients representing "Record the CSR commitment and performance of suppliers and partners" and "Disclose organisation-to-supplier (partner) commitments and establish appropriate safeguards". FA in addition disclosed that the CSR activities linked to the CSR NGOs dimension were categorised as *Corporate socio-economic services*, with the two highest pattern/structure coefficients representing "Business provides assistance wherever appropriate for public health activities" and "Business provides funds and sponsorships where appropriate for public and/or social welfare purposes".

Grounded on the CSR customer, environment and resource, and community dimensions, the descriptive analysis established that roughly 93% of the SMEs rated the CSR activities as very important. The FA disclosed that the CSR activities associated with the CSR customer dimension were categorised as *Customer satisfaction and product safety*, with the two highest patter/structure coefficients representing "Attainment of safety requirements" and "Elimination of potential safety threats to the community"; and *Disclosure of financial and investment performance information of the organisation*, with the two highest pattern/structure coefficients representing "Accurate information on product quality credit records" and "Accurate information on corporate finance records". Additionally, the FA revealed that the CSR activities linked to the environment and resources dimension were categorised as *Environmental protection and the conservation of energy and resources*, with the two highest pattern/structure coefficients representing "Improvement of corporate environmental management system" and "The organisation trains labour force pertaining to the awareness of environmental protection". The FA also revealed that the CSR activities associated to the community dimension were categorised as *Community relations and construction project commitment*, with the two highest pattern/structure coefficients representing "Participate in community activities and provide some financial support where appropriate" and "Communicate of corporate values and create a long-term relationship with the local community".

The descriptive analysis in relation to the CSR government and competitor dimensions revealed that approximately 94% of the SMEs rated the CSR activities as very important. Following the descriptive analysis, the FA indicated that the CSR activities associated with the CSR government dimension were categorised as *Conformance to the requirements of government laws and policies*, with the two highest pattern/structure coefficients representing "Abide by the law (codes of conduct, anti-corruption, building regulation) and bear other obligations stipulated by the government" and "Pay required tax payments as stipulated by law". The FA also revealed that the CSR activities associated with the CSR competitor

dimension were categorised as *Ethical business practices and fair competition*, with the two highest pattern/structure coefficients representing "Actively coordinate with construction-related associations" and "Actively comply with the construction-related regulations of associations".

Comparing the findings of this study for all the CSR activities (variables) considered by SMEs in the South African construction industry to previous studies limited with respect to the global construction industry, it is evident many – for example, Goldengate Consulting (2012); Zhao *et al.* (2012); Hlatywayo (2015); Jorge *et al.* (2016); and Bac and Huyen (2020) – support the findings. However, what makes the findings of this study distinct is that FA was utilised to reduce the variables (CSR activities) of each CSR dimension, which in itself simplifies the variables (CSR activities) contributing to the development of a more simplified CSR model, as compared to the CSR indicator systems produced by Zhao *et al.* (2012) and Bac and Huyen (2020) within their particular construction contexts. Further to the findings, an ANOVA test determined no statistically significant difference pertaining to the MSs of SMEs in relation to the CSR activities (variables), contradicting the belief of the researcher as stipulated in Section 1.8 that CSR activities needing to be considered to achieve SBP are noticeably different for SEs and MEs in the South African construction industry.

All of the findings obtained in line with the objectives of this study point to the development of a single CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance, once again contradicting the belief of the researcher as documented in Section 1.8, stating that the CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance is different for SEs and MEs.

6.10 Chapter summary

This chapter presented and discussed the results of analysis in the quantitative phase of this research using a combination of descriptive and inferential statistics. The research findings clearly illustrate that SMEs in the South African construction industry perceive from both their internal and external organisational perceptions a positive relationship between the integration of CSR and SBP. Secondly, the research findings establish that CSR practices pertaining to SMEs in the South African construction industry, though limited at times, are driven by international and national CSR drivers. Although driven to perform CSR practices, the research findings also indicate that SMEs in the South African construction industry experience CSR implementation challenges at all four management levels: the normative, strategic, operative

and environmental levels. Finally, the research findings also allude to the CSR activities associated with the CSR dimensions (variables) that need to be considered by SMEs in the South African construction industry to achieve sustainable business performance. Although some activities (variables) were more important than others, all the CSR activities were considered by SMEs in the South African construction industry to be very important in the quest to achieve sustainable business performance. The findings of this study also reveal that SEs and MEs are surprisingly similar in the way they think, irrespective of their years of construction industry experience, education or cidb grade. The ANOVA tests across the four objectives of this study support this. Chapter 7 will allow for further explanation on the findings to close the research gaps identified by the research objectives of this study.

CHAPTER 7

QUALITATIVE DATA ANALYSIS

7.1 Introduction

This chapter presents the analysis of the qualitative data based on individual case studies produced from structured face-to-face interviews to further elaborate and support the quantitative data established in Chapter 6. The study utilises multiple case studies, allowing for an analytical string of evidence to be produced and analysed using deductive thematic analysis (described in Section 5.7.1.2). Four case studies are presented and coded as Organisation A, B, C and D to protect the privacy of each respondent. All organisational owners selected for the face-to-face interviews showed interest to be interviewed. Table 7.1 indicates the background information of each organisation that partook in the structured face-to-face interviews. From Table 7.1, it is deduced that the organisations (owners) are representative of the SME cluster in the South African construction industry as described by Windapo *et al.* (2020:9) and the cidb (2020:1). Another deduction from the table is that all four organisations are open to general building and civil engineering classes of work across all nine provinces of South Africa, with owners of these organisations having acquired an average of approximately 16 years of overall construction related experience. In addition, all four owners have obtained relevant qualifications, allowing for more confirmatory and elaborative responses, giving validity to the data obtained from the interviews.

7.2 Case study analysis

7.3.1 Case study 1 – Organisation A

7.3.1.1 Theme 1: Perceptions of SMEs pertaining to the relationship between the integration of CSR and sustainable business performance

Based on the deduced findings of this section, the owner of Organisation A agreed that a relationship can surely be seen regarding the integration of CSR in their business and sustainable business performance. For example, he clearly stipulated that by including nearby communities as the beneficiaries to their CSR initiatives, their projects seem to run smoother and more efficiently, leading to more success in the overall performance of the projects. From an internal organisational perspective, the owner stated,

Table 7.1: Background information of participating organisations

Organisational Name	Year Est.	Geographical area of operation	Core Operation	BBBEE Level	CIDB Grade	CIDB class of works	Eligible tender value range	Years of construction business experience	Years of overall construction industry experience	Qualifications
Organisation A	2002	All nine provinces in South Africa	Manufacturing, supplying and installing of major fencing products	Level 1	Grade 6	• General Building (GB) and • Civil Engineering (CE)	R10 - R20 mil.	19 years	25 years	• Bachelor's Degree in Business Administration
Organisation B	2015	All nine provinces in South Africa	Manufacturing and installation of signage products as well as undertaking building maintenance projects	Level 1	Grade 4	• General Building (GB) and • Civil Engineering (CE)	R3 – R6 mil.	7 years	12 years	• Bachelor's Degree in Construction Management
Organisation C	2015	Operates predominantly in the Western Cape province of South Africa and occasionally tenders and acquires work in other provinces.	Building and maintenance of simple structures and occasionally prioritises small civil engineering works.	Level 1	Grade 1	• General Building (GB) and • Civil Engineering (CE)	up to R500 000	7 years	11 years	• National Diploma in Building and Civil Engineering
Organisation D	2018	All nine provinces in South Africa	Architectural and construction services that integrate sustainable building design with physical construction.	Level 1	Grade 2	• General Building (GB) and • Civil Engineering (CE)	up to R1 mil.	4 years	15 years	• Bachelor of Architectural Studies, and • Bachelor's Degree in Construction Management

The CSR practices performed by our organisation does afford us the opportunity of becoming more prestige's as CSR has become part of our organisations culture which allows our organisation to establish good long-lasting relationships with stakeholders which include among other the communities in which we work. We are thus not performing CSR to be seen, but to develop a culture of being socially responsible which in essence has its benefits, an important one being its contribution towards our sustainable business performance.

The owner of Organisation A indicated that CSR practices undertaken by the organisation definitely increase the organisation's ability to attract quality staff. However, this finding would depend predominantly on an individual seeking employment because not all employment seekers are attracted to an organisation because of an organisation's CSR initiatives, but rather financial benefits such as the anticipated salary. He implied that if an employment seeker was attracted to the organisation predominantly due to the organisation's CSR initiatives, this would benefit the organisation in terms of positive recruitment, as the organisation's CSR and overall business objectives would be satisfied. He added,

With all things being equal however, and if all construction companies offered similar salary packages for various positions, I am strongly of the opinion that an organisation that practices CSR as part of their business culture such as our organisation, would definitely attract more employees. This is more reason to believe that the practice of CSR in construction organisations could definitely contribute to sustainable business performance through sustainable employment attracted by CSR initiatives.

From an external perspective, the owner of Organisation A believes that they gain credibility through their CSR practices, especially credibility from communities who have garnered respect for the organisation and vice versa. He also believes that the organisation's CSR practices contribute to improving the organisational image and hopefully afford the organisation more business opportunities going forward, especially from the communities in which they have previously worked, stating,

It is evident from our external business perspective that CSR definitely gives back to the community. For example, on one of our projects we afforded an individual the opportunity to be trained as a first aider which in essence implies that this individual has a tangible skill that was not only useful for our project but allows the individual to be employed by other construction organisations who are also working or seeking work in the very same community, deeming the individual employable.

7.3.1.2 Theme 2: CSR drivers influencing CSR practices of SMEs

Based on the deduced findings of this section, it is clear from the interview with the owner of Organisation A that he supports the findings which stipulate that CSR practices of SMEs in the

South African construction industry are limitedly driven by international and national CSR drivers, specifically stating,

> *I am predominantly of the opinion that global standardisation has not yet really been influential in driving CSR practices in the South African context more so the South African construction industry context. I feel that CSR practices driven by global standardisation is more prevalent to construction organisations which include SMEs in Europe and in the Western countries. In terms of the South African context, though limited, I strongly feel that CSR practices are driven predominantly by national CSR drivers particularly drivers linked to socio-economic priorities and concerns, where construction organisations such as ourselves have practiced CSR in the form of employing and upskilling community members in good and bad economic times, as we acknowledge the need in the communities in which we work.*

He further mentioned that although the organisation strives to practice CSR across all construction projects, its CSR is not rooted, and yet is expected by every community or stakeholder to the business, commenting,

> *At this stage and viewing the South African construction industry holistically, my view is that there are very few drivers influencing CSR practices in the industry. By this I am not implying that CSR drivers from an international and national perspective don't exist. However, CSR should rather be considered to be in its infancy phase.*

7.3.1.3 Theme 3: CSR implementation challenges experienced by SMEs

Grounded on the deduced findings of this section in line with the CSR implementation challenges at the normative management level, the interview with the owner of Organisation A shows that he also detects a lack of CSR integration in the SME culture, business norms and objectives, as this seems to be the situation with his organisation, although it is noted by the owner that the organisation is attempting CSR practices through the construction projects in which they are involved. He further supports this point,

> *This I feel is caused by the lack implementation of certain CSR drivers which if implemented could enforce CSR practices across all SMEs in the South African construction industry. In addition, my view is that construction businesses only seem to be driven to practice or do anything if they are forced to comply. This once again links to the fact that the business culture adopted by construction businesses in South Africa, particularly SMEs are not satisfactory, if progress is to made especially from a CSR perspective.*

As for CSR implementation challenges in accordance with the strategic management level, the owner of Organisation A fully supports the findings which show that SMEs in the South African construction industry have limited financial and human resources to undertake CSR initiatives, stating,

These findings hit home as our organisation can only contribute to small CSR initiatives based on the fact that construction budgets are very tight allowing for very limited finance to be made available for these initiatives. Also with regards to the limited human resources we understand that we cannot just teach one of staff members the responsibilities of monitoring the CSR processes within our organisation as we are still learning ourselves. We thus acknowledge that understanding and monitoring CSR is a specialist duty. This said, the organisation is not in a position financially to hire a CSR specialist, but we are addressing it in our own unique way.

With regards to CSR implementation challenges in line with the operative management level, the owner of Organisation A indicates that while it is not terribly difficult to adapt CSR practices and standards into the organisation's internal business processes, he does agree that some resistance is experienced within the organisation in adapting CSR practices. In addition, he admitted that CSR comes with a variety of other challenges that the organisation must be willing to learn from:

For other organisations which might be smaller, I can definitely see them struggling to adapt CSR process into their organisations, based on the fact that many smaller organisations already struggle to comply with many existing policies such as for example policies and practices in line with Health and Safety compliances.

In terms of the CSR implementation challenges in line with the environmental management level, the owner of Organisation A stated the following:

Yes, I fully agree with the challenges at the environmental management level especially the challenge that has to do with the unstable economic conditions. The reason for this is that many of the CSR initiatives are conducted with our own profits and based on the economic conditions, profit margins become either smaller or bigger at any given time. If they become smaller CSR initiatives become limited. Therefore, if public and private sector projects include CSR initiatives as a budget line item specific to the tender document, CSR practices could take place more consistently.

7.3.1.4 Theme 4: CSR activities considered by SMEs to achieve sustainable business performance

In accordance with the findings in line with the CSR activities in general, the owner of Organisation A agreed that all CSR activities which the quantitative data exposed via the nine CSR dimensions – Employee Dimension; Shareholder Dimension; Customer Dimension; Supplier and Partner Dimension; Government Dimension; Environment and Resources Dimension; Community Dimension; Competitors Dimension; and NGOs Dimension – should be considered by SMEs in the South African construction industry to achieve sustainable business performance. He commented on the CSR activities by stating the following:

I definitely support the CSR activities related to the employee dimension as the organisation needs to look after its people, in fact all organisations need to look after their people working for them. If you take it one step further, if the people working for you are happy they will deliver which means your organisation will perform well". In addition, I also feel that relationship management between shareholders is a crucial CSR activity in the quest for our organisation to achieve sustainable business performance. As for the CSR activity related to the customer dimension, I do not think organisations need to disclose their financial information as I cannot seem to see what and how the customer will benefit from this. I feel that only certain people should be privy to this information. As for customer satisfaction and product safety I definitely agree with these two activities under the customer dimension, as it is always necessary to keep the customer happy and also to keep everyone on the job safe, free from injury or even fatality as injuries and fatalities could have dire consequences for the organisation especially in terms of its sustainable business performance.

7.3.1.5 Theme 5: General comments

One general comment by the owner of Organisation A is that the deduced findings complement each other well and can holistically be utilised to generate a CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance.

7.3.2 Case study 2 – Organisation B

7.3.2.1 Theme 1: Perceptions of SMEs pertaining to the relationship between the integration of CSR and sustainable business performance

Based on the deduced findings of this section, the owner of Organisation B agreed that a relationship for integrating CSR into any organisation processes, particularly their organisation processes, definitely has a positive relationship towards sustainable business performance. Based on the findings of this study and from an internal organisational perspective, the owner of Organisation B stated,

I think with CSR and its practices there is a lot of positive attributes. One of the many positive attributes is that construction organisations who embed CSR as part of their organisational practices and culture, would definitely attract individuals seeking employment, specifically individuals who find that they are able to fit into a construction organisation who embraces a CSR culture. This said, it should not be forgotten that human beings are wired to do and embrace the good aspects of life which in this regard affords construction organisations who embrace CSR within their organisational practices, the opportunity to employ likeminded individuals who have the potential to take the organisation forward in a very sustainable manner.

In accordance with the findings of the study from an external organisational perspective, the owner of Organisation B agreed that CSR contributes to his organisation's credibiity which in turn contributes to the sustainable business performance of the organisation. The owner of Organisation B explained,

> *Based on my own experience I can definitely say that the CSR initiatives that my organisation gets involved in and practices, surely contributes to my organisation achieving more credibility, as people outside the organisation view us as an organisation that is warm hearted and caring towards the community that we find ourselves established in, as well as the communities in which our projects occur. Although we are incorporating CSR practices for the greater good, it should be said that the CSR practices surely bolsters the organisations corporate image which contributes to our business being more sustainable in terms of the performance. Based on what I have also researched around CSR, I found that although my organisation utilises CSR to do good, in reality CSR is also utilised by many organisations as a strategy to improve their organisational image and to get the organisation known to the public through what I call CSR marketing. In essence my view is that if you are an entrepreneur such as myself, our responsibility is to look after the greater community as well as our other stakeholders as I feel that this is one of the most important fundamentals of good entrepreneurship which allows us to contribute positively.*

7.3.2.2 Theme 2: CSR drivers influencing CSR practices of SMEs

Based in the findings of this section, it is clear from the interview with the owner of Organisation B that the he supports the findings which stipulate that CSR practices of SMEs in the South African construction industry are limitedly driven by international and national CSR drivers. However, the owner of Organisation B admits that although limited, his organisation's CSR practices are predominantly driven by national CSR drivers:

> *I feel that we've got a lot of socio-economic issues and as a businessman born and raised on the Cape Flats I know that the Cape Flats houses some of the poorest communities in the Western Cape and based on this knowledge I find myself having a better understanding towards the people in these communities as I am more related to them and I have much more sympathy for their way of living. So as part of my organisation, giving back to these communities serves as part of my interest as I have walked and lived in this environment and have seen the need, thus my organisation commits and is more driven to CSR practices from this point of view. As for CSR drivers from a political and governmental perspective I feel that not enough is being done to drive CSR within construction businesses, be it large or small businesses, as it is found that many businesses get involved with CSR to use it primarily for what is known as a fronting method and not for its actual cause which is to give back and empower communities, individuals, and entities around the business, so that we see more sustainable growth not just for us as businesses but also for the broader society and stakeholders which if done uprightly will benefit*

businesses in terms of their sustainable business performance. In terms of CSR driven by culture and tradition I do feel that all construction businesses should be driven by this driver especially within the South African context as we come from a very rich and deep history of oppression, so people especially in the community that I come from understand that we should assist one another as many of us inclusive of our families have lost out on a lot opportunity and progress based on the past. This in itself also drives CSR practices in my organisation.

7.3.2.3 Theme 3: CSR implementation challenges experienced by SMEs

Based on the findings of this section in line with the CSR implementation challenges at the normative management level, the interview with the owner of Organisation B showed that he supports the findings:

I feel that generally there is definitely a lack of culture when it comes to implementing CSR at a normative management level, which stems from the fact that not a lot of construction businesses, more specifically SMEs in the South African construction environment practice CSR within their businesses on a regular basis, and based on this many construction business owners look to their competitors to see what they are doing. The bottom line for many construction businesses is that if my competitor is not compelled to practice CSR why should I do it. This is predominantly my view as to why a CSR culture cannot be adequately developed particularly in our industry.

As for the CSR implementation challenges deduced in line with the strategic management level, the owner of Organisation B fully supports the findings that SMEs in the South African construction industry have limited financial and human resources to undertake CSR initiatives, commenting,

We are a third world country and thus I can say from my own business experience that resources remain a challenge in allowing us to practice CSR as we take whatever we have and try to make the best of it. I am sure that there are many other SME businesses in our industry that would want to contribute and practice CSR, but because of the lack of resources be it financial or human resources these SMEs can only but think of surviving first.

With regards to the CSR implementation challenges in line with the operative management level, the owner of Organisation B indicates that even though his organisation adapts some forms of CSR practices and standards, challenges at the operative management level persists:

I am of the opinion that CSR challenges at the operative management level has its roots well nestled in the fact that CSR practices among SMEs are limitedly driven by CSR drivers and thus developing a CSR culture among construction organisations across South Africa particularly SMEs is difficult. I am also in agreement with the fact that a lack of CSR skills and knowledge is one of the major challenges that I have experienced and if I should say, still experience particularly in my business. Having more knowledge particularly with regards to CSR is powerful

and I feel that when we as construction business owners are not informed we would not understand how CSR can unlock future potential, especially in terms of sustainable business performance, specifically through the boosting of the organisations image allowing for more sustainable business to plant itself on the organisations door steps. Fortunately, my organisation has taken the stance to deliver on CSR, not only for our benefit but for the benefit of others around the business.

Grounded on the CSR implementation challenges deduced in line with the environmental management level, the owner of Organisation B commented,

Yes, I agree that poor CSR collaboration among SMEs; unstable economic conditions, as well as lack of CSR culture among SMEs are definitely challenges that my business has faced and still faces to various extents. As part of an overview on this point I would like to add something that my organisation did on one of our projects in order to mitigate some of these challenges related to performing CSR. This is what we did, we understood that most of our sub-contractors had a 10% retention and what we did was that we negotiated with them to release their retention earlier than what the contract allowed, only if they would want give 1% of the 10% retention as a contribution towards a community initiative that we as the main contractor find ourselves involved in. We thus agreed with the sub-contractors that if they give a 1% we will equal or double the percentage as per our contribution towards the initiative. The sub-contractors subsequently agreed and were happy to contribute. Looking towards the future, this idea serves as a stepping stone to create a collaborative network among our sub-contractors and other SMEs, mitigating the challenges due to economic and financial conditions and more specifically creating a culture amongst one another of giving back.

7.3.2.4 Theme 4: CSR activities considered by SMEs to achieve sustainable business performance

In accordance with findings in line with the CSR activities, in general, the owner of Organisation B agreed that all CSR activities exposed by the quantitative data should be considered by SMEs in the South African construction industry to achieve sustainable business performance. He commented further on CSR activities, expressing some concern:

The only concern that I have is with the activity under the CSR customer dimension which states: 'Disclosure of financial and investment performance information of the organisation'. This activity is not really necessary as we are not a public company and our financial and investment performance is most viewed internally, however if disclosing of our financial and investment performance information allows us to get certain incentives, then the shareholders and directors inclusive of myself will agree that we should publish this type of information. Other than this I agree that all the other CSR activities associated with the CSR customer dimensions should be considered by construction organisations particularly SMEs in order to achieve sustainable business performance.

7.3.2.5 Theme 5: General comments

A general comment made by the owner of Organisation B was as follows:

> *I definitely feel that all the findings produced by the study ties in well with one another and thus I must say that you have developed some sort of ecosystem with regards to the CSR indicators that I feel is needed for our industry as we need to get more organisations involved in CSR initiatives.*

7.3.3 Case study 3 – Organisation C

7.3.3.1 Theme 1: Perceptions of SMEs pertaining to the relationship between the integration of CSR and sustainable business performance

Based on the findings of this section, the owner of Organisation C agreed that there is definitely a strong relationship in terms of integrating CSR into a construction organisation and sustainable business performance, commenting,

> *I feel that if a small construction organisation such as mine integrates CSR practices into my business norms, there would definitely be a positive attraction from outside the organisation especially from the stakeholders which include among other, communities that surround the organisation, which in essence I feel can surely contribute to the organisations sustainable business performance.*

From an internal organisational perspective, the owner of Organisation C stated,

> *Based on the findings that have been deduced by the study I fully support it, as I feel that CSR allows for an organisation to establish within itself a positive culture which becomes infectious to others, in and around the organisation. I can also confirm this finding, from the little CSR exposure that my organisation has had as more positive changes have occurred within my business which include, the buy in from my employees, contributing to my organisations efficiency. In addition, if your staff members are not entirely happy especially on an emotional level based on the atmosphere at work, prestige, efficiency and also the ability to attract more staff to the organisation will not be entirely possible.*

The owner of Organisation C also supported the deduced findings relative to the external organisational perspective, adding,

> *From an external perspective I truly think that CSR practices does improve the organisational image as I have and still experience it with my own organisation. This specifically allows my organisation to build healthier relationships with other smaller contractors who I also consider as my competitors. These relationships are thus built based on my competitors' curiosity as to how my organisation achieves more positive growth and by this I do not always imply financial growth. I am also implying to positive organisational cultural growth which I consider very*

important. I thus believe that through positive relationship building, with my competitors more sustainable work opportunities can be achieved.

7.3.3.2 Theme 2: CSR drivers influencing the CSR practices of SMEs

In accordance with the findings of this section, the interview with the owner of Organisation C showed that he supports the findings which stipulate that CSR practices of SMEs in the South African construction industry are limitedly driven by international and national CSR drivers. However, he does concur that although limited, CSR practices are predominantly driven by national CSR drivers:

> *Based on what I have experienced, I can definitely say that CSR practices specifically from a construction perspective is driven primarily by socio-economic aspects and cultural aspects, based on the fact that many communities in which construction projects commence, apply pressure towards contractors who are working on these projects. I can definitely say that these pressures are based on the fact that some of the communities are hard hit by the likes of unemployment, poverty, and also social evils etc. In addition, I feel that not enough drivers are enforced in order for construction organisations to establish CSR as part of their organisational norms and practices. If more compulsory CSR drivers are put in place, I am of the opinion that it will eventually spark a CSR culture within construction organisations to practice CSR open heartedly without being pressurised. I am thus of the opinion that although limited, there could be smaller construction organisations in South Africa who are driven by international drivers. My honest opinion is that we the contractors in South Africa are thus driven mostly by national CSR drivers.*

7.3.3.3 Theme 3: CSR implementation challenges experienced by SMEs

Grounded on the deduced findings of this section in line with the CSR implementation challenges at the normative management level, the interview with the owner of Organisation C shows support for the findings:

> *My opinion is that it is almost definite that SMEs in the South African construction industry lack in terms of integrating CSR into their business norms and objectives as I speak from experience, based on the fact that profit margins on construction projects are very limited and thus as an SME our profit margins do not afford us the opportunity to always consider CSR initiatives. I thus feel that on public projects government should include a line item in the tender document in order to promote CSR practices by contractors on all projects, then at least the construction organisation would not have to panic about financial constraints. In this way I also feel that government will help generate a CSR culture.*

As for CSR implementation challenges in line with the strategic management level, the owner of Organisation C fully supports the findings that SMEs in the South African construction

industry have limited financial and human resources to undertake CSR initiatives. He added the following:

> *Yes, I am of the opinion that SMEs such as myself are limited financially, this is based on what I have mentioned previously. However, I would not really say that we are limited from a human resources point of view. I would rather allude to the fact that CSR is still a new area which requires the human resources that an organisation such as mine employ, to be upskilled and gain more knowledge so that we become more resourceful with regards to CSR.*

With regards to the CSR implementation challenges deduced in line with the operative management level, the owner of Organisation C commented,

> *Although my organisation tries its best, surely SMEs such as myself will find it a little difficult to adapt CSR practices, based on the challenges exposed at the strategic management level that alludes to financial and human resource challenges, which includes the gap in CSR skills and knowledge.*

Grounded on CSR implementation challenges in line with the environmental management level, the owner of Organisation C stated the following:

> *I honestly feel that the CSR challenges experienced at the Environmental Management Level is created by most of the challenges at the preceding management levels as we have discussed.*

7.3.3.4 Theme 4: CSR activities considered by SMEs to achieve sustainable business performance

Based on the findings pertaining CSR activities, in general, the owner of Organisation C acknowledged that all the CSR activities which the quantitative data has exposed should be considered by SMEs in the South African construction industry to achieve sustainable business performance. He added that,

> *Although I agree that all the CSR activities in relations to the CSR dimensions should be considered by SMEs such as myself to achieve sustainable business performance, I do feel that certain CSR activities take precedents over others such as the CSR activities relative to the employee, customer, shareholder, and supplier and partner dimensions. In addition, I am of the opinion that the CSR activities relative to the competitors' dimension will however be challenging to implement as the competitive nature within the construction industry makes it difficult for competitors to work with one another, especially from a CSR perspective. However, somehow a CSR culture within our industry needs to be established more robustly.*

7.3.3.5 Theme 5: General comments

A general comment made by the owner of Organisation C is that the findings of the study portray a very realistic picture in terms of the nature of CSR in the South African construction

industry, particularly from an SME perspective. He believes that it provides SMEs with guidance as to what to look out for and follow in terms of CSR initiated by SMEs.

7.3.4 Case study 4 – Organisation D

7.3.4.1 Theme 1: Perceptions of SMEs pertaining to the relationship between the integration of CSR and sustainable business performance

Based on the deduced findings of this section, the owner of Organisation D agreed that there is definitely a strong relationship in terms of integrating CSR into a construction organisation and sustainable business performance. Based on the findings of this study, from an internal organisational perspective, the owner of Organisation D stated,

> *I would agree that CSR from an internal perspective does contribute to sustainable business performance, specifically relating to the findings which focuses on the fact that CSR improves employee dedication, motivation, loyalty, commitment, respect, and efficiency; and increases the organisations ability to attract good and quality staff. I have experienced this in my own organisation, based on the fact that I have a principle embedded in my organisation, that whenever I client pays us for a job that has been successfully completed, I would pay my workforce first and on time, never failing to pay them even when times are tough. By practicing this simple principle, I as the organisations owner have found that my workforce remain loyal to me and the organisation at all times. I also find that due to my workforce being happy at work, they seem to influence potential workforce to join my organisation. I am thus of the view that by following this principle, it does more than just sustain my organisation, but also gives us an edge in terms of recruiting, possibly the best workforce in our immediate environment.*

The owner of Organisation D supported the findings relative to the external organisational perspective, adding,

> *Based on the CSR principle that my organisation follows and which I have previously mentioned under the internal organisational perceptions, I can definitely say that it certainly helps my organisation in terms of improving the organisational image and reputation which in fact positively contributes to my organisations credibility. I should add that the same workforce which were employed since the organisation was established, are the same workforce that are spreading the news as to how well the organisation looks after its workforce without me as the owner influencing this initiative, hence our good image, reputation and credibility has come about in a natural way based on what I call good business principles.*

7.3.4.2 Theme 2: CSR drivers influencing CSR practices of SMEs

Based on the findings gathered for this section, the interview with the owner of Organisation D showed that he supports the findings which stipulate that CSR practices of SMEs in the South

African construction industry are limitedly driven by international and national CSR drivers, commenting that,

> *I am certainly of the opinion that when it comes to the CSR practices from a construction perspective, it is true that not a lot of construction organisations in South Africa particularly SMEs are driven by international drivers. The only drivers driving CSR, seem to be the national CSR drivers, through what is known and alluded to by your findings in the study as socio-economic priorities and concerns. One can see this in some of the public jobs that we as an organisation tender on, that there is always some form of community involvement that needs to be adhered to by the contractor that gets awarded the job. An example of this would be that the organisation that gets awarded the contract needs to involve sub-contractors and labour from the community in which the project will be situated. My opinion is that due to the fact that we are still considered a developing country, it is almost natural that most of the CSR drivers would stem from a socio-economic point of view. By this I am not saying that international drivers are non-existent, but that they are truly limited at this stage.*

7.3.4.3 Theme 3: CSR implementation challenges experienced by SMEs

Grounded on the deduced findings of this section in line with the CSR implementation challenges at the normative management level, the interview with the owner of Organisation D supports the findings:

> *Although my organisation practices CSR to some extent, I would agree that at a Normative Management Level it is definitely difficult to integrate CSR into my organisations objectives and norms, based on the fact that there are not always enough finances available for more CSR activities to be initiated. SMEs such as myself on many occasion seem to work from what I call hand to mouth and this impacts our CSR integration. We as SMEs are also expected to comply with many policies and construction bodies just as larger organisations do. In this regard we as smaller construction organisations sometimes struggle to keep up and thus CSR practices also suffer.*

Observing the owner of Organisation D's response under the normative management level, it was clear from his business experience that he agreed with the findings, particularly that SMEs in the South African construction industry have limited financial and human resources to undertake CSR initiatives. For the CSR challenges at the operative management level, he also agreed that SME owners, himself included, lack the necessary CSR skills and knowledge, and from an environmental perspective he agreed that unstable economic conditions and poor collaboration among SMEs hinder CSR initiatives. He added,

> *My main view regarding the CSR implementation challenges is that the challenges seem to have a ripple effect on one another. This said I am certain that the CSR implementation challenges stipulated at the Environmental Management Level, contributes to the challenges at*

the Operative Management Level, which contributes to the challenges at Strategic Management Level, which eventually contribute to the challenges at the Normative Management Level.

7.3.4.4 Theme 4: CSR activities considered by SMEs to achieve sustainable business performance

Based on the deduced findings in line with the CSR activities, in general, the owner of Organisation D agreed that all the CSR activities exposed by the data should be considered by SMEs in the South African construction industry to achieve sustainable business performance, commenting that,

> *As part of the CSR activities which you have mentioned and which have been shown by your research findings, I definitely agree with it. What I can say for sure is that it is very important for my organisation to maintain good relationships with my suppliers by particularly paying my suppliers on time, as well as paying my workforce on time and then also keeping my shareholders who play an important role in the organisation happy. As an organisation we are also very considerate of the environment in which we work and coming from an architectural background myself I understand that it needs to be protected and conserved. In saying all of this I can definitely concur with the findings as all of the CSR activities captured in your study are of utmost importance, firstly as a CSR practice and secondly if practiced properly could definitely generate more sustainable business performance for any construction organisation be it big or small.*

7.3.4.5 Theme 5: General comments

A general comment of the owner of Organisation D was as follows:

> *I feel that the findings of the study thus far are very interesting. It certainly sparked more curiosity from my side to get to know more about CSR as I feel that it has the potential to unlock a new dynamic within my organisation which will assist in further positive developments and business sustainability.*

7.4 Discussion of structured face-to-face interview findings

With reference to the four case studies, including the case study summaries (Table 7.2), all the respondents (Organisations A-D) agreed that a positive relationship exists between the integration of CSR and sustainable business performance. And also that the practice of CSR, specifically CSR initiatives directed at immediate stakeholders such as the surrounding communities of the organisation and potential future employees, affords SMEs within the South African construction industry the opportunity to achieve more prestige (Organisation A); attract likeminded and quality staff who are interested in concepts such as CSR (Organisations A, B and D); improves employee commitment (Organisations C and D); improves employee efficiency (Organisation C); improves the organisational image (Organisations A-D); and bolsters organisational credibility (Organisations A, B and D). All of these points support a trajectory towards sustainable business performance.

In addition, the respondents (Organisations A-D) also concurred that CSR practices of SMEs within the South African construction industry are limitedly driven by CSR drivers stemming from both an international and national perspective. Respondents did, however, clarify that while international CSR drivers may not necessarily be non-existent, CSR in the South African context is explained by the respondents as adopted more naturally from a national point of view, because South Africa is still considered a developing nation and that more socio-economic (Organisations A-D), political and governmental (Organisation B), and cultural and traditional (Organisation B and C) concerns are prioritised through community engagement on various public construction projects. Organisation A summarises the concerns pertaining to the limited drivers influencing CSR practices of SMEs within the South African construction industry in this way:

> *At this stage and viewing the South African construction industry holistically, my view is that there are very few drivers influencing CSR practices in the industry. By this I am not implying that CSR drivers from an international and national perspective don't exist. However, CSR should rather be considered to be in its infancy phase.*

Adding to the CSR drivers, respondents (Organisations A-D) also agreed that they experience CSR implementation challenges across all four management levels: normative, strategic, operative and environmental. More specifically, all the respondents (Organisations A-D) believed that at the normative management level, SMEs such as themselves experience inadequacies relating to the integration of CSR into their business culture, norms and objectives. One of the reasons for this challenge was suggested by Organisation A:

Lack of implementation of certain CSR drivers which if implemented could enforce CSR practices across all SMEs in the South African construction industry.

At the strategic management level, all the respondents (Organisations A-D) agreed that they experience CSR implementation challenges related to limited financial and human resources. Several reasons were elaborated by the respondents:

We are a third world country and thus I can say from my own business experience that resources remain a challenge in allowing us to practice CSR as we take whatever we have and try to make the best of it. (Organisation B)

Profit margins on construction projects are very limited and thus as an SME our profit margins do not afford us the opportunity to always consider CSR initiatives. (Organisation C)

The fact that there are not always enough finances available for more CSR activities to be initiated. (Organisation D)

Relative to the CSR implementation challenges at the operative management level, it was noted by the comments of Organisation A that a slight challenge in terms of adapting CSR practices and standards into their organisation's internal business processes exist. According to Organisation A, this is caused predominantly by resistance within the organisation. Another CSR implementation challenge experienced at the operative management level, as confirmed by Organisations B and D, is the lack of CSR skills and knowledge. Organisation B elaborated that the lack of CSR skills and knowledge is indirectly caused by the lack of CSR drivers to drive CSR practices among SMEs in the South African construction industry. Organisation B also stated,

Having more knowledge particularly with regards to CSR is powerful and I feel that when we as construction business owners are not informed we would not understand how CSR can unlock future potential, especially in terms of sustainable business performance, specifically through the boosting of the organisations image allowing for more sustainable business to plant itself on the organisations door steps.

In relation to the CSR implementation challenges at the environmental management level, Organisations A-D all agree that they face challenges aligned to unstable economic conditions. One reason given by Organisation A pertaining to this challenge is that,

…many of the CSR initiatives are conducted with our own profits and based on the economic conditions, profit margins become either smaller or bigger at any given time. If they become smaller CSR initiatives become limited.

Another specific implementation challenge, evident from the data related to the environmental management level as documented by Organisation B, was the absence of CSR culture among SMEs and poor collaboration among SMEs. From a broader perspective, Organisations D summarises the reasons for the CSR implementation challenges across all four management levels, experienced by SMEs, as follows:

My main view regarding the CSR implementation challenges is that the challenges seem to have a ripple effect on one another. This said I am certain that the CSR implementation challenges stipulated at the Environmental Management Level, contributes to the challenges at the Operative Management Level, which contributes to the challenges at Strategic Management Level, which eventually contribute to the challenges at the Normative Management Level.

The respondents (Organisation A-D) agreed that all CSR activities exposed by the quantitative data should be considered by SMEs in the South African construction industry, themselves included, to achieve sustainable business performance. However, the findings showed that some CSR activities take precedence over others: relationship management between shareholders (Organisation A and D); customer satisfaction and product safety (Organisation A); and maintaining good relationships with suppliers (Organisation D). One of the CSR activities, Disclosure of financial and investment performance information of the organisation, which is under the customer dimension, was not deemed as necessary by Organisations A and B. Justification was given by Organisation A:

I do not think organisations need to disclose their financial information as I cannot seem to see what and how the customer will benefit from this. I feel that only certain people should be privy to this information.

Justification given by Organisation B was captured as,

This activity is not really necessary as we are not a public company and our financial and investment performance is most viewed internally, however if disclosing of our financial and investment performance information allows us to get certain incentives, then the shareholders and directors inclusive of myself will agree that we should publish this type of information.

Generally, all the respondents agreed that the findings based on the initial quantitative data work well together and sketch an ecosystem of CSR indicators necessary for the South African construction industry, specifically to guide SMEs towards the achievement of sustainable business performance.

Table 7.2: Summary of qualitative research study conducted with reference to each construction organisation case study analysis

Theme	Organisation A – case study 1	Organisation B – case study 2	Organisation C – case study 3	Organisation D – case study 4
Perceptions of SMEs pertaining to the relationship between the integration of CSR and sustainable business performance	• The CSR practices performed by our organisation does afford us the opportunity of becoming more prestige's as CSR has become part of our organisations culture which allows our organisation to establish good long-lasting relationships with stakeholders which include among other the communities in which we work.	• I think with CSR and its practices there is a lot of positive attributes. One of the many positive attributes is that construction organisations who embed CSR as part of their organisational practices and culture, would definitely attract individuals seeking employment, specifically individuals who find that they are able to fit into a construction organisation who embraces a CSR culture. This said, it should not be forgotten that human beings are wired to do and embrace the good aspects of life which in this regard affords construction organisations who embrace CSR within their organisational practices, the opportunity to employ likeminded individuals who have the potential to take the organisation forward in a very sustainable manner.	• I can also confirm this finding, from the little CSR exposure that my organisation has had as more positive changes have occurred within my business which include, the buy in from my employees, contributing to my organisations efficiency.	• I would agree that CSR from an internal perspective does contribute to sustainable business performance, specifically relating to the findings which focuses on the fact that CSR improves employee dedication, motivation, loyalty, commitment, respect, and efficiency; and increases the organisations ability to attract good and quality staff.

Table 7.2: (Continued)

Theme	Organisation A – case study 1	Organisation B – case study 2	Organisation C – case study 3	Organisation D – case study 4
Perceptions of SMEs pertaining to the relationship between the integration of CSR and sustainable business performance	• CSR practices undertaken by the organisation definitely increase the organisations ability to attract good and quality staff. However, this finding would depend predominantly on an individual seeking employment based on the fact that not all employment seekers are attracted towards an organisation primarily due to the organisations CSR initiatives, but rather the financial benefits such as the salary that will be earned. • The owner of Organisation A believes that they gain credibility through their CSR practices especially credibility from communities who have developed respect for the organisation and vice versa. He also believes that the organisation CSR practices in addition contributes to improving the organisational image and hopefully would afford the organisation more business opportunities going forward especially from the communities in which they have worked previously.	• Although we are incorporating CSR practices for the greater good, the CSR practices surely bolster the organisation's corporate image which contributes to our business being more sustainable in terms of the performance.	• From an external perspective I truly think that CSR practices does improve the organisational image as I have and still experience it with my own organisation.	• Based on the CSR principle that my organisation follows and which I have previously mentioned under the internal organisational perceptions, I can definitely say that it certainly helps my organisation in terms of improving the organisational image and reputation which in fact positively contributes to my organisations credibility.

Table 7.2: (Continued)

Theme	Organisation A – case study 1	Organisation B – case study 2	Organisation C – case study 3	Organisation D – case study 4
CSR Drivers influencing the CSR practices of SMEs	• I strongly feel that CSR practices are driven predominantly by national CSR drivers particularly drivers linked to socio-economic priorities and concerns, where construction organisations such as ourselves have practiced CSR in the form of employing and upskilling community members in good and bad economic times, as we acknowledge the need in the communities in which we work.	• I feel that we've got a lot of socio-economic issues and as a businessman born and raised on the Cape Flats I know that the Cape Flats houses some of the poorest communities in the Western Cape and based on this knowledge I find myself having a better understanding towards the people in these communities…, thus my organisation commits and is more driven to CSR practices from this point of view.	• Based on what I have experienced, I can definitely say that CSR practices specifically from a construction perspective is driven primarily by socio-economic aspects and cultural aspects, based on the fact that many communities in which construction projects commence, apply pressure towards contractors who are working on these projects.	• The only drivers driving CSR, seem to be the national CSR drivers, through what is known and alluded to by your findings in the study as socio-economic priorities and concerns. One can see this in some of the public jobs that we as an organisation tender on, that there is always some form of community involvement that needs to be adhered to by the contractor that gets awarded the job.
		• As for CSR drivers from a political and governmental perspective I feel that not enough is being done to drive CSR within construction businesses, be it large or small businesses, as it is found that many businesses get involved with CSR to use it primarily for what is known as a fronting method and not for its actual cause which is to give back and empower communities, individuals, and entities around the business….	• My honest opinion is that we the contractors in South Africa are thus driven mostly by national CSR drivers.	

Table 7.2: (Continued)

Theme	Organisation A – case study 1	Organisation B – case study 2	Organisation C – case study 3	Organisation D – case study 4
CSR Drivers influencing the CSR practices of SMEs		• In terms of CSR driven by culture and tradition I do feel that all construction businesses should be driven by this driver especially within the South African context as we come from a very rich and deep history of oppression, so people especially in the community that I come from understand that we should assist one another as many of us inclusive of our families have lost out on a lot opportunity and progress based on the past. This in itself also drives CSR practices in my organisation.		
CSR Implementation Challenges experienced by SMEs	• I support the findings which allude to the fact that there seems to be a lack of CSR integration in the SME culture, business norms and objectives, as this seems to be the situation with our organisation as well.	• I feel that generally there is definitely a lack of culture when it comes to implementing CSR at a normative management level, which stems from the fact that not a lot of construction businesses, more specifically SMEs in the South African construction environment practice CSR within their businesses on a regular basis…	• My opinion is that it is almost definite that SMEs in the South African construction industry lack in terms of integrating CSR into their business norms and objectives as…...based on the fact that profit margins on construction projects are very limited and thus as an SME our profit margins do not afford us the opportunity to always consider CSR initiatives.	• Although my organisation practices CSR to some extent, I would agree that at a Normative Management Level it is definitely difficult to integrate CSR into my organisations objectives and norms, based on the fact that there are not always enough finances available for more CSR activities to be initiated.

Table 7.2: (Continued)

Theme	Organisation A – case study 1	Organisation B – case study 2	Organisation C – case study 3	Organisation D – case study 4
CSR Implementation Challenges experienced by SMEs	• These findings hit home as our organisation can only contribute to small CSR initiatives based on the fact that construction budgets are very tight allowing for very limited finance to be made available for these initiatives. Also with regards to the limited human resources we understand that we cannot just teach one of staff members the responsibilities of monitoring the CSR processes within our organisation as we are still learning ourselves. We thus acknowledge that understanding and monitoring CSR is a specialist duty. This said, the organisation is not in a position financially to hire a CSR specialist, but we are addressing it in our own unique way.	• We are a third world country and thus I can say from my own business experience that resources remain a challenge in allowing us to practice CSR as we take whatever we have and try to make the best of it.	• Yes, I am of the opinion that SMEs such as myself are limited financially, this is based on what I have mentioned previously. However, I would not really say that we are limited from a human resources point of view. I would rather allude to the fact that CSR is still a new area which requires the human resources that an organisation such as mine employ, to be upskilled and gain more knowledge so that we become more resourceful with regards to CSR.	• Agreed that SME owners do lack the necessary CSR skills and knowledge.

Table 7.2: (Continued)

Theme	Organisation A – case study 1	Organisation B – case study 2	Organisation C – case study 3	Organisation D – case study 4
CSR Implementation Challenges experienced by SMEs	• it is not entirely difficult to adapt CSR practices and standards into the organisations internal business processes; however, some resistance is experienced within the organisation in adapting CSR practices.	• I am of the opinion that CSR challenges at the operative management level has its roots well nestled in the fact that CSR practices among SMEs are limitedly driven by CSR drivers and thus developing a CSR culture among construction organisations across South Africa particularly SMEs is difficult. I am also in agreement with the fact that a lack of CSR skills and knowledge is one of the major challenges that I have experienced and if I should say, still experience particularly in my business.	• I honestly feel that the CSR challenges experienced at the Environmental Management Level is created by most of the challenges at the preceding management levels as we have discussed.	• My main view regarding the CSR implementation challenges is that the challenges seem to have a ripple effect on one another. This said I am certain that the CSR implementation challenges stipulated at the Environmental Management Level, contributes to the challenges at the Operative Management Level, which contributes to the challenges at Strategic Management Level, which eventually contribute to the challenges at the Normative Management Level.
	• Yes, I fully agree with the challenges at the environmental management level especially the challenge that has to do with the unstable economic conditions. The reason for this is that many of the CSR initiatives are conducted with our own profits and based on the economic conditions, profit margins become either smaller or bigger at any given time.	• Yes, I agree that poor CSR collaboration among SMEs; unstable economic conditions, as well as lack of CSR culture among SMEs are definitely challenges that my business has faced and still faces to various extents.		

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Table 7.2: (Continued)

Theme	Organisation A – case study 1	Organisation B – case study 2	Organisation C – case study 3	Organisation D – case study 4
CSR activities considered by SMEs to achieve sustainable business performance	• I also feel that relationship management between shareholders is a crucial CSR activity in the quest for our organisation to achieve sustainable business performance. • As for customer satisfaction and product safety I definitely agree with these two activities under the customer dimension, as it is always necessary to keep the customer happy and also to keep everyone on the job safe, free from injury or even fatality as injuries and fatalities could have dire consequences for the organisation especially in terms of its sustainable business performance.	• The only concern that I have is with the activity under the CSR customer dimension which states: 'Disclosure of financial and investment performance information of the organisation'. This activity is not really necessary as we are not a public company and our financial and investment performance is most viewed internally, however if disclosing of our financial and investment performance information allows us to get certain incentives, then the shareholders and directors inclusive of myself will agree that we should publish this type of information.	• Although I agree that all the CSR activities in relations to the CSR dimensions should be considered by SMEs such as myself to achieve sustainable business performance, I do feel that certain CSR activities take precedents over others such as the CSR activities relative to the employee, customer, shareholder, and supplier and partner dimensions. • In addition, I am of the opinion that the CSR activities relative to the competitors' dimension will however be challenging to implement as the competitive nature within the construction industry makes it difficult for competitors to work with one another, especially from a CSR perspective. However, somehow a CSR culture within our industry needs to be established more robustly.	• As part of the CSR activities which you have mentioned and which have been shown by your research findings, I definitely agree with it. What I can say for sure is that it is very important for my organisation to maintain good relationships with my suppliers by particularly paying my suppliers on time, as well as paying my workforce on time and then also keeping my shareholders who play an important role in the organisation happy.

Table 7.2 (Continued)

Theme	Organisation A – case study 1	Organisation B – case study 2	Organisation C – case study 3	Organisation D – case study 4
CSR activities considered by SMEs to achieve sustainable business performance	• As for the CSR activity related to the customer dimension, I do not think organisations need to disclose their financial information as I cannot seem to see what and how the customer will benefit from this. I feel that only certain people should be privy to this information.			
General Comments	• The deduced findings complement each other well and can holistically be utilised to generate a CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance.	• I definitely feel that all the findings produced by the study ties in well with one another and thus I must say that you have developed some sort of ecosystem with regards to the CSR indicators that I feel is needed for our industry as we need to get more organisations involved in CSR initiatives	• The findings of the study portray a very realistic picture in terms of the nature of CSR in the South African construction industry, particularly from an SME perspective. • It provides SMEs with some form of indication based on what to look out for and follow in terms of CSR being initiated by SMEs.	• I feel that the findings of the study thus far are very interesting. It certainly sparked more curiosity from my side to get to know more about CSR as I feel that it has the potential to unlock a new dynamic within my organisation which will assist in further positive developments and business sustainability.

7.5 Chapter summary

This chapter presented the case-by-case analysis of the qualitative interviews conducted with four research participants (owners of SMEs). The participants of the interviews also partook in the quantitative survey during the first data collection phase. The findings in this chapter introduced more depth and explanation to several of the findings in the quantitative data, confirming the latent variables as well as the measurement variables that need to form part of the structural equation model as developed in Chapter 8.

CHAPTER 8

DEVELOPING THE CSR MODEL

8.1 Introduction

In Chapters 6 and 7, the research data was presented and analysed with both descriptive and inferential statistics and finally deduced and discussed. Based on these findings, specific measurement variables in relation to the respective latent variables as indicated in the conceptual framework of the study were established.

This chapter seeks the development of a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance, using the Structural Equation Modelling (SEM) technique. SEM involves a two-stage analysis which comprises a measurement model as well as an assessment of the structural model. To understand the two-stage analysis better, Hoyle (1995, 2011) and Kline (2010) specify that the measurement model, which represents the first stage in SEM, assesses the link between the latent and measurement variables, while the assessment of the structural model specifies the links between the latent variables only. To conclude the model development process, a calculation of the path coefficients, indicating the predictive strength of the model, were estimated and analysed to test the structural model.

8.2 Structural equation model

The rationalisation for selecting SEM as the technique to develop a CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance has been discussed in Section 5.7.2.3. According to Fan, Chen, Shirkey, John, Wu, Park and Shao (2016), SEM is a third-generation multivariate technique which combines two statistical methods: confirmatory factor analysis and path analysis. Gopinath (2014), however, adds that not only does SEM combine confirmatory factor analysis and path analysis, but also includes regression analysis, all of which represent special cases of SEM. According to Gopinath (2014), compared to regression and factor analysis, SEM is a relatively young technique, having its roots in papers that appeared only in the late 1960s. The uniqueness of SEM affords researchers the opportunity to test complete theories, concepts and complex models by estimating the composite relationship between the variables (Gil-Garcia, 2008; Robins, 2012).

Based on the views of SmartPLS (2020), the SEM technique for modelling can be approached from two perspectives – either from a covariance-based structural equation model (CB-SEM) perspective or from a variance-based partial least square structural equation model (PLS-SEM) perspective – as both allow for different research goals to be achieved. According to SmartPLS (2020), CB-SEM is utilised when:

- the goal of the research is theory testing, theory confirmation or comparison of alternative theories;
- the structural model has circular relationships; and
- the research requires a global goodness-of-fit criterion;

and PLS-SEM is used when:

- the goal of research is predicting key target constructs or identifying key driver constructs;
- the structural model is complex (many constructs and many indicators);
- the sample size is small or the data is nonnormally distributed; and
- the plan is to use latent variable scores in subsequent analysis.

Numerous studies on SME business performance, particularly in the South African construction industry, have utilised different statistical techniques such as logistic and multiple regression to develop various research models around this research area. As for this present study, PLS-SEM was employed because latent and measurement variables were used; these are interrelated and therefore the relationship between these variables could be explored.

8.3 Model fitting and analysis using PLS-SEM

According to Elbanna, Child and Dayan (2013), PLS-SEM is considered the most appropriate method for developing a new theory. To achieve a robust PLS-SEM, basic assumptions such as *"the sample size must be a minimum of 10 times the number of path relationships leading to endogenous construct"* were satisfied to establish sample size (Elbanna *et al.*, 2013). Noting this assumption, all variables in the model are interrelated serving as a holistic outcome and representing the CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance. The focus of the model is linked strongly to the CSR activities that need to be considered by SMEs to achieve sustainable business performance; hence there are three main paths leading to the CSR activities. The main goal for developing this model was to establish CSR indicators for the use of SMEs in the South African construction industry, through links, nature of relationship and the relative predictive power of the variables among the latent constructs.

8.3.1 Selection of variables for the CSR model

Selecting the variables for developing the CSR model was done after data analysis in Chapters 6 and 7. The variables selected were those of a significant nature in relation to their individual constructs. Table 8.1 illustrates the latent variable constructs in relation to the measurement variables. The first latent variable considers the SMEs perceptions, pertaining to the relationship between the integration of CSR and sustainable business performance. Eight measurement variables (four internal and four external organisational perceptions) that correspond to the first latent variable were selected based on the ranking order of the descriptive data in Chapter 6. The second latent variable considers the CSR drivers that influence CSR practices of SMEs. This latent variable is comprised of two concepts, international CSR drivers and national CSR drivers. Based on the data analysis conducted for this latent variable, five measurement variables (CSR drivers) emerged, two representing international CSR drivers and three representing national CSR drivers. The third latent variable of the study considers SME CSR implementation challenges. This latent variable consists of four concepts, namely normative management level challenges in which two measurement variables (CSR implementation challenges) emerged as significant; strategic management level challenges in which two measurement variables emerged; operative management level challenges in which two measurement variables emerged; and environmental management level challenges in which two measurement variables emerged.

The fourth latent variable reflects CSR activities that need to be considered by SMEs in the South African construction industry to achieve sustainable business. Fourteen measurement variables (CSR activities) emerged, reflecting three variables for the employee dimension; two for the shareholder dimension; two for the customer dimension; two for the supplier partner dimension; one for the government dimension; one for the environment and resources dimension; one for the community dimension; one for the competitor dimension; and one for the NGOs dimension. With this selection of variables for the CSR model, Table 8.1 was developed.

Table 8.1: Conceptual model latent variables extracted

Latent variable constructs	Measurement variables
SMEs perceptions pertaining to relationship between the integration of CSR and sustainable business performance	**Internal organisational perceptions** • **C41AB:** CSR improves employee dedication, motivation, loyalty, commitment, respect and efficiency that contributes to SBP • **C41AC:** CSR improves the organisation's efficiency allowing for SBP • **C41AF:** CSR improves the organisation's prestige, contributing to SBP • **C41AH:** CSR increases the organisational ability to attract good and quality staff contributing to SBP **External organisational perceptions** • **C41BA:** CSR improves the organisation's corporate image and reputation with various stakeholders (employees, customers/clients, investors, government, suppliers and the community) all of which contributes to SBP • **C41BD:** CSR positively contributes to the credibility of the organisation allowing for SBP • **C41BE:** CSR positively contributes to giving back to the community allowing for SBP • **C41BF:** CSR increases business relations and new business opportunity contributing to SBP
CSR Drivers influencing the CSR practices of SMEs	**International CSR Drivers** • **INTDF1**: Global standardisation • **INTDF2**: Stakeholder activism **National CSR Drivers** • **NATDF1:** Socio-economic priorities and concerns • **NATDF2:** Political reforms • **NATDF3:** Culture and tradition
CSR Implementation Challenges experienced by SMEs	**Normative Management Level Challenges** • **C31AA:** Lack of integration in the SMEs culture and the SMEs business objectives • **C31AB:** Lack of integration in the SMEs culture and the SMEs business norms **Strategic Management Level Challenges** • **C31BC:** SMEs have limited financial resources to undertake CSR initiatives • **C31BD:** SMEs have limited human resources to undertake CSR initiatives **Operative Management Level Challenges** • **C31CC:** Lack of CSR skills and knowledge • **C31CD:** SMEs find it difficult to adapt CSR practices and standards to their internal business process **Environmental Management Level Challenges** • **C31DA:** Unstable economic conditions • **C31DC:** Poor collaboration among SMEs

Table 8.1: (Continued)

Latent variable constructs	Measurement variables
CSR activities considered by SMEs to achieve sustainable business performance	**Employee Dimension Activities** • **EMPLOYF1:** Employee rights, remuneration and recruitment • **EMPLOYF2:** Occupational health and safety of employees and training • **EMPLOYF3:** Employees freedom of association and bargaining **Shareholder Dimension Activities** • **SHAREF1:** Permissible shareholder proceeds • **SHAREF2:** Permissible information, participation and relationship management towards shareholders **Customer Dimension Activities** • **CUSTF1:** Customer satisfaction and product safety • **CUSTF2:** Disclosure of financial and investment performance information of the organisation **Supplier and Partner Dimension Activities** • **SUPPLYF1:** Preserve suitable supplier and partner relationships • **SUPPLYF2:** Promote adequate communication and CSR performance with suppliers and partners **Government Dimension Activities** • **GOVF1:** Conformance to the requirements of government laws and policies **Environment and Resources Dimension Activities** • **ENVIROF1:** Environmental protection and the conservation of energy and resources **Community Dimension Activities** • **COMUF1:** Community relations and construction project commitments **Competitors Dimension Activities** • **COMPF1:** Ethical business practices and fair competition **NGOs Dimension Activities** • **NGOF1:** Corporate socio-economic services

8.3.2 Measurement model results

The measurement model was established utilising SmartPLS (version 2.0M3) Software to access the measurement capacities of the explanatory variables and the predictive strength of the model. To attain the measurement model results, all possible structural relationships between the latent variables of the study were drawn allowing for the reflective indicators of the latent variables to turn from red to blue to indicate some form of relationship with each other. Thereafter, the PLS algorithm determined the standardised regression rate, factor loadings and the percentage variance (R^2 value) explained by the explanatory variables. Based on the PLS algorithm and according to Chu, Hsiao, Lee and Chen (2004) and Fornell and Larcker (1981), variables with factor loadings of 0.7 and above should be retained. However, this study considered 0.5 as the baseline for factor loading, since the use of 0.5 in factor

analysis is seen as acceptable (Hulland, 1999). All variables selected for the development of the model were above the baseline of 0.5; therefore, no variables were deleted from the model.

Based on the results reported in Table 8.2, individual item reliability was inspected on the latent variables. The results show that the measures are robust in terms of their internal consistency reliability as indicated by the composite reliability. The composite reliabilities of the different measures ranged from 0.88 to 0.96, which exceeds the recommended minimum value of 0.70 stated by Nunnally (1978, cited by Al-Gahtani, Hubona & Wang, 2007:686). These results, according to Fornell and Lacker (1981), confirm that convergent validity of the constructs may be concluded as adequate.

The elements in the matrix diagonals, representing the square roots of the average variance extracted (AVE), are in all cases greater than the off-diagonal elements in their corresponding row and column, supporting the discriminant validity of the scales of use. The results illustrate higher factor loadings and the constructs indicate satisfactory shared variance with their indicators. Based on these observations, the model presents acceptable reliability and validity in explaining the links among the constructs of the model.

Table 8.2: Latent variables inter construct correlation and reliability measure

Latent Variables	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy	ACD	CC	CD	SP
CSR activities considered by SMEs to achieve sustainable business performance (ACD)	0.6508	0.9628	0.1479	0.958	0.6508	0.0385	1	0	0	0
CSR implementation challenges experienced by SMEs (CC)	0.483	0.8818	0	0.8504	0.483	0	0.259	1	0	0
CSR drivers influencing the CSR practices of SMEs (CD)	0.7795	0.9464	0	0.9307	0.7795	0	0.2451	0.1394	1	0
SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance (SP)	0.7452	0.959	0.101	0.9524	0.7452	0.0351	0.2867	0.2392	0.2406	1

8.3.3 Validation of the structural model results

Convergent validity was tested and confirmed by linking the latent variables in the model to extract the factor and cross loadings of all indicator items to their respective latent variables. The measurement model results (Table 8.3) indicate that all items load on their respective latent variables from a lower bound of 0.63 to an upper bound of 0.91.

In the proposed structural model (see Figure 8.1), interaction effects were examined by running the PLS-algorithm to identify the relationship (if any) existing among the variables. The reason

for running the PLS-algorithm was to identify the variance explained by the variables included in the model and to establish the significance levels of the paths leading to the PLS estimate. The path coefficients were also evaluated (see Table 8.4) and indicate the contributions of each latent explanatory construct to the predictive capacity of the endogenous construct. It is clear from Table 8.4 and Figure 8.1 that the exogenous and endogenous constructs of the model have a positive contribution towards each other. The overall predictive capacity of the structural model, according to Chin (2010), is assessed by the R^2 value associated to the endogenous constructs within the model. Viewing the calculated R^2 value of the endogenous constructs, the values are above 10% which are acceptable, according to Fornell and Lacker (1981); Falk and Miller (1992); and Henseler, Dijkstra, Sarstedt, Ringle, Diamantopoulos, Straub, Ketchen, Hair, Hult and Calantone (2014). In addition, Frost (2021) confirms that R^2 values vary in terms of the study area undertaken. Frost (2021:1) contends,

> *Different research questions have different amounts of variability that are inherently unexplainable. Case in point, humans are hard to predict. Any study that attempts to predict human behaviour will tend to have R-squared values less than 50%. However, if you analyse a physical process and have very good measurements, you might expect R-squared values over 90%. There is no one –size fits all best answer for how high R-squared should be.*

The R^2 values of this study aligned to the statement by Frost (2021:1) as the findings of the study where directly linked to the views of construction SME business owners in the South African construction industry, allowing the R^2 to be assessed from a social science perspective.

Table 8.3: Factor loadings (bolded) and cross loadings for measurement model

Coding	CSR activities considered by SMEs to achieve sustainable business performance (ACD)	CSR implementation challenges experienced by SMEs (CC)	CSR drivers influencing the CSR practices of SMEs (CD)	SMEs perception pertaining to the relationship between the integration of CSR and sustainable business performance (SP)
C31_A_A	0.1554	**0.7173**	0.1389	0.2382
C31_A_B	0.1278	**0.7154**	0.1499	0.1306
C31_B_C	0.1248	**0.6701**	0.1411	0.0863
C31_B_D	0.0987	**0.7155**	0.1907	0.2083
C31_C_C	0.2489	**0.7426**	0.0625	0.1438
C31_C_D	0.3218	**0.6346**	0.1194	0.136
C31_D_A	0.1593	**0.6996**	0.0269	0.1992
C31_D_C	0.0202	**0.6582**	-0.1451	0.1478
C41_A_B	0.2366	0.3248	0.2889	**0.8409**
C41_A_C	0.273	0.2408	0.2439	**0.8643**
C41_A_F	0.2824	0.3231	0.21	**0.8866**
C41_A_H	0.2816	0.1106	0.2517	**0.8787**
C41_B_A	0.2905	0.1216	0.1904	**0.8503**
C41_B_D	0.1477	0.0692	0.1439	**0.8207**
C41_B_E	0.1877	0.1681	0.0613	**0.8618**
C41_B_F	0.1987	0.1384	0.1523	**0.9002**
COMPF1	**0.7936**	0.1845	0.1707	0.1582
COMUF1	**0.8267**	0.162	0.1971	0.1697
CUSTF1	**0.8017**	0.1482	0.2016	0.2213
CUSTF2	**0.8734**	0.2834	0.2111	0.2648
EMPLOYF1	**0.8617**	0.2819	0.2009	0.2063
EMPLOYF2	**0.7673**	0.1754	0.2855	0.1807
EMPLOYF3	**0.6525**	0.1847	0.2641	0.272
ENVIROF1	**0.9128**	0.2407	0.2177	0.244
GOVF1	**0.7894**	0.1018	0.1474	0.1143
INTDF1	0.2597	0.1211	**0.8746**	0.2753
INTDF2	0.2603	0.1452	**0.9137**	0.2365
NATDF1	0.2206	0.1242	**0.8895**	0.168
NATDF2	0.1541	0.1182	**0.9025**	0.1655
NATDF3	0.1317	0.0961	**0.8319**	0.1715
NGOF1	**0.8892**	0.2696	0.1667	0.1985
SHAREF1	**0.8461**	0.2987	0.1528	0.3089
SHAREF2	**0.6463**	0.123	0.131	0.2762
SUPPLYF1	**0.7931**	0.1677	0.1816	0.2103
SUPPLYF2	**0.7908**	0.1822	0.1977	0.3054

Table 8.4: Path coefficient of the latent variables

Latent Variables	ACD	CC	CD	SP
CSR activities considered by SMEs to achieve sustainable business performance (ACD)	0	0	0	0
CSR implementation challenges experienced by SMEs (CC)	0.1872	0	0	0.2098
CSR drivers influencing the CSR practices of SMEs (CD)	0.1707	0	0	0.2113
SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance (SP)	0.2009	0	0	0
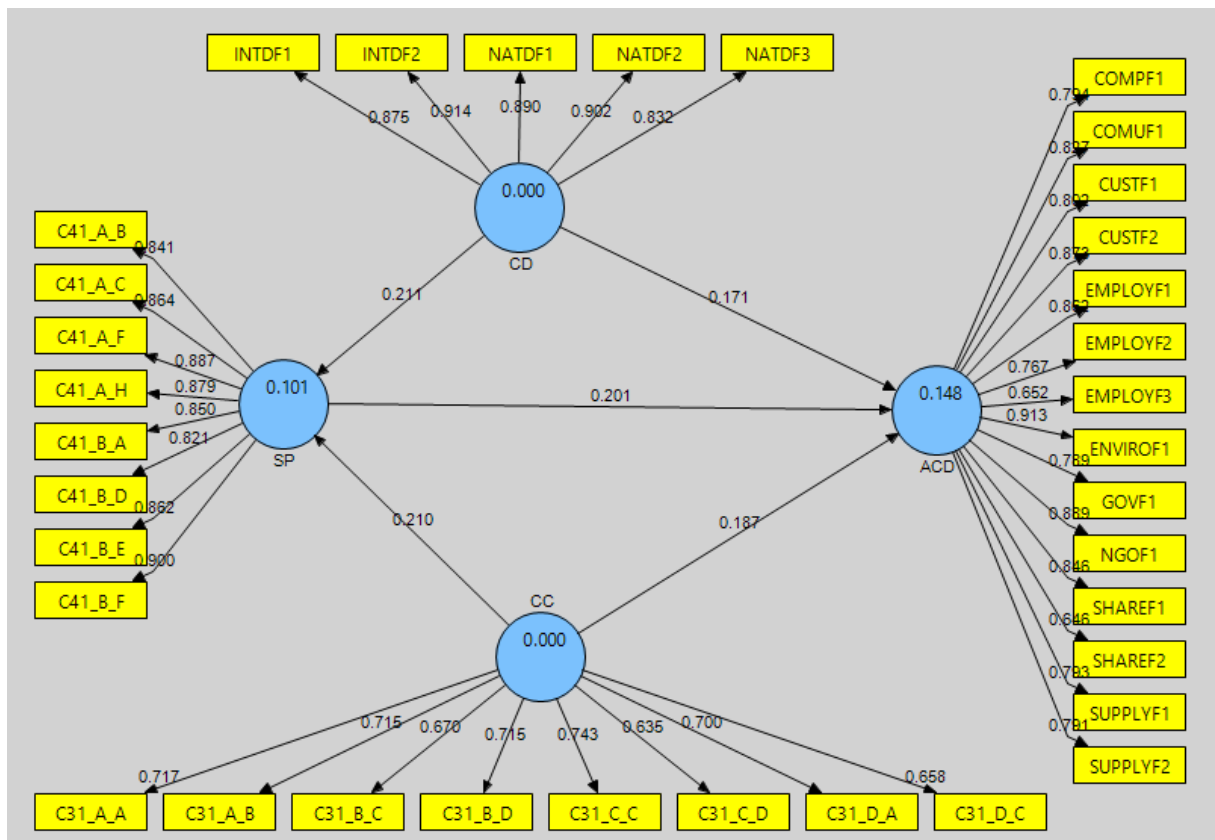
Figure 8.1: Structural model with path coefficients and coefficient of determination (R-square) values

To establish the significance level of the variables in this study, the bootstrapping technique part of the SmartPLS software, was performed using 500 resamples. The bootstrapping technique produced Figure 8.2 which illustrates the structural model with path coefficients and t-statistics. The assumption with regards to bootstrapping, more specifically the t-statistics, is that a t-statistic above 1.65 indicates that the path coefficient is significant at p≤ 0.10. If the t-

statistic is greater than 1.96, the path coefficient is significant at the p≤ 0.05 significance level; and when the t-statistic is above 2.57, it is significant at p≤ 0.01 (Nandakumar, 2008).
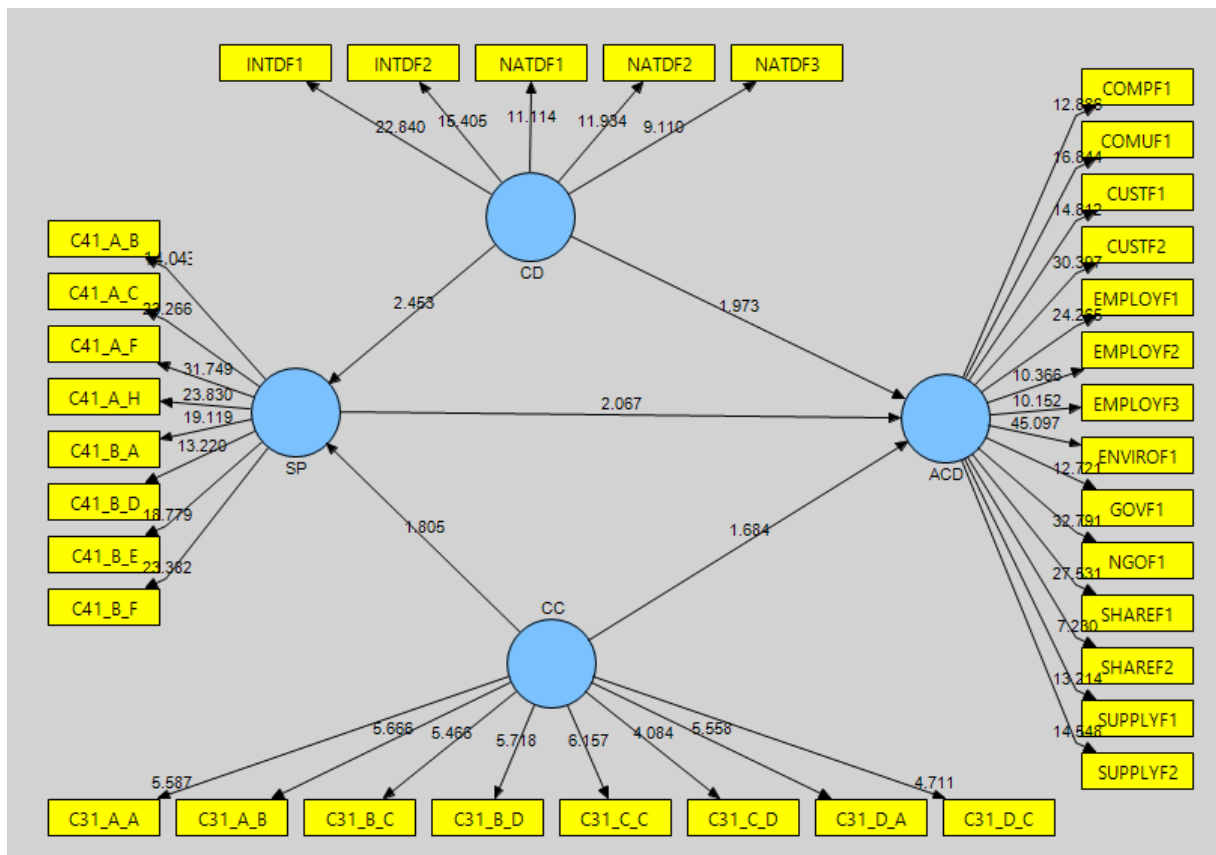
Figure 8.2: Structural model with hypothesis test statistic (t-statistics)

8.3.4 Structural equations to validate the structural model

The structural model (Figures 8.1 and 8.2) gives an indication of how the latent variables link with each other. According to Monecke and leisch (2012) and Sanchez (2013), latent variables specific to SEM can be segmented into two categories: endogenous and exogenous variables. Endogenous variables are influenced by one or more of the variables which form part of the model. Alternatively, exogenous variables are not influenced by other variables in the SEM. Based on SEM, endogenous variables portray dependency whereas exogenous variables portray independency.

With regards to the structural model (Figures 8.1 and 8.2), CSR drivers influencing the CSR practices of SMEs and CSR implementation challenges experienced by SMEs are viewed as exogenous variables as these two variables are not influenced by variables in the model. It is important to note that the PLS-SEM structural model is considered a combination of linear regressions; thus all the relationships in Figure 8.3 are linear, causal and additive (Hair,

Sarstedt, Pieper & Ringle, 2012). As for the endogenous variables, the model (Figure 8.1) presents two endogenous variables (SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance and CSR activities considered by SMEs to achieve sustainable business performance), with two sets of standardised coefficients estimated from the PLS-SEM. These PLS-SEM path equations relate to the causal link hypothesised in this study. The ε represents the error terms which denote that the variations remain unexplained by the predicting variables within the path model. The equations are as follows:

- CSR implementation challenges experienced by SMEs (CC) = CC + 0 (Exogenous variable)

    …………………………………………………………………………………………1

- SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance (SP) = PAB (CSR implementation challenges experienced by SMEs) + PCB (CSR drivers influencing CSR practices of SMEs) + ε_1

    …………………………………………………………………………………....2

- CSR drivers influencing CSR practices of SMEs (CD) = CD + 0 (Exogenous variable) + ε_2

    …………………………………………………………………………………………

    3

- CSR activities considered by SMEs to achieve sustainable business performance (ACD) = PAD (CSR implementation challenges experienced by SMEs) + PBD (SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance) + PCD (CSR drivers influencing CSR practices of SMEs) + ε_3

    …………………………………………………………………………………..4

The following abbreviations represent the path coefficients, as illustrated in Figure 8.3

- PAB: CSR implementation challenges experienced by SMEs → SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance;

- PCB: CSR drivers influencing the CSR practices of SMEs → SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance;

- PAD: CSR implementation challenges experienced by SMEs → CSR activities considered by SMEs to achieve sustainable business performance;

- PBD: SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance → CSR activities considered by SMEs to achieve sustainable business performance;

- PCD: CSR drivers influencing the CSR practices of SMEs → CSR activities considered by SMEs to achieve sustainable business performance.

Figure 8.4 illustrates the CSR model that has been established to guide SMEs in the South African construction industry towards the achievement of sustainable business performance. The model constructs and measurement variables for each construct are shown clearly in the model.
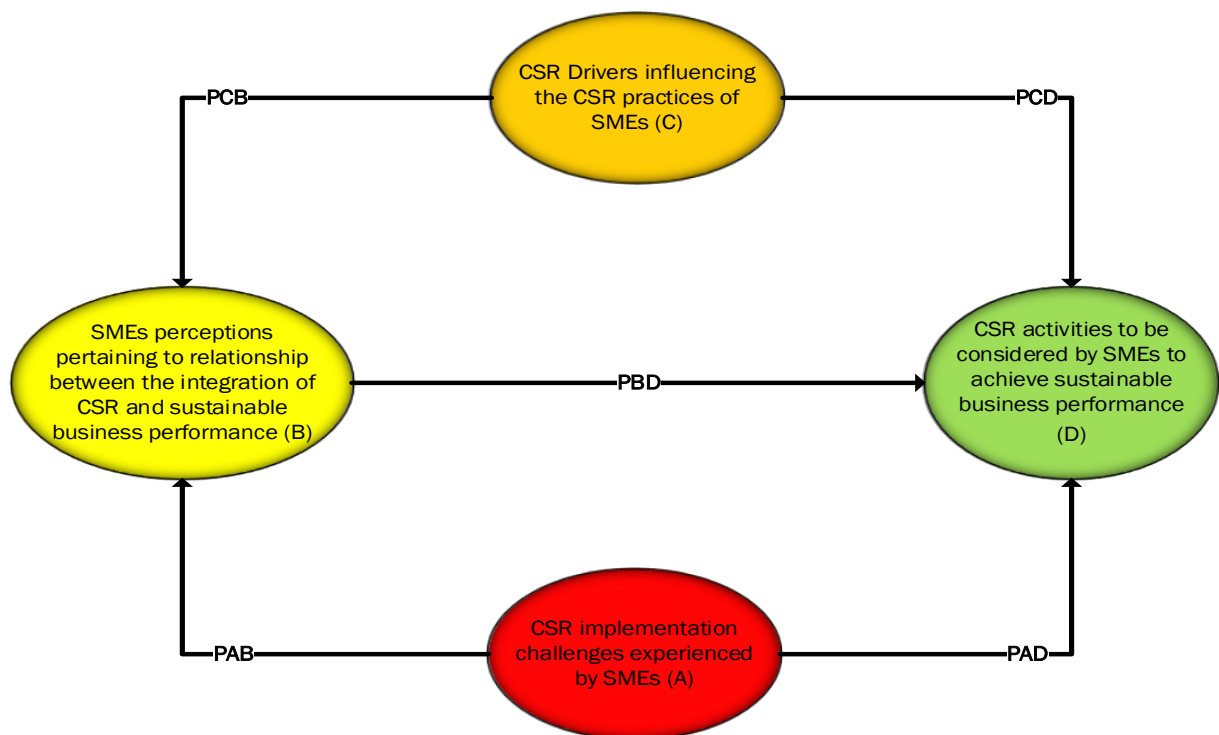
Figure 8.3: Causality structural model explaining underlying factors of the CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance
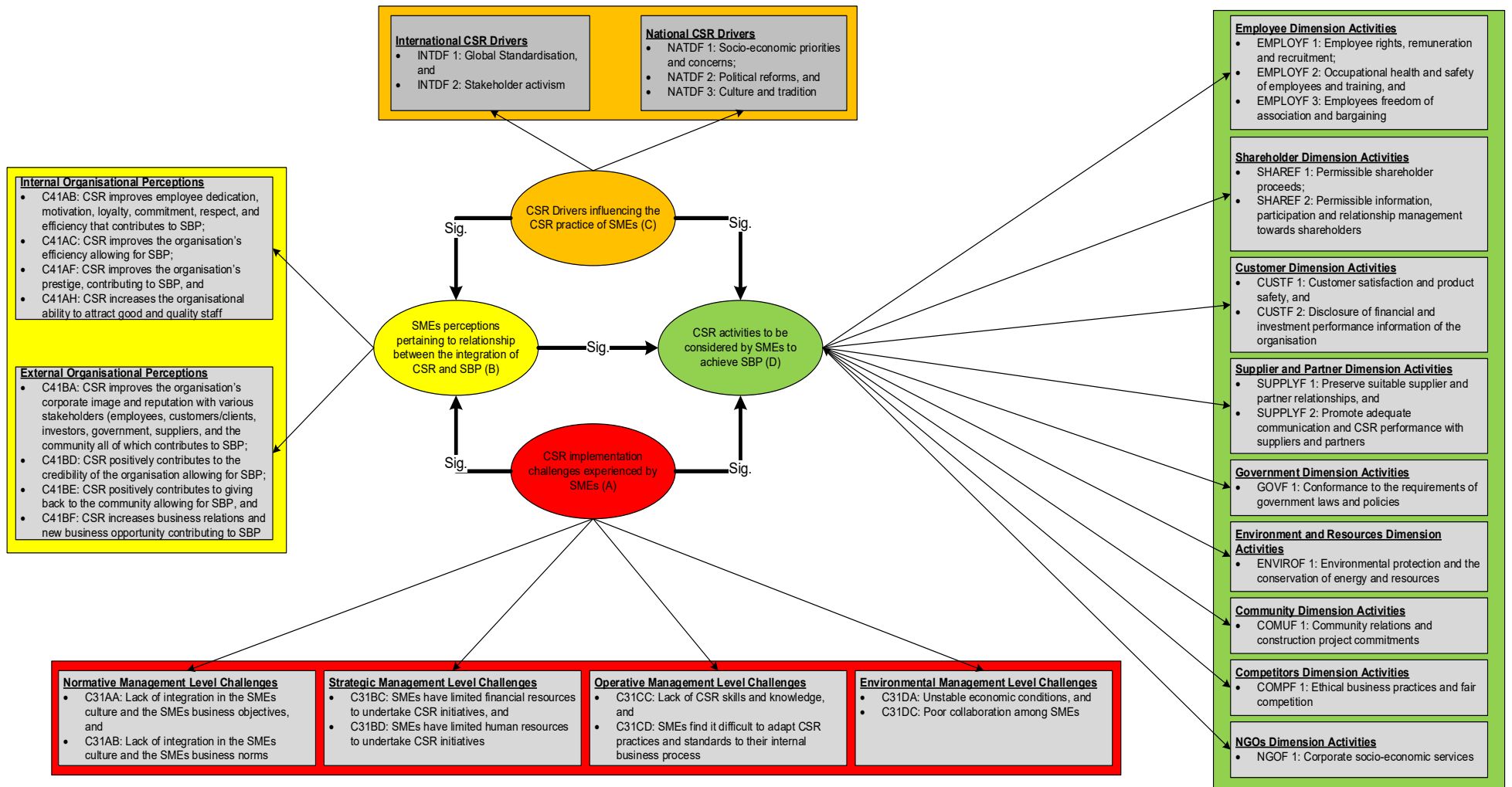
Figure 8.4: CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance

8.3.5 Model evaluation

With regards to the evaluation of the model developed in this study, the PLS considers the R-square values as essential values to determine the predictive significance of the model. Considering the ongoing need to report and evaluate the performance of PLS models, including both measurement and structural models, and with attention on the overall predictive power of the model, a global criterion of goodness of fit (GoF) index as recommended by Tenenhaus, Esposito, Chatelin and Lauro (2005) was used. The procedural guidelines provided by Wetzels, Schroder and Oppen (2009) to compute the GoF values, which are minimum values for global validation of PLS path models, were followed. Based on the values (Table 8.2), a GoF value of 0.29 was achieved for the entire model, falling within the threshold values of 0.25 and 0.36 for small and large values of R^2 as stipulated by Akter, D' Ambra and Ray (2011). Based on this, it can be concluded that the PLS model developed in this study has explanatory power and offers support to validate the PLS model globally.

8.4 Discussion of findings from the model results

The results from the structural model developed indicate that the CSR implementation challenges experienced by SMEs in the South African construction industry, as well as the CSR drivers influencing the CSR practices of SMEs, have a predictive power of 10.1% (R^2 value: 0.101) in terms of influencing SME perceptions pertaining to the relationship between the integration of CSR in their businesses and sustainable business performance. According to the report of Henseler *et al.* (2014), the R^2 value of 10.1% is at an acceptable level of 10%. CSR implementation challenges experienced by SMEs explained 21% and CSR drivers influencing the CSR practices of SMEs explained 21.1% of contribution towards SME perceptions regarding the relationship between the integration of CSR in their businesses and sustainable business performance. Further analysing shows the following: a lack of integration in SME culture and SME business objectives and norms; limited financial resources to undertake CSR initiatives; limited human resources to undertake CSR initiatives; lack of CSR skills and knowledge; difficulty adapting CSR practices and standards to internal business processes; unstable economic conditions; and poor collaboration among SMEs. These are reflective indicators that contribute to the significance of CSR implementation challenges experienced by SMEs on various management levels which influence the perceptions of SMEs regarding the relationship between the integration of CSR in their business and sustainable business performance, as summarised by the model (path (r) = 0.210; t = 1.805; p≤ 0.10).

In terms of CSR drivers influencing the CSR practices of SMEs, it is evident that several drivers – global standardisation; stakeholder activism; socio-economic priorities and concerns; political reforms; and culture and tradition – contribute substantially as CSR drivers which in turn influence SME perceptions in the South African construction industry based on the relationship between the integration of CSR and sustainable business performance, as summarised by the model (path (r) = 0.211; t = 2.453; p≤ 0.05). The results pertaining to CSR implementation challenges and CSR drivers influencing CSR practices of SMEs are supported by The Peak Performance Centre (2021:1) which argues that past and present challenges have a direct influence on the perceptions of people and impact on decision-making processes. According to Zhang *et al.* (2019), this information is correlated to the way in which business owners, particularly SME construction business owners, perceive their business environment and the way business decisions around CSR initiatives and activities are made, taking into consideration CSR drivers and implementation challenges which influence their perceptions of CSR practice.

In addition, the model examines the relationships between SME perceptions: the relationship between the integration of CSR in their businesses and sustainable business performance, CSR drivers influencing CSR practices of SMEs, CSR implementation challenges experienced by SMEs, and the CSR activities considered by SMEs to achieve sustainable business performance. The model indicates that SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance has a predictive strength of 20.1% in terms of influencing the CSR activities considered by SMEs: employee rights, remuneration and recruitment; occupational health and safety of employees and training; employee freedom of association and bargaining; permissible shareholder proceeds; permissible information, participation and relationship management towards shareholders; customer satisfaction and product safety; disclosure of financial and investment performance information of the organisation; preserve suitable supplier and partner relationships; promote adequate communication and CSR performance with suppliers and partners; conformance to the requirements of government laws and policies; environmental protection and the conservation of energy and resources; community relations and construction project commitments; ethical business practices and fair competition; and corporate socio-economic services.

The model also indicates that SME perceptions have a positive significant relationship with CSR activities considered by SMEs to achieve sustainable business performance, as summarised by the model (path (r) = 0.201; t = 2.067; p≤ 0.05). This is supported by Hurley

(2002) who references Gibson's theory of perception wherein perception is viewed as a requisite property of animate action, arguing that without perception being realised, action (in this case the decision to undertake CSR activities) would be unguided, and without action, perception would serve no purpose. UK Essays (2018:1) concurs, arguing that decision making is an important skill that a business owner must exercise for the business to achieve business goals and objectives. UK Essays (2018:1) further mentions that organisational excellence, which includes sustainable business performance, leans heavily on proper decision making (in this case, the decision to undertake CSR activities) by the business owner and management team, guided by their perceptions.

In addition, the model indicates that CSR implementation challenges experienced by SMEs have a predictive strength of 18.7% in terms of influencing the CSR activities considered by SMEs to achieve sustainable business performance. The CSR implementation challenges experienced by SMEs share a positive significant relationship with the CSR activities considered by SMEs to achieve sustainable business performance as summarised by the model (path (r) = 0.187; t = 1.684; $p \leq 0.10$). The Peak Performance (2021:1) and Zhang *et al.* (2019) and other authors – Elford and Daub (2019); Loosemore and Lim (2017a); and Loosemore and Lim (2017b) – support the results.

Lastly, the model indicates that CSR drivers influencing CSR practices of SMEs has a predictive strength of 17.1% in terms of influencing CSR activities considered by SMEs to achieve sustainable business performance. CSR drivers influencing the CSR practices of SMEs shares a positive significant relationship with the CSR activities considered by SMEs to achieve sustainable business performance as summarised by the model (path (r) = 0.171; t = 1.973; $p \leq 0.05$). Studies by Zhang *et al.* (2019), Prowly Magazine (2020) and Duman *et al.* (2016) support the results.

In summary, the reflected results based on the structural model illustrate that CSR implementation challenges experienced by SMEs, and CSR drivers influencing CSR practices of SMEs, have positive significant relationships and moderate predictive capabilities to influence SME perceptions pertaining to the relationship between the integration of CSR in their businesses and sustainable business performance. This is similar for the relationships and predictive capabilities between SME perceptions pertaining to the relationship between the integration of CSR in their businesses and sustainable business performance, CSR drivers influencing CSR practices of SMEs, CSR implementation challenges experienced by SMEs, and CSR activities considered by SMEs to achieve sustainable business performance. The

overall predictive strength of the CSR model is acceptable as the R^2 values are above 10%. The accepted predictive strength of the model has thus supported the research proposition that a combination of the three constructs (CSR implementation challenges experienced by SMEs; SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance as well as CSR drivers influencing the CSR practices of SMEs) influence the CSR activities considered by SMEs to achieve sustainable business performance. Table 8.5 summarises the effects of the structural model results on the hypothesised links in the PLS-SEM path model which were guided by the propositions.

Table 8.5: Summary of the effects of structural model results on hypothesised links in PLS-SEM path model

Path Label	Path relationship	T-statistic	Corresponding hypothesised path	Remark on hypothesis
PAB	CSR implementation challenges experienced by SMEs → SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance	Significant	*Hypothesis 1: There is a significant relationship between CSR implementation challenges experienced by SMEs and SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance.*	Supported
PCB	CSR drivers influencing the CSR practices of SMEs → SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance	Significant	*Hypothesis 2: A significant association exists between CSR drivers influencing the CSR practices of SMEs and SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance.*	Supported
PAD	CSR implementation challenges experienced by SMEs → CSR activities considered by SMEs to achieve sustainable business performance	Significant	*Hypothesis 3: There is a significant relationship between CSR implementation challenges experienced by SMEs and the CSR activities considered by SMEs to achieve sustainable business performance.*	Supported
PBD	SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance → CSR activities considered by SMEs to achieve sustainable business performance	Significant	*Hypothesis 4: A significant affiliation exists between SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance and the CSR activities considered by SMEs to achieve sustainable business performance*	Supported

Table 8.5 (Continued)

Path Label	Path relationship	T-statistic	Corresponding hypothesised path	Remark on hypothesis
PCD	CSR drivers influencing the CSR practices of SMEs → CSR activities considered by SMEs to achieve sustainable business performance	Significant	*Hypothesis 5: There is a significant relationship between CSR drivers influencing the CSR practices of SMEs and the CSR activities considered by SMEs to achieve sustainable business performance*	Supported
PAD+PBD+PCD	Combined paths	Significant	*Hypothesis 6: Merging the CSR implementation challenges experienced by SMEs, SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance, as well as CSR drivers influencing the CSR practices of SMEs , impacts the CSR activities, considered by SMEs to achieve sustainable business performance.*	Supported

8.5 Application of the PLS model

According to Xiong, Skitmore and Xia (2015), SmartPLS is a SEM with a beneficial and robust technique that can be utilised in both empirical and theoretical research, noting that its applications within construction research continues to increase. PLS was utilised as this research identified a variety of CSR factors that could contribute to guide SMEs in the South African construction industry towards the achievement of sustainable business performance. The CSR factors could be predicted and ultimately modelled, as PLS-SEM offers a systematic basis to predict and evaluate the performance of the model. PLS regression as a tool, able to handle a large number of predictors, can therefore be applied to model a problem without adaption, as it manages to account for the complexity between the factors mentioned in the model (Boulesteix & Strimmer, 2006; Fischer, 2012). This presents a practical application of PLS-SEM to the conceptual model presented in Chapter 3 for evaluating the relationships between the established constructs of this study.

8.6 Chapter summary

PLS-SEM was utilised for this study to test the conceptual model illustrated in Chapter 3, examining the nature of relationships that exist between the constructs within the model. The developed structural model illustrated that positive relationships exist between all of the causal links. Based on the R^2 values, the results of the model represent acceptable predictive (explanatory) power illustrating both 10.1% and 14.8% which is exhibited by all the explanatory constructs of the model. The GoF (goodness of fit) values were also determined for model fitting and validation, confirming that the model is able to predict CSR indicators to guide SMEs in the South African construction industry towards the achievement of sustainable business performance. Therefore, the model is adequate for worldwide validation for partial least square model path.

CHAPTER 9

SUMMARY OF RESEARCH FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

9.1 Introduction

This chapter presents an overall synopsis of the study, acknowledging the research findings through the achievement of the research objectives. This was achieved through the review of relevant literature, whereby different variables appealing to the research were extracted and included in the study. The comprehensive review of literature provided a better understanding of CSR, and more specifically the perceptions of SMEs pertaining to the relationship between CSR and sustainable business performance; CSR implementation challenges experienced by SMEs; CSR drivers influencing the CSR practices of SMEs; and CSR activities that need to be considered by SMEs to achieve sustainable business performance. Therefore, grounded on the available facts and research findings, a CSR model to guide SMEs towards the achievement of sustainable business performance was developed. Based on the findings, the research was summarised and concluded, and practical implications and recommendations were established with further research areas suggested. The chapter highlights the study's contribution to knowledge and the limitations experienced.

9.2 Revision of the research intent in response to the research objectives

A focal point of this study was to provide an answer to the main research question:

> *What CSR factors should be modelled to guide SMEs in the South African construction industry towards achieving sustainable business performance?*

To substantially address the issues surrounding the main research question, the study identified the following objectives:

- To identify and ascertain how SMEs in the South African construction industry perceive the relationship between the integration of CSR and sustainable business performance;
- To identify the CSR drivers influencing CSR practices of SMEs in the South African construction industry;
- To identify and evaluate the challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR;
- To establish the CSR activities that need to be considered by SMEs in the South   African construction industry to achieve sustainable business performance; and

- To develop and validate a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance.

To achieve these objectives, a literature review established past and current views and developments relative to the research constructs presented within each research objective. A logical approach to data collection and analysis was employed through the adoption of an explanatory sequential mixed method design with the aim of attaining both quantitative and qualitative data, utilising a survey questionnaire as well as structured face-to-face interviews to gather the empirical data. The findings are as follows.

9.2.1 Perceptions of SMEs in the South African construction industry pertaining to the relationship between the integration of CSR and sustainable business performance (Objective 1)

Objective one focused on identifying and ascertaining the perceptions of SMEs in the South African construction industry pertaining to the relationship between the integration of CSR and sustainable business performance. From the reviewed literature, 14 internal organisational perceptions and 15 external organisational perceptions of SMEs were established regarding the relationship between the integration of CSR and sustainable business performance. These were rated by the respondents and analysed via descriptive and inferential statistical analysis. The results obtained from the descriptive statistical analysis indicated that from an internal organisational perception, SMEs in the South African construction industry believe that:

- CSR improves an organisation's prestige, contributing to SBP;
- CSR increases an organisation's ability to attract quality staff contributing to SBP;
- CSR improves an organisation's efficiency allowing for SBP; and
- CSR improves employee dedication, motivation, loyalty, commitment, respect and efficiency that contributes to SBP.

Alternatively, from an external organisational perception, SMEs in the South African construction industry are of the opinion that:

- CSR positively contributes to the credibility of the organisation, allowing for SBP;
- CSR improves an organisation's corporate image and reputation with various stakeholders (employees, customers/clients, investors, government, suppliers and community), all of which contributes to SBP;
- CSR increases business relations and new business opportunity contributing to SBP; and
- CSR positively contributes to giving back to the community, allowing for SBP.

The results obtained from the inferential statistical analysis through use of ANOVA revealed no statistically significant difference between the SMEs and their internal and external perceptions based on the relationship between the integration of CSR into their business and SBP, contradicting the belief of the researcher as stipulated in Section 1.8 that SEs and MEs have different perceptions of the relationship between the integration of CSR and sustainable business performance.

The identified and ascertained perceptions of SMEs in the South African construction industry pertaining to the relationship between the integration of CSR and sustainable business performance were incorporated as indicators into the CSR model developed for this study and presented in Chapter 8.

9.2.2 CSR drivers influencing CSR practices of SMEs in the South African construction industry (Objective 2)

The second objective of this study focused on identifying the CSR drivers influencing CSR practices of SMEs in the South African construction industry. From the reviewed literature, 15 international and 33 national CSR drivers (variables) that influence the CSR practices of SMEs were established, and as part of the data analysis process, were subject to descriptive statistical analysis and inferential statistical analysis in the form of FA utilising PCA as an extraction method and ANOVA, with FA being the main focus.

Based on the 15 international CSR drivers (variables) as part of the FA process, with the initial assessment of the 15 international CSR drivers (variables), five had strong cross-loadings (75% and above) and were subsequently deleted. Hence, FA was conducted with the 10 remaining international CSR drivers (variables). Based on the FA results, these 10 international CSR drivers (variables) were categorised into two component factors: *'CSR practices driven by global standardisation'* and *'CSR practices driven by stakeholder activism'.*

As for the 33 national CSR drivers (variables) and as part of the FA process from the initial assessment, 11 had strong cross-loadings (75% and above) and were subsequently deleted. Hence, FA was conducted with the 22 remaining national CSR drivers (variables). Based on the FA results, they were categorised into three component factors: *'CSR practices driven by socio-economic priorities and concerns', 'CSR practices driven by political reforms'* and *'CSR practices driven by culture and tradition'.*

The ANOVA test revealed no statistically significant difference pertaining to the MSs of SMEs in relation to the CSR drivers influencing their CSR practices, contradicting the belief of the

researcher as stipulated in Section 1.8 that the CSR drivers influencing SEs and MEs in the South African construction industry are conspicuously different.

The identified CSR drivers influencing the CSR practices of SMEs in the South African construction industry were incorporated as indicators into the CSR model developed for this study and presented in Chapter 8.

9.2.3 Challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR (Objective 3)

The third objective of this study focused on identifying and evaluating the challenges that SMEs in the South African construction industry experience pertaining to the implementation of CSR. The literature review established that challenges experienced by SMEs pertaining to the implementation of CSR were identified on four different management levels – normative management level, strategic management level, operative management level and environmental management level – with four challenges identified on the normative management level; eleven on the strategic management level; four on the operative management level, and seven on the environmental management level. These CSR implementation challenges were rated by the respondents and analysed via descriptive and inferential statistical analysis. The results obtained from the descriptive statistical analysis indicated that SMEs in the South African construction industry rated the following CSR implementation challenges as the most significant challenges at the four different management levels:

Normative management level

- Lack of integration in SME culture and the SME business norms, and
- Lack of integration in SME culture and the SME business objectives.

Strategic management level

- SMEs have limited financial resources to undertake CSR practices, and
- SMEs have limited human resources to undertake CSR practices.

Operative management level

- SMEs find it difficult to adapt CSR practices to their internal business process, and
- Lack of CSR skills and knowledge.

Environmental management level

- Poor collaboration among SMEs, and
- Unstable economic conditions.

The results obtained from the inferential statistical analysis through use of an ANOVA test for the CSR implementation challenges across all four management levels contradicted the researcher's belief as stipulated in Section 1.8, that the implementation challenges pertaining to the practice of CSR by SEs and MEs in the South African construction industry are substantially different.

The identified and evaluated CSR implementation challenges that SMEs in the South African construction industry experience were incorporated as indicators into the CSR model developed for this study and presented in Chapter 8.

9.2.4 CSR activities that need to be considered by SMEs in the South African construction industry to achieve sustainable business performance (Objective 4)

The fourth objective focused on establishing CSR activities that need to be considered by SMEs in the South African construction industry to achieve sustainable business performance. The literature review established that CSR activities are associated with various CSR dimensions: employee dimension; shareholder dimension; customer dimension; supplier and partner dimension; government dimension; environment and resources dimension; community dimension; competitors dimension; and NGOs dimension. Based on the literature review, sixty-three CSR activities (variables) were established associated with the CSR employee dimension; twelve CSR activities associated with the CSR shareholder dimension; twenty-four CSR activities relative to the CSR customer dimension; ten CSR activities linked to the CSR supplier and partner dimension; four CSR activities associated with the CSR government dimension; seventeen CSR activities relative to the CSR environment and resources dimension; seven CSR activities linked to the CSR community dimension; five CSR activities relative to the CSR competitor dimension; and six CSR activities associated with the CSR NGOs dimension. As part of the data analysis process, all the CSR activities established across the various CSR dimensions were subject to descriptive statistical analysis and inferential statistical analysis in the form of FA utilising PCA as an extraction method and ANOVA, with FA being the main focus.

Therefore, as part of the FA process, with the initial assessment of the sixty-three CSR activities, eight had strong cross-loadings (75% and above) and were subsequently deleted.

Hence, FA was conducted utilising the fifty-five remaining CSR activities, and grounded on the FA results the fifty-five remaining CSR activities associated with the CSR employee dimension were categorised into three component factors: *'Employee rights, remuneration and recruitment', 'Occupational Health and Safety of employees and training'* and *'Employees freedom of association and bargaining'*.

Grounded on the twelve CSR activities (variables) associated with the CSR shareholder dimension, and as part of the FA process, the CSR activities associated with the CSR shareholder dimension were categorised into two component factors described as '*Permissible shareholder proceeds'* and '*Permissible information, participation and relationship management towards shareholders'*.

As for the twenty-four CSR activities (variables) relative to the CSR customer dimension, it is evident from the findings in the study that based on the initial valuation of the twenty-four CSR activities, five illustrated strong cross-loadings (75% and above) and were subsequently deleted. Hence, FA was conducted utilising the nineteen remaining CSR activities, with the results revealing that the remaining nineteen CSR activities relative to the CSR customer dimension were categorised into two component factors: *'Customer satisfaction and product safety'* and *'Disclosure of financial and investment performance information of the organisation'*.

Based on the ten CSR activities (variables) linked to the CSR supplier and partner dimension, and as part of the FA process, the CSR activities associated with the CSR supplier and partner dimension were categorised into two component factors: *'Preserve suitable supplier and partner relationships'* and *'Promote adequate communication and CSR performance with suppliers and partners'*. The process followed for the four CSR activities (variables) associated with the CSR government dimension was similar and the FA results revealed that the four CSR activities associated with the CSR government dimension were categorised into a single component factor: *'Conformance to the requirements of government laws and policies'*. As for the seventeen CSR activities (variables) relative to the CSR environment and resources dimension, it is evident from the FA results that the CSR activities were also categorised into a single component factor: *'Environmental protection and the conservation of energy and resources'*. It is also evident from the FA that the CSR activities (variables) linked to the CSR community dimension were categorised into a single component factor: *'Community relations and construction project commitments'*.

Grounded on the five CSR activities (variables) relative to the CSR competitor dimension and as part of the FA process, the CSR activities associated with the CSR competitor dimension were categorised into a single component factor: *'Ethical business practices and fair*

competition'. Lastly, for the six CSR activities (variables) associated with NGOs dimension, the FA results revealed that the CSR activities were categorised into a single component factor: *'Corporate socio-economic services'*.

Further to the findings, an ANOVA test revealed no statistically significant difference pertaining to the MSs of SMEs in relation to the CSR activities (variables), contradicting the initial belief of the researcher as stipulated in Section 1.8 that CSR activities needing to be considered to achieve SBP are noticeably different for SEs and MEs in the South African construction industry.

The established CSR activities that need to be considered by SMEs in the South African construction industry to achieve sustainable business performance were incorporated as indicators into the CSR model developed for this study and presented in Chapter 8.

9.2.5 Develop and validate a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance (Objective 5)

The fifth objective of this study focused on developing and testing the effectiveness and usefulness of the CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance. To achieve this objective, the hypotheses listed below were utilised to investigate the links (influential patterns) between the model constructs that make up the CSR model:

- *Hypothesis $_1$: There is a significant relationship between CSR implementation challenges experienced by SMEs and SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance.*

- *Hypothesis $_2$: A significant association exists between CSR drivers influencing the CSR practices of SMEs and SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance.*

- *Hypothesis $_3$: There is a significant relationship between CSR implementation challenges experienced by SMEs and the CSR activities considered by SMEs to achieve sustainable business performance.*

- *Hypothesis $_4$: A significant affiliation exists between SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance and the CSR activities considered by SMEs to achieve sustainable business performance.*

- *Hypothesis $_5$: There is a significant relationship between CSR drivers influencing the CSR practices of SMEs and the CSR activities considered by SMEs to achieve sustainable business performance.*

To test these hypotheses, a structural model was developed using SmartPLS. The structural model results for hypothesis$_1$ illustrated that a significant and positive relationship exists between CSR implementation challenges experienced by SMEs in the South African construction industry and SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance. This result implies that the challenges SMEs in the South African construction industry experience with regards to the implementation of CSR definitely contribute to the way in which SMEs perceive the relationship between the integration of CSR and sustainable business performance.

The results relative to hypothesis$_2$ indicated that a strong and significant relationship exists between CSR drivers influencing CSR practices of SMEs and SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance. This result implies that SME in the South African construction industry perceptions pertaining to the relationship between the integration of CSR and sustainable business performance are definitely dependent on what drives their CSR practices.

Hypothesis$_3$, which was to establish the relationship between CSR implementation challenges experienced by SMEs and the CSR activities considered by SMEs to achieve sustainable business performance, illustrated that a significant and positive relationship exists between the constructs. This implies that the CSR activities considered by SMEs in the South African construction industry to achieve sustainable business performance are dependent on the CSR implementation challenges that SMEs experience.

Similarly, for hypothesis$_4$ which evaluated the affiliation between SME perceptions regarding the relationship between the integration of CSR and sustainable business performance and the CSR activities considered by SMEs to achieve sustainable business performance, it was established that a strong positive relationship exists between the constructs. This result implies that the CSR activities considered by SMEs in the South African construction industry to achieve sustainable business performance are dependent on the way in which SMEs perceive the relationship between the integration of CSR and sustainable business performance.

The results of the structural equation model in relation to hypothesis$_5$ demonstrated that a significant and positive relationship between CSR drivers influencing the CSR practices of SMEs and the CSR activities considered by SMEs to achieve sustainable business performance exists. This result implies that the CSR activities considered by SMEs in the South

African construction industry to achieve sustainable business performance are dependent on what drives their CSR practices.

To develop and validate the CSR model to guide SMEs in the South African construction towards achieving sustainable business performance, three of the five aforementioned hypotheses were tested and combined to formulate hypothesis$_6$ which reads:

Hypothesis $_6$: Merging the CSR implementation challenges experienced by SMEs, SMEs perceptions pertaining to the relationship between the integration of CSR and sustainable business performance, as well as CSR drivers influencing the CSR practices of SMEs, impacts the CSR activities, considered by SMEs to achieve sustainable business performance.

This hypothesis was tested through a SmartPLS structural model which affirms the findings of the earlier hypotheses. The results illustrate that as CSR indicators, CSR implementation challenges experienced by SMEs as well as the CSR drivers influencing the CSR practices of SMEs both have an impact on the way in which SMEs perceive the relationship between the integration of CSR and sustainable business performance. More importantly, the results show that as indicators, CSR implementation challenges experienced by SMEs, CSR drivers influencing the CSR practices of SMEs, and SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance all influence the CSR activities considered by SMEs to achieve sustainable business performance. The predictive strength of the constructs in the structural model indicated that approximately 15% of the variation based on the CSR activities considered by SMEs to achieve sustainable business performance can be accounted for by the variables included in the structural model. This is acceptable predictive (explanatory) power, though there are indications of the presence of other variables that need to be considered in the model.

9.3 Summary of research

It is clear, based on the significance of this study in Chapter 1, that for more than two decades SMEs in the South African construction industry have shown signs of unsustainable business performance with various contributory factors pointing towards the lack of the business owner management knowledge and competencies, business knowledge, self-knowledge, industry experience, business acumen, aptitude, and an entrepreneurial mind-set for undertaking the business of construction. However, it is surprising that a limitation in construction studies exists in terms of considering CSR as a key influencer towards changing the business trajectory of construction SMEs globally inclusive of SMEs in the South African construction industry from unsustainable to sustainable, contributing holistically to business performance. It is well documented in general business literature that practices of CSR in general businesses

worldwide yields substantial benefits on business performance. An obvious reason for this is that CSR has only recently begun to attract interest in the global construction industry which by extension encompasses the South African construction industry.

From this foundation, this research has focused on guiding SMEs in the South African construction industry towards achieving sustainable business performance through the establishment of a CSR model. The first step was a pilot study that enabled the researcher to test the viability of the research problem, research questions and objectives. The pilot study was to intensify the existence of the research problems and to establish the adequacy of the research approach and instruments to be employed in this study. The second step was an extensive review of literature in line with the research objectives, exposing the research variables associated with the research constructs. Thereafter, a theoretical and conceptual framework was developed for the study. The methodology employed in this study was mixed methods, employing an explanatory sequential design where the qualitative data collected in phase two confirmed the quantitative data in phase one. In addition, data collected through these methods was analysed utilising descriptive and inferential statistical methods. The results of analysis revealed the measurement variables to be included in each of the latent constructs of the CSR model.

Finally, the conceptual model that has been developed was validated using PLS-SEM. The structural model has confirmed that positive relationships exist between the causal links in the model, and that the latent constructs have acceptable predictive powers to guide SMEs in the South African construction industry towards the achievement of sustainable business performance. In terms of validating the model, a goodness of fit (GoF) value was determined for model fitting and for validation. The results confirm that the model has explanatory power and supports the validity of the PLS model globally.

9.4 Conclusion

The primary aim of this research – to develop a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance – has been accomplished, as it has been presented, discussed and validated. The result indicates that by combining the CSR implementation challenges experienced by SMEs, SME perceptions pertaining to the relationship between the integration of CSR and sustainable business performance, and CSR drivers influencing CSR practices of SMEs, these have acceptable predictive capabilities in influencing CSR activities considered by SMEs to achieve sustainable business performance.

In addition, using PLS-SEM to develop and validate a CSR model to guide SMEs in the South African construction industry towards the achievement of sustainable business performance is also an accomplishment, because PLS-SEM is a multi-dimensional modelling method confirmed to have substantial capacity in predicting the performance of complex variables; hence, the generalisation of the adequacy and validity of the model for evaluating the achievement of sustainable business performance of SMEs in the South African construction industry.

The study also identified, through the literature review, that the understanding of what CSR means to the construction industry, and how it is practiced, is still limited as little research has been undertaken to develop a framework for CSR activities relevant to construction enterprises worldwide as a tool for CSR performance and ultimately sustainable business performance for construction enterprises large or small. Moreover, a limitation pertaining to a CSR model to guide SMEs, particularly in the South African construction industry, towards sustainable business performance has subsequently also been identified. Therefore, this study provides CSR indicators that will serve as a baseline by affording SMEs in the South African construction industry the opportunity to recognise and understand the following:

- the positive relationship of integration of CSR on construction business performance;
- the CSR drivers that influence CSR practices within construction businesses;

- the CSR implementation challenges that are experienced once CSR is considered a driver of sustainable business performance; and

- the CSR activities that need to be considered to achieve sustainable business performance.

9.5 Practical implications and recommendations

Globally, SMEs across all industries, including construction, play a valuable role in sustaining economies, introducing innovative services and products, generating employment opportunities, and nurturing economic growth and national development. However, it is noticeable from a South African perspective that the small business sector is experiencing significant challenges. A major challenge is that SMEs across all business sectors, again, including the construction sector of South Africa, are presenting unrelenting signs of unsustainable business performance, specifically within the first year of existence. Reports indicate that 70%-80% of SMEs in the South African construction industry fail to survive within their first five years. This places huge doubts around the sustainability of construction SMEs, implying that SMEs at this point in time are not able to deliver in terms of their expected role. Many causes for the unsustainable business performance of SMEs and business failures have

been examined and investigated, yet to date, as indicated by this study, the trend of failure and unsustainable business performance persists. This research attempted to explore a new trajectory, looking to the CSR concept for solutions. In doing so, this research determined that construction literature pertaining to the CSR concept and its relationship with sustainable business performance is scarce; however, evidence through this study (literature and empirical findings) has suggested that the adaption of CSR practices within SMEs in the South African and global construction industry equates to more sustainable business performance. Hence, the development of a CSR model as a pioneering starting point provides a significant theoretical and practical contribution towards guiding SMEs, particularly in the South African construction, industry towards the achievement of sustainable business performance.

This study, through the CSR model, also pricked government agency awareness, such as the construction industry development board (cidb); policy makers; construction education and training authority (CETA); institutions of higher learning which include traditional universities, universities of technology, and technical vocational education and training TVET colleges who offer courses in construction studies; and SME employees, shareholders, customers, suppliers and partners, communities and competitors that consideration should be given to the adaption of CSR as a mechanism to support the sustainable development and performance of SMEs in the South African construction industry.

Based on the findings and the practical implications emanating from this research, the research contributes theoretically towards the achievement of sustainable business performance of SMEs in the South African construction industry. However, for the CSR model to be applied on a practical basis, recommendations for this study need to be directed towards government agencies such as the cidb, policy makers and CETA as well as institutions of higher learning which are housed in the South African context. Hence the following recommendations are made:

- Policy makers in government should assist by phasing in more enforceable statutory requirements in line with the adoption of CSR, that will be utilised as a guide for training and monitoring mechanisms, ensuring the achievement of sustainable business performance of SMEs in the South African construction industry.
- To guide SMEs in the South African construction industry towards achieving sustainable business performance from a CSR perspective, it is important for CETA and institutions of higher learning to assist government by developing and administering accredited CSR training programmes for construction SMEs.
- As a government agency, the cidb should assist by introducing a CSR merit and demerit monitoring system for the development of SMEs in the South African construction industry,

ultimately driving SMEs to perform CSR activities that are proven by this study to contribute to the achievement of sustainable business performance.

In summary, this study has demonstrated that to guide SMEs in the South African construction industry towards the achievement of sustainable business performance from a CSR perspective, CSR indicators relative to the perceptions of SMEs pertaining to the relationship between the integration of CSR and sustainable business performance; CSR drivers influencing the CSR practices in SMEs; CSR implementation challenges experienced by SMEs; and the CSR activities that need to be considered by SMEs to achieve sustainable business performance – all need to be considered from an all-inclusive point of view.

9.6 Contribution to the body of knowledge

The aim of this study was to develop a CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance. To achieve this aim, previous and current CSR research surrounding the global construction industry was examined. These research studies clearly identified that CSR research in the global construction industry, including the South African construction industry, is limited. From a global construction industry perspective, it was established that CSR studies predominantly cover certain topical areas which include CSR perceptions; CSR dimensions; CSR performance; drivers of CSR implementation; motivation for CSR implementation; barriers to CSR implementation; and CSR activities. In contrast, CSR research published in the context of the South African construction industry merely focuses on the following:

- The integration of the CSR concept within South African Quantity Surveying firms as an approach for solving the housing problem for the poor;

- The role of partnership in integrating CSR of construction project stakeholders towards better housing affordability;

- The status of small, medium and micro-enterprises (SMMEs) in the built environment in relation to CSR;

- The extent to which construction SMEs in Gauteng, South Africa, involve CSR in their practices; and

- The current CSR practice of firms operating in the South African construction industry.

Taking these focus areas into consideration and acknowledging the research context, this research explored and contributed to the body of knowledge by establishing the following:

- That SMEs in the South African construction industry perceive a positive relationship between the integration of CSR within their business and sustainable business performance;

- That although limited, CSR practices of SMEs in the South African construction industry are driven by certain international and national CSR drivers;

- That SMEs in the South African construction industry face CSR implementation challenges across all management levels pertaining to the organisation and the business environment; and

- That SMEs in the South African construction industry consider specific CSR activities across nine CSR dimensions (employee; shareholder; customer; supplier and partner; government; environment and resources; community; competitors; and NGOs) to achieve sustainable business performance.

Acknowledging these contributions via the research variables and research aim, a further contribution through the development of a novel CSR model to guide SMEs in the South African construction industry towards achieving sustainable business performance, utilising a 'Partial Least Square Structural Equation Model' was made. The model was validated through hypothesis testing. The suitability of PLS-SEM was attested by Robins (2012), that PLS-SEM is a strong method for research that intends to refine theories in management research because it offers a variety of advantages. Thus far, though, limited use of PLS-SEM has been observed in construction management research, more specifically in research relative to the concept of CSR in the global construction industry. However, this study has illustrated that PLS-SEM is a crucial multivariate method of analysis that can advance the study of CSR and sustainable business performance in modelling relationships of variables. Consequently, the CSR model developed in this study contributes significantly to the body of knowledge by establishing positive, significant relationships between research variables. The model therefore indicates the following:

- That CSR implementation challenges experienced by SMEs across all management levels pertaining to the organisation and business environment significantly influence the perception of SMEs relative to the relationship between the integration of CSR and sustainable business performance, which in turn significantly influences the CSR activities considered by SMEs to achieve sustainable business performance;

- That international and national CSR drivers influencing the CSR practice of SMEs significantly influence the perception of SMEs relative to the relationship between the

integration of CSR and sustainable business performance, which significantly influences the CSR activities considered by SMEs to achieve sustainable business performance;

- That individually, CSR implementation challenges experienced by SMEs across all management levels pertaining to the organisation and business environment; SME perceptions relative to the relationship between the integration of CSR and sustainable business performance; and international and national CSR drivers influencing the CSR practice of SMEs, all significantly influence the CSR activities considered by SMEs to achieve sustainable business performance.

Moreover, the novelty relative to the developed CSR model is evident in the combination of theories, namely perception theory and stakeholder theory, that were realised to support the CSR model. This is novel as other CSR research has overlooked perception theory as a catalyst to stakeholder theory; this research, however, introduces perception theory as theory that needs to be considered in future CSR research.

9.7 Limitation of the research

The limitations encountered in this research stem from the questionnaire survey utilised for this study being disseminated to SMEs only in the South African construction industry who are registered on the cidb register of contractors between Grade1 GB or CE and Grade 6 GB or CE. This is regarded as a limitation since the results may only be valid for the South African context, though the generic methodology, data analysis techniques and the model can be replicated for other countries.

Another major limitation was the difficulty in collecting data during the COVID-19 pandemic. This limitation manifested itself in that many SMEs in the South African construction industry prioritised their business survival over research participation, which is well understood. This limitation resulted in time, administrative and financial constraints experienced during the research study. Despite this, sufficient data was obtained to validate the findings, particularly the developed CSR model, ultimately satisfying the aim of the study.

9.8 Suggestions for further research

The practice of CSR is still in its infancy, especially within the South African construction industry. Based on the findings of this study, it is suggested that further research be conducted on the following topics:

- A thorough investigation should be conducted investigating why SMEs in the South African construction industry are limitedly driven by CSR drivers;

- Research efforts should investigate modalities that can be utilised in mitigating CSR implementation challenges identified in this research.

- Further research should also investigate whether a relationship exists between the CSR drivers influencing the CSR practice of SMEs and the CSR implementation challenges experienced by SMEs in the South African construction industry, and vice versa.

- In depth research should be conducted in terms of identifying and establishing an appropriate CSR module that could be embedded in training programmes aimed at developing SMEs in the South African construction industry.

- Further research should investigate the development of concise statutory requirements and monitoring systems for the practice of CSR within SMEs or larger construction organisations within the South African construction industry.

- Additional research should investigate the constructs of the CSR model developed in this study as the constructs and their corresponding variables could be explored as theoretical views on various related topics could be considered developmental.

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APPENDIX A: Study questionnaire

Civil Engineering Department

Faculty of Engineering and the Built Environment

Cape Peninsula University of Technology

Symphony way Bellville, 7535

E-mail: wentzell@cput.ac.za

05 October 2020

Dear Sir/Mam,

RE: DOCTORAL (PhD) RESEARCH ON SUSTAINABLE BUSINESS PERFORMANCE OF SMES IN THE SOUTH AFRICAN CONSTRUCTION INDUSTRY

The Faculty of Engineering and the Built Environment at the Cape Peninsula University of Technology (CPUT) is aware and in support of this research aimed at developing a corporate social responsibility (CSR) indicator model to achieve sustainable business performance of SMEs in the South African construction industry.

This questionnaire is a significant part of the research project. We do appreciate that the questionnaire will take approximately 20 minutes of your precious time, but without your kind and expert input, the research objectives cannot be realised.

Kindly accept our utmost assurance that all answers and information provided shall be treated with utmost confidentiality and used for academic purposes only.

Should you have any question(s) or would like further information, please do not hesitate to contact me on 0722 835 398 or e-mail at wentzell@cput.ac.za

Thank you very much for your valuable time taken to answer the questions and for your kind assistance.

Lance Wentzel

(Doctoral Research Student)

Questionnaire Survey Link: http://bit.ly/SBP_SMS

Section A: General information

1.1   Kindly indicate with a ✓ your gender

Male	Female

1.2   Kindly indicate with a ✓ your age bracket in the table below.

Age Bracket									
20-30		30-40		40-50		50-60		60-70	

1.3   How many construction related organisations have you worked for, before starting your own business. Kindly write the number in the table below.

Construction related organisations worked for:

1.4   Kindly indicate with a ✓ the number of years your organisation has been operational:

Years of operation									
1-5		5-10		10-15		15-20		20-25	

1.5   Kindly indicate in the table below, the number of employees working for your organisation.

Number of employees

1.6   Kindly indicate with a ✓ the cidb grade and category that your organisation is registered in:

CIDB Grade			General Building (GB)	Civil Engineering (CE)
Tick		✓	✓	✓
A	Grade 1			
B	Grade 2			
C	Grade 3			
D	Grade 4			
E	Grade 5			
F	Grade 6			

1.7   Kindly indicate with a ✓ the number of years your organisation has been registered in the above indicated cidb grade.

Years registered in cidb grade									
1-2		3-4		5-6		7-8		9-10	

1.8   Kindly indicate with a ✓ the BBBEE Level and Correlating Code of your organisation.

	BBBEE Level with Correlating Code	✓
A	BBBEE Level 1 (≥ 100 points)	
B	BBBEE Level 2 (≥ 95 but < 100 points)	
C	BBBEE Level 3 (≥ 90 but < 95 points)	
D	BBBEE Level 4 (≥ 80 but < 90 points)	
E	BBBEE Level 5 (≥ 75 but < 80 points)	
F	BBBEE Level 6 (≥ 70 but < 75 points)	
G	BBBEE Level 7 (≥ 55 but < 70 points)	
H	BBBEE Level 8 (≥ 40 but < 55 points)	
I	Non-Compliant (< 40 points)	

1.9   Kindly indicate with a ✓ the number of years your organisation has been registered in the above indicated BBBEE Level with Correlating Code.

Years registered in BBBEE Level with Correlating Code									
1-2		2-4		4-6		6-8		8-10	

1.10   Kindly indicate with a ✓ the province that your organisation is located in (include all branches):

Western Cape ☐   Eastern Cape ☐   Gauteng ☐   KwaZulu-Natal ☐   Limpopo ☐
Mpumalanga ☐   Northern Cape ☐   North West ☐   Free State ☐

1.11   Kindly indicate with a ✓ your (Business Owner) construction related education and training qualification and the years of relevant industry experience pertaining to the qualification selected:

Construction related education and training		✓	**Years of relevant industry experience**				
			1-5	5-10	10-15	15-20	20-25
			✓	✓	✓	✓	✓
Artisan Trade Test Qualifications:							
A	Qualified Bricklayer						
B	Qualified Plumber						
C	Qualified Plasterer						
D	Qualified Painter						
E	Qualified Tiler						
F	Qualified Carpenter						
National Diploma Qualifications:							
A	National Diploma Building						
B	National Diploma Civil Engineering						
C	National Diploma Architecture						

		1	2	3	4			
D	National Diploma Surveying							
Bachelor of Technology Degree Qualifications:								
A	B Tech Construction Management							
B	B Tech Quantity Surveying							
C	B Tech Facilities Management							
D	B Tech Construction Health and Safety							
E	B Tech Civil Engineering							
F	B Tech Architectural Technology							
G	B Tech Surveying							
Bachelor of Science Degree Qualifications:								
A	BSc Construction Management							
B	Bsc Quantity Surveying							
C	Bsc Eng Civil Engineering							
D	Bsc Architecture							
E	Bsc Land Surveying							
Other								
A	Kindly specify in the space provided on the right and indicate the years of relevant industry experience:							

Section B: Aims to identify the CSR drivers influencing SMEs in the South African construction industry (SACI) – (Relative to Objective 2)

C2.1   In general, on a scale of 1 (not a driver: Na. D) to 4 (highly significant driver: Ma. D), kindly evaluate, the international CSR drivers that influence your organisations CSR activities.

International CSR drivers influencing SMEs in the SACI	Na. D………………………………...HS. D			
	1	2	3	4
A) CSR initiatives driven by International Standardisation:				
A CSR initiatives being driven by International Social and Environmental Accreditation and Labelling (ISEAL) Alliance 2012 (A set of global standards and codes of business practice pertaining to environmental and social standards)				
B CSR initiatives being driven by Global Reporting Initiative (GRI) Standards (Allowing organisations to publicly report on a range of economic, environmental and social impacts to their business, which includes organisations reporting on their positive or negative contributions towards sustainable development)				
C CSR initiatives being driven by Integrated Reporting				

	(This provides insights into the nature and quality of the organisation's relationships with its key stakeholders)				
D	CSR initiatives being driven by the International Organisations of Standardisation (ISO) 26000 (A standard referring to Social Responsibility)				
E	CSR initiatives being driven by the International Organisations of Standardisation (ISO) 14000 (A standard referring to Environmental Management)				
	B) CSR initiatives driven by Investment Incentives:				
A	CSR initiatives being driven by incentives received through social investments on the Dow Jones Sustainability Index (Where funds are screened on an ethical, social and environmental criterion)				
B	CSR initiatives being driven by incentives received through social investments on the Financial Times Stock Exchange (FTSE) 4-Good (Where funds are screened on an ethical, social and environmental criterion)				
C	CSR initiatives being driven by incentives received through social investments on the Financial Times Stock Exchange (FTSE) /Johannesburg Stock Exchange (JSE) Responsibility Investment Index (RII) (Where funds are screened on an ethical, social and environmental criterion)				
D	CSR initiatives being driven by incentives received through social investments on the Information and Communications Technology (ICT) Sustainability Index (Where funds are screened on an ethical, social and environmental criterion)				
	C) CSR initiatives driven by Stakeholder Activism:				
A	CSR initiatives being driven through development agencies				

	(Who engage organisations to increase the developmental impact of their business operations)				
B	CSR initiatives being driven through trade unions (Who internally communicate and conduct negotiations between employees and management of organisations and externally are unencumbered by corporate rules and regulations making it easy to disseminate and monitor the compliance by organisations)				
C	CSR initiatives being driven through international NGOs (Who partner with organisations advocating that organisations contribute to the reconstruction of the global public domain where organisations practice their businesses)				
D	CSR initiatives being driven through business associations (Who advocate economic growth, development, peace and prosperity allowing for the building of inclusive entrepreneurship ecosystems)				
E	CSR initiatives driven by the media as an activist for CSR				
	D) CSR initiative driven by Supply Chain Reliability:				
A	CSR initiatives being driven by the International Organisations of Standardisation (ISO) 20400 (A standard referring to Sustainable Procurement)				

C2.2 In general, on a scale of 1 (not a driver: Na. D) to 4 (highly significant driver: Ma. D), kindly evaluate, the national CSR drivers that influence your organisations CSR activities. influence

National CSR drivers influencing SMEs in the SACI	Na. D………………………………...HS. D			
	1	**2**	**3**	**4**
A CSR initiatives driven by Political Reforms:				
A CSR initiatives being driven through affirmative action to deliver democracy and to restore the injustices of the past				

B	CSR initiatives being driven by Broad-Based Black Economic Empowerment (BBBEE) to deliver democracy and to restore the injustices of the past				
C	CSR initiatives being driven by corporate governance to deliver democracy and to restore the injustices of the past				
D	CSR initiatives being driven by collective business action for social upliftment				
E	CSR initiatives being driven by collective business action for business ethics				
F	CSR initiatives being driven through political mechanism in the form of ministerial leadership				
G	CSR initiatives being driven through political mechanisms that stimulate new and existing business associations.				
H	CSR initiatives being driven through political mechanisms such as subsidise being provided to organisations for undertaking CSR activities.				
I	CSR initiatives being driven through political mechanisms such as the Deploying of 'soft' regulations				

B CSR initiatives driven by Cultural Tradition:

A	CSR initiatives being driven by cultural values within various demographics				
B	CSR initiatives being driven by religious values within various demographics				
C	CSR initiatives being driven by communitarianism practices within various demographics				
D	CSR initiatives being driven by charity practices within various demographics				
E	CSR initiatives being driven by humanism (Ubuntu) practices within various demographics				

C CSR initiatives driven by Socio-economic Priorities:

A	CSR initiatives being driven by the provision of adequate health-care needed in developing communities that struggle with socio-economic development challenges.				
B	CSR initiatives being driven by the provision of poverty alleviation initiatives needed in developing communities that struggle with socio-economic development challenges.				
C	CSR initiatives being driven by the provision of infrastructure development needed in				

	developing communities that struggle with socio-economic development challenges.				
D	CSR initiatives being driven by the provision of adequate education needed in developing communities that struggle with socio-economic development challenges.				
E	CSR initiatives driven by consumer protection challenges in society				
F	CSR initiatives driven by fair trade challenges in society				
G	CSR initiatives driven by green marketing challenges in society				
H	CSR initiatives driven by climate change challenges				

D CSR initiatives driven by Maintaining Market Access

A	CSR initiatives driven by competitive advantage to maintain market access				

E CSR initiatives driven by Governance Gaps

A	CSR initiatives driven by governance gaps that fail to provide adequate housing to developing communities in need				
B	CSR initiatives driven by governance gaps that fail to provide adequate roads to developing communities in need				
C	CSR initiatives driven by governance gaps that fail to provide adequate electricity supply to developing communities in need				
D	CSR initiatives driven by governance gaps that fail to provide adequate health-care to communities in need				
E	CSR initiatives driven by governance gaps that fail to provide adequate education to communities in need				

F CSR initiatives driven by Crises Response

A	CSR initiatives driven by economic crises such as an economic recession etc.				
B	CSR initiatives driven by social crises such as widespread unemployment etc.				
C	CSR initiatives driven by environmental crises such as climate change etc.				
D	CSR initiatives driven by health-related crises, such as COVID-19				
E	CSR initiatives driven by industrial crises such as when organisational systems fail causing a ripple effect on stakeholders and the surrounding society				

Section C: Aims to identify and evaluate the challenges that SMEs in the South African construction industry (SACI) experience pertaining to the implementation of CSR. (Relative to Objective 3)

C3.1   In general, on a scale of 1 (strongly disagree) to 4 (strongly agree), kindly evaluate the challenges that your organisation experience pertaining to the implementation of CSR.

CSR implementation challenges affecting SMEs at different management levels	Strongly disagree………Strongly agree			
	1	2	3	4
A Normative Management Level:				
A	Lack of integration in the SMEs culture and the SMEs business objectives				
B	Lack of integration in the SMEs culture and the SMEs business norms				
C	Lack of integration in the SMEs culture and the SMEs business values				
D	Lack of commitment and motivation of SME managers and owners towards CSR.				
B Strategic Management Level:				
A	Reluctance of SMEs to communicate CSR initiatives internally to the business				
B	Reluctance of SMEs to communicate CSR initiatives externally to the business				
C	SMEs have limited financial resources to undertake CSR initiatives				
D	SMEs have limited human resources to undertake CSR initiatives				
E	SMEs have limited time to undertake CSR initiatives				
F	SMEs have limited knowledge to undertake CSR initiatives				
G	SMEs have limited awareness to undertake CSR initiatives				
H	SMEs have limited information to undertake CSR initiatives				
I	SMEs have limited legal support to undertake CSR initiatives				
J	SMEs have limited media support to undertake CSR initiatives				
K	SMEs find it difficult to justify or legitimise CSR efforts, since benefits are challenging to measure				
C Operative Management Level:				
A	High levels of bureaucracy				
B	Standardised CSR guidelines are too complex and inapplicable for SMEs				
C	Lack of CSR skills and knowledge				

		1	2	3	4
D	SMEs find it difficult to adapt CSR practices and standards to their internal business process				
D Environmental Management Level:					
A	Unstable economic conditions				
B	Negative government regulations and policies				
C	Poor collaboration among SMEs				
D	Poor customer care by SMEs				
E	Lack of CSR culture in SMEs				
F	Poor supplier care by SMEs				
G	The location of the SME business				

Section D: Aims to identify and ascertain how SMEs in the South African construction industry (SACI) perceive the relationship between the integration of CSR and sustainable business performance. (Relative to Objective 1)

C4.1   In general, on a scale of 1 (strongly disagree) to 4 (strongly agree), kindly evaluate how your organisation perceives the relationship between the integration of CSR and sustainable business performance.

Perception of the relationship between the integration of CSR and sustainable business performance		**Strongly disagree………Strongly agree**			
		1	2	3	4
A. Internal Organisational Perceptions:					
A	CSR positively impacts the organisations business processes, which contributes to SBP				
B	CSR improves employee dedication, motivation, loyalty, commitment, respect, and efficiency that contributes to SBP				
C	CSR improves the organisation's efficiency allowing for SBP				
D	CSR positively contributes to an organisation's legal obligations allowing for SBP				
E	CSR positively contributes to the longevity of the organisation allowing for SBP				
F	CSR improves the organisation's prestige, contributing to SBP				
G	CSR allows for long-term return on investment and increase in productivity contributing to SBP				
H	CSR increases the organisational ability to attract good and quality staff				
I	CSR improves operating cost reductions that contributes to SBP				

J	CSR improves the organisation's capacity for learning and innovation, ultimately allowing for SBP				
K	CSR improves the organisation's financial performance, contributing to SBP				
L	CSR improves the organisation's risk and crises management contributing to SBP				
M	CSR allows for long-term sustainability of the organisation and society contributing to SBP				
N	CSR improves products and services that contributes to SBP				
B. External Organisational Perceptions:					
A	CSR improves the organisation's corporate image and reputation with various stakeholders (employees, customers/clients, investors, government, suppliers and the community) all of which contributes to SBP				
B	CSR enhances the organisation's brand value contributing to SBP				
C	CSR allows for positive reactions (client satisfaction) from clients that contributes to SBP				
D	CSR positively contributes to the credibility of the organisation allowing for SBP				
E	CSR positively contributes to giving back to the community allowing for SBP				
F	CSR increases business relations and new business opportunity contributing to SBP				
G	CSR allows for organisations to receive recognition by international credit organisations, contributing to SBP				
H	CSR improves the organisation's competitiveness ultimately allowing better turnover which contributes to SBP				
I	CSR reduces regulatory oversight which contributes to SBP				
J	CSR improves the business trust and understanding between the business and its customers contributing to SBP				
K	CSR improves partnership opportunities with transitional organisations, contributing to SBP				
L	CSR improves the organisation's influence in the industry and market share contributing to SBP				
M	CSR increases the appeal to investors and financial analysts contributing to SBP				
N	CSR allows the organisation to access funding opportunities contributing to SBP				
O	CSR improves client retention that contributes to SBP				

Section E: Aims to establish the CSR dimensions that need to be considered by SMEs in the South African construction industry (SACI) to achieve sustainable business performance. (Relative to Objective 4)

Aims to establish the level of importance that SMEs in the South African construction Industry (SACI) attach to activities that influence the CSR dimensions. (Relative to Objective 4)

C5.1   In general, on a scale of 1 (slightly important: S. I) to 4 (very important: V. I), kindly evaluate, the activities that influence the employee dimension pertaining to CSR.

Employee Dimension Activities	S. I.........................V. I			
	1	2	3	4
A. Occupational health and safety of employees (Sub-dimension and activity/ies):				
A	Providing a safe working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)				
B	Providing a healthy working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)				
C	Providing health inductions for employees				
D	Providing health training for employees				
E	Providing safety inductions for employees				
F	Providing safety training for employees				
G	Establishment of a self-awareness system for construction safety				
H	Improving the self-awareness system for construction safety				
I	Establishment of a responsibility system for construction safety				
J	Improving the responsibility system for construction safety				
K	Providing access to on-site and off-site facilities e.g. Staff areas, drinking water, food				
L	Contribute towards design review from construction hazard perspective				
M	Regular maintenance of construction machinery and equipment				
N	Effective emergency management procedures in place pertaining to: (e.g. injuries, accidents, and occupational diseases)				
O	Effective safety supervision in place pertaining to: (e.g. injuries, accidents, and occupational diseases)				
P	Regular inspections of employees work practices				
Q	Regular health checks				
R	Regular notification of health check results				
S	Participation of employers representatives in Occupational Health and Safety Commission				
T	Participation of employees' representatives in Occupational Health and Safety Commission				
B. Legal working hours and rest time (Sub-dimension and activity/ies):				
A	Compliance with working hours regulation				
B	Allocate appropriate working hours according to the type of work				

C	Process to manage the weekly maximum overtime and average working time				

C. Wages and welfare (Sub-dimension and activity/ies):

A	Guarantee the professional minimum wage				
B	Awareness of all employees on the various components that constitute their wages				
C	Process in place to ensure wages are not altered for disciplinary purposes				
D	No delay in payment wages and allowances according to the contract of employment				
E	Commitments to improve staff welfare				
F	Give special allowances to employees under special work conditions				
G	Additional remuneration for overtime work				

D. Staff employment (Sub-dimension and activity/ies):

A	Provide fair job opportunities				
B	Provide equitable job opportunities				
C	All employees are formally contracted				
D	The organisation abides by laws regarding the non-employment of child labour				
E	Human resources policy in place to attract qualified staff				
F	Human resource policy in place to retain qualified staff				

E. Education and training (Sub-dimension and activity/ies):

A	Appropriate training for the job, as well as specific OHS and W training				
B	Employees are aware of relevant organisational regulations				
C	Employees are aware of relevant organisational rules				
D	Employees are aware of relevant organisational values				
E	Career guidance plan in place for employees				

F. Freedom of association and bargaining (Sub-dimension and activity/ies):

A	Employees have the right of association and freedom to join trade unions				
B	The organisation supports the existence of trade unions				
C	The organisation supports the functions of trade unions				
D	The organisation supports the maintenance of communication and dialog with trade unions at all times				
E	An effective and confidential system in place for employee complaints				
F	Negotiate employee benefits with trade unions				
G	An effective and confidential procedure in place to manage employee complaints				

G. Harmonious labour/management relationship (Sub-dimension and activity/ies):

A	Employees representation and participation in corporate decision-making				
B	Appropriate information channels to inform employees about any organisational changes				
C	Employees who are experiencing personal problems receive appropriate support				
D	Systems in place to manage employees who are sick and no longer able to continue in existing capacity				

	H. Human rights measures (Sub-dimension and activity/ies):				
A	Organisational values do not interfere with employee beliefs				
B	Organisational values do not interfere with employee customs				
C	Organisational values do not interfere with employee legal rights				
D	Prohibit harassment of the employees				
E	Prohibits abuse of the employees				
F	Prohibits corporal punishment towards employees				
G	Employees are not forced to work beyond what they are legally entitled to do				
H	Human rights policies in place to assess and deal with human rights performance				
I	Human rights procedures in place to assess and deal with human rights performance				
J	Employees are provided with appropriate cultural environment				
K	Employees are provided with appropriate cultural facilities				

C5.2   In general, on a scale of 1 (slightly important: S. I) to 4 (very important: V. I), kindly evaluate, the activities that influence the shareholder dimension pertaining to CSR.

Shareholder Dimension Activities	S. I.......................V. I			
	1	2	3	4
A. Shareholder legal revenues (Sub-dimension and activity/ies):				
A Maintain their shareholder revenues				
B Maintain their shareholder profits				
C Enhance their shareholder revenues				
D Enhance their shareholder profits				
E Increase in value of shareholder shares				
B. Accurate disclosure of corporate status and development prospects (Sub-dimension and activity/ies):				
A Accurate information on corporate operating performance				
B Accurate information on corporate financial performance				
C Accurate information on corporate sustainable development prospects (e.g. social and environmental performance)				
C. Decision-making participation (Sub-dimension and activity/ies):				
A Shareholders participation in corporate decision-making on major corporate activities				
B Shareholders participation in decision-making regarding corporate income distribution				
D. Shareholder relationship management system (Sub-dimension and activity/ies):				
A Establish the sense of being responsible to shareholders				
B Establish the sense of being an agency of shareholder relationship management.				

C5.3   In general, on a scale of 1 (slightly important: S. I) to 4 (very important: V. I), kindly evaluate, the activities that influence the customer dimension pertaining to CSR.

Customer Dimension Activities		S. I....................V. I			
		1	2	3	4
A. Quality and safety of construction product (Sub-dimension and activity/ies):					
A	Quality of buildings and their components				
B	Durability of buildings and their components				
C	Attainment of legal requirements				
D	Attainment of safety requirements				
E	Elimination of potential safety threats to the customer				
F	Elimination of potential safety threats to the community				
G	The organisation employs a good record keeping system that enables easy analysis of all incidents during the construction process				
H	The organisation employs a good record keeping system that enables easy response to all incidents during the construction process				
I	Establish a project quality management system				
B. Customer satisfaction (Sub-dimension and activity/ies):					
A	Complete project within budget				
B	Complete project on time				
C	The organisation has a policy to meet customers' needs				
D	The organisation has a policy to meet customers' expectations				
E	Procedures in place to manage customer complaints properly				
F	Maintains an appropriate relationship with the supervision engineers and consultants				
C. Customer service culture (Sub-dimension and activity/ies):					
A	Has set up an appropriate asset management system (e.g. Construction maintenance and post-construction service)				
D. Innovation and development (Sub-dimension and activity/ies):					
A	Investment on developing innovative construction materials				
B	Investment on developing innovative construction methods				
C	Investment on developing innovative construction technology				
E. Disclosure of true performance information of the organisation (Sub-dimension and activity/ies):					
A	Accurate information on corporate credit records				
B	Accurate information on corporate finance records				
C	Accuracy of credit records of compliance with contract				
D	Accurate information on product quality credit records				
E	Accurate information on corporate tax credit records				

C5.4   In general, on a scale of 1 (slightly important: S. I) to 4 (very important: V. I), kindly evaluate, the activities that influence the supplier and partner dimension pertaining to CSR.

Supplier and Partner Dimension Activities		S. I...................V. I			
		1	2	3	4
A. Maintain an appropriate partner relationship (Sub-dimension and activity/ies):					
A	Contractual obligations are met and suppliers are paid in timely manner				
B	Contractual obligations are met and contractors are paid in timely manner				
C	Mutual respect for laws				
D	Mutual respect for regulations				
E	Mutual respect for business ethics				
B. Enhance communication with partners/suppliers (Sub-dimension and activity/ies):					
A	Disclose organisation-to-supplier (partner) policies and establish appropriate safeguards				
B	Disclose organisation-to-supplier (partner) commitments and establish appropriate safeguards				
C	Effective communication with suppliers/partners				
C. Promote CSR performance of partners and suppliers (Sub-dimension and activity/ies):					
A	**Record the CSR commitment and performance of suppliers and partners**				
B	**Assess the CSR commitment and performance of suppliers and partners**				

C5.5   In general, on a scale of 1 (slightly important: S. I) to 4 (very important: V. I), kindly evaluate, the activities that influence the government dimension pertaining to CSR.

Government Dimension Activities		S. I...................V. I			
		1	2	3	4
A. Pay tax (Sub-dimension and activity/ies):					
A	Pay required tax payments as stipulated by law				
B. Obey the requirements of laws and policy (Sub-dimension and activity/ies):					
A	Abide by the law (codes of conduct, anti-corruption, building regulation) and bear other obligations stipulated by the government				
B	Actively support the public welfare activities that government initiated				
C. Provide employment opportunities (Sub-dimension and activity/ies):					
A	Provide employment opportunities for society				

C5.6   In general, on a scale of 1 (slightly important: S. I) to 4 (very important: V. I), kindly evaluate, the activities that influence the environment and resources dimension pertaining to CSR.

Environment and Resources Dimension Activities		S. I.......................V. I			
		1	2	3	4
A. Conservation of energy and resources (Sub-dimension activity/ies):					
A	Water conservation and harvesting in construction process and building operation				
B	Land use efficiency				
C	Minimizing construction demolition waste to landfill and energy consumption				
D	The organisation encourages responsible utilisation of resources				
E	The organisation promotes the use of renewable resources and alternative energy systems				
F	Scientific and technological innovation (energy conservation/reduce consumption of resources) during construction process				
G	The organisation trains labour force to encourage resource saving				
H	The organisation trains labour force pertaining to the awareness of environmental protection				
B. Environment protection (Sub-dimension and activity/ies):					
A	Construction practices that reduce pollution emissions (e.g. gas, dust, sewage, solid waste and other hazardous substances)				
B	Impact evaluation of the construction project on the environment during project planning, construction, and operation stages				
C	Establishment of corporate environmental management system				
D	Improvement of corporate environmental management system				
E	Compliance with environmental laws and regulations in the construction industry				
F	The organisation engages in R and D of building designs that improve the energy efficiency				
G	The organisation engages in appropriate R and D that encourages green construction (e.g. green building design, green materials, new construction methods)				
H	Appropriate waste disposal processes				
I	Appropriate waste recycling processes				

C5.7   In general, on a scale of 1 (slightly important: S. I) to 4 (very important: V. I), kindly evaluate, the activities that influence the community dimension pertaining to CSR.

Community Dimension Activities		S. I.......................V. I			
		1	2	3	4
A. Project impact on community (Sub-dimension and activity/ies):					
A	Commitments to protect local environment				
B	Minimise safety hazards to the community				
C	Maintain good communication channels with neighbours				
B. Build harmonious community (Sub-dimension and activity/ies):					

A	Participate in community activities and provide some financial support where appropriate				
B	Build community welfare facilities				
C	Business promotes work opportunities to the local community				
D	Communicate of corporate values and create long-term relationship with the local community				

C5.8   In general, on a scale of 1 (slightly important: S. I) to 4 (very important: V. I), kindly evaluate, the activities that influence the competitors dimension pertaining to CSR.

Competitors Dimension Activities	S. I........................V. I			
	1	2	3	4
A. Operation ethically (Sub-dimension and activity/ies):				
A	Establish self-regulatory mechanisms and abide by the law				
B	Actively coordinate with construction-related associations				
C	Actively comply with the construction-related regulations of associations				
B. Fair competition (Sub-dimension and activity/ies):				
A	Prohibit bribery and other unacceptable business practices				
B	Boycott illegal behaviour in the construction market, maintain market order				

C5.9   In general, on a scale of 1 (not important: N. I) to 5 (extremely Important: E. I), kindly evaluate, the activities that influence the NGOs dimension pertaining to CSR.

NGOs Dimension Activities	N. I........................E. I			
	1	2	3	4
A. Social and public service strategy (Sub-dimension and activity/ies):				
A	Provide care and support for disadvantaged groups where appropriate				
B	Business engages in public and cultural activities, support public education				
C	Business provides funds and sponsorships where appropriate for public or social welfare purposes				
D	Business provides assistance wherever appropriate for public health activities				
E	Business provides assistance wherever appropriate for disaster prevention activities				
F	Business encourages its employees to take part in public welfare activities				

APPENDIX B: Interview invitation letter

Cape Peninsula
University of Technology

Civil Engineering Department

Faculty of Engineering and the Built Environment
Cape Peninsula University of Technology
Symphony way Bellville, 7535
E-mail: wentzell@cput.ac.za
17th May 2021

Dear Sir/Mam,

RE: Letter of appreciation and request for interview appointment

This letter is written to you expressing our genuine appreciation for allocating time out of your busy schedule to respond to the research questionnaire survey sent to you between the 5th and 12th of October 2020. In saying this, for us to achieve more robust research findings pertaining to the study which aims to develop a corporate social responsibility (CSR) model to achieve sustainable business performance of SMEs in the South African construction industry, the research phase is divided into both a 'quantitative' and 'qualitative' phase. The 'quantitative' phase has already been concluded revealing extensive facts in alignment with the research objectives. However, the 'qualitative' phase through the use of structured face-to-face interviews would further be utilised to confirm and give more explanation to the facts that have been exposed by the quantitative findings, ensuring validity and reliability of the research outcomes.

This said, I would like to request an appointment for the research interview. Kindly specify a date and time that will be convenient for you between the 27th of May and the 3rd of June 2021 either via email: wentzell@cput.ac.za or telephonic communication: 072 283 5398. I thus wish to state that the objectives of this research will not be realised without your valuable contribution, taking into consideration your experience, particularly construction business experience in the construction industry.

Kindly note that any information that you provide during and after the interview shall be treated with utmost anonymity and confidentiality.

Thank you for your anticipated support
 Lance Wentzel
(Doctoral Research Student)

APPENDIX C: Interview schedule

Cape Peninsula
University of Technology

Civil Engineering Department

Faculty of Engineering and the Built Environment

Cape Peninsula University of Technology

Symphony way Bellville, 7535

E-mail: wentzell@cput.ac.za

Organisation	Place	Date	Time	Duration
Organisation A	Organisations head office in Cape Town	27th May 2021	16:00	58 min.
Organisation B	Neutral venue (coffee shop) in the northern suburbs of Cape Town	28th May 2021	15:00	45 min.
Organisation C	Neutral venue (coffee shop) in the southern suburbs of Cape Town	31st of May 2021	18:00	30 min
Organisation D	Neutral venue (coffee shop) in the southern suburbs of Cape Town	3rd of June 2021	19:00	63 min

APPENDIX D: Structured interview guide: deductions and questions

Cape Peninsula
University of Technology

Abbreviations

- **CSR:** Corporate Social Responsibility
- **SBP:** Sustainable Business Performance

(A) SME perception of the relationship between integration of CSR and SBP

Deduction/s:

i. It is deduced from the quantitative findings of this study that SMEs in the South African construction industry agree that there is a positive relationship between the integration of CSR in their businesses and SBP from both their internal and external organisational perspectives. From an internal organisational perspective SMEs agreed that:

- CSR improves the organisations prestige;
- CSR increases the organisational ability to attract good and quality staff;
- CSR improves the organisation's efficiency; and
- CSR improves employee dedication, motivation, loyalty, commitment, respect, and efficiency all of which positively contributes to sustainable business performance.

From an external organisational perspective SMEs agreed that:

- CSR positively contributes to the credibility of the organisation;
- CSR improves the organisation's corporate image and reputation with various stakeholders;
- CSR increases business relations and new business opportunity; and
- CSR positively contributes to giving back to the community all of which positively contributes to sustainable business performance.

Question/s:

1. Based on your business experience, kindly comment and elaborate in support or in contrast of the deduction.

(B) CSR drivers influencing the CSR practices of SMEs

Deduction/s:

i.   It is inferred from the quantitative findings of this study that even though SMEs in the South African construction industry's CSR practices are driven by international and national CSR drivers, this remains of a limited nature. Based on the findings, international CSR drivers influencing CSR practices of SMEs across the South African construction industry were deduced as:

- Stakeholder activism and relevant incentives, and
- Global standardisation and relevant incentives.

The national CSR drivers influencing CSR practices of SMEs across the South African construction industry were deduced as:

- Socio-economic priorities and concerns;
- Political reforms; and
- Culture and tradition.

ii.   The quantitative findings via the total average percentages also suggested that even though SMEs in the South African construction industry's CSR practices are limitedly driven by both international and national CSR drivers, national CSR drivers for example: Socio-economic priorities and concerns; political reforms, and culture and tradition seem to have a bigger influence on the CSR practices of SMEs than international CSR drivers.

Question/s

1. Based on your business experience, kindly comment and elaborate in support or in contrast of the deduction/s.

(C) CSR implementation challenges experienced by SMEs

Deduction/s:

i.   The overall observation from the quantitative findings pertaining to the SMEs CSR implementation challenges clearly illustrates that SMEs in the South African construction industry definitely have challenges on different management levels (Normative, Strategic, Operative, and Environmental) in terms of implementing

CSR initiatives in their businesses. The implementation challenges reflected at the Normative Management Level are:

- Lack of integration in the SMEs culture and the SMEs business norms, and
- Lack of integration in the SMEs culture and the SMEs business objectives.

The implementation challenges reflected at the Strategic Management Level are:

- SMEs have limited financial resources to undertake CSR initiatives;
- SMEs have limited human resources to undertake CSR initiatives, and

The implementation challenges reflected at the Operative Management Level are:

- SMEs find it difficult to adapt CSR practices and standards to their internal business processes, and
- Lack of CSR skills and knowledge.

The implementation challenges reflected at the Environmental Management Level are:

- Poor collaboration among SMEs;
- Unstable economic conditions, and
- Lack of CSR culture in SMEs.

ii. Although the quantitative findings reveal that SMEs in the South African construction industry agree that they have CSR implementation challenges on different management levels, the total average percentages reflected in the findings revealed that more SMEs agreed with the fact that their CSR implementation challenges stem from the operative management levels in their businesses.

Question/s

1. Based on your business experience, kindly comment and elaborate in support or in contrast of the deductions.

(D) CSR activities considered by SMEs to achieve sustainable business performance

Deduction/s:

i. The quantitative findings clearly illustrated that CSR activities across all nine CSR dimensions (Employee, Shareholder, Customer, Supplier and Partner, Government, Environment and Resources, Community, Competitor and NGOs) were considered by SMEs to be very important (over 90% of SMEs) to achieve

sustainable business performance. However, from the nine CSR dimensions and relative CSR activities, SMEs considered CSR activities associated with the customer; government; environment and resources; community, and competitor dimension to be more important than the remaining four CSR activities and associated CSR dimensions to achieve sustainable business performance.

Question/s

1. Based on your business experience, kindly comment and elaborate in support or in contrast of the deductions.

APPENDIX E: Data sheets (reliability tests)

APPENDIX E 1: Reliability Test: SMEs perceptions based on the relationship between the integration of CSR and sustainable business performance

Coding	Variable	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	Internal Organisational Perceptions			
C41_A_A	CSR positively impacts the organisations business processes, which contributes to SBP	.641	.987	
C41_A_B	CSR improves employee dedication, motivation, loyalty, commitment, respect, and efficiency that contributes to SBP	.765	.987	
C41_A_C	CSR improves the organisation's efficiency allowing for SBP	.825	.987	
C41_A_D	CSR positively contributes to an organisation's legal obligations allowing for SBP	.844	.987	
C41_A_E	CSR positively contributes to the longevity of the organisation allowing for SBP	.837	.987	
C41_A_F	CSR improves the organisation's prestige, contributing to SBP	.811	.987	
C41_A_G	CSR allows for long-term return on investment and increase in productivity contributing to SBP	.868	.987	
C41_A_H	CSR increases the organisational ability to attract good and quality staff	.872	.987	
C41_A_I	CSR improves operating cost reductions that contributes to SBP	.867	.987	
C41_A_J	CSR improves the organisation's capacity for learning and innovation, ultimately allowing for SBP	.844	.987	
C41_A_K	CSR improves the organisation's financial performance, contributing to SBP	.861	.987	
C41_A_L	CSR improves the organisation's risk and crises management contributing to SBP	.870	.987	
C41_A_M	CSR allows for long-term sustainability of the organisation and society contributing to SBP	.879	.986	
C41_A_N	CSR improves products and services that contributes to SBP	.888	.986	**0.987**

Coding	Variable	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	External Organisational Perceptions			
C41_B_A	CSR improves the organisation's corporate image and reputation with various stakeholders (employees, customers/clients, investors, government, suppliers and the community) all of which contributes to SBP	.832	.987	
C41_B_B	CSR enhances the organisation's brand value contributing to SBP	.851	.987	
C41_B_C	CSR allows for positive reactions (client satisfaction) from clients that contributes to SBP	.849	.987	
C41_B_D	CSR positively contributes to the credibility of the organisation allowing for SBP	.836	.987	
C41_B_E	CSR positively contributes to giving back to the community allowing for SBP	.829	.987	
C41_B_F	CSR increases business relations and new business opportunity contributing to SBP	.888	.986	
C41_B_G	CSR allows for organisations to receive recognition by international credit organisations, contributing to SBP	.862	.987	
C41_B_H	CSR improves the organisation's competitiveness ultimately allowing better turnover which contributes to SBP	.857	.987	
C41_B_I	CSR reduces regulatory oversight which contributes to SBP	.834	.987	
C41_B_J	CSR improves the business trust and understanding between the business and its customers contributing to SBP	.903	.986	
C41_B_K	CSR improves partnership opportunities with transitional organisations, contributing to SBP	.899	.986	
C41_B_L	CSR improves the organisation's influence in the industry and market share contributing to SBP	.856	.987	
C41_B_M	CSR increases the appeal to investors and financial analysts contributing to SBP	.832	.987	
C41_B_N	CSR allows the organisation to access funding opportunities contributing to SBP	.828	.987	
C41_B_O	CSR improves client retention that contributes to SBP	.896	.986	

APPENDIX E 2: Reliability Test: International CSR drivers influencing the CSR practices of SMEs

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	CSR practices driven by International Standardisation			
C21_A_A	CSR practices being driven by International Social and Environmental Accreditation and Labelling (ISEAL) Alliance 2012 (A set of global standards and codes of business practice pertaining to environmental and social standards)	.850	.977	
C21_A_B	CSR practices being driven by Global Reporting Initiative (GRI) Standards (Allowing organisations to publicly report on a range of economic, environmental and social impacts to their business, which includes organisations reporting on their positive or negative contributions towards sustainable development)	.848	.977	
C21_A_C	CSR practices being driven by Integrated Reporting (This provides insights into the nature and quality of the organisation's relationships with its key stakeholders)	.853	.977	
C21_A_D	CSR practices being driven by the International Organisations of Standardisation (ISO) 26000 (A standard referring to Social Responsibility)	.881	.977	
C21_A_E	CSR practices being driven by the International Organisations of Standardisation (ISO) 14000 (A standard referring to Environmental Management)	.857	.977	**0.979**
	CSR practices driven by Investment Incentives			
C21_B_A	CSR practices being driven by incentives received through social investments on the Dow Jones Sustainability Index (Where funds are screened on an ethical, social and environmental criterion)	.874	.977	
C21_B_B	CSR practices being driven by incentives received through social investments on the Financial Times Stock Exchange (FTSE) 4-Good (Where funds are screened on an ethical, social and environmental criterion)	.901	.976	

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
C21_B_C	CSR practices being driven by incentives received through social investments on the Financial Times Stock Exchange (FTSE) /Johannesburg Stock Exchange (JSE) Responsibility Investment Index (RII) (Where funds are screened on an ethical, social and environmental criterion)	.914	.976	
C21_B_D	CSR practices being driven by incentives received through social investments on the Information and Communications Technology (ICT) Sustainability Index (Where funds are screened on an ethical, social and environmental criterion)	.918	.976	
	CSR practices driven by Stakeholder Activism			
C21_C_A	CSR practices being driven through development agencies (Who engage organisations to increase the developmental impact of their business operations)	.844	.977	
C21_C_B	CSR practices being driven through trade unions (Who internally communicate and conduct negotiations between employees and management of organisations and externally are unencumbered by corporate rules and regulations making it easy to disseminate and monitor the compliance by organisations)	.830	.978	
C21_C_C	CSR practices being driven through international NGOs (Who partner with organisations advocating that organisations contribute to the reconstruction of the global public domain where organisations practice their businesses)	.819	.978	
C21_C_D	CSR practices being driven through business associations (Who advocate economic growth, development, peace and prosperity allowing for the building of inclusive entrepreneurship ecosystems)	.786	.978	
C21_C_E	CSR practices driven by the media as an activist for CSR	.833	.977	
	CSR practices driven by Supply Chain Reliability			
C21_D_A	CSR practices being driven by the International Organisations of Standardisation (ISO) 20400 (A standard referring to Sustainable Procurement)	.866	.977	

APPENDIX E 3: Reliability Test: National CSR drivers influencing the CSR practices of SMEs

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	CSR practices driven by Political Reforms			
C22_A_A	CSR practices being driven through affirmative action to deliver democracy and to restore the injustices of the past	.822	.988	
C22_A_B	CSR practices being driven by Broad-Based Black Economic Empowerment (BBBEE) to deliver democracy and to restore the injustices of the past	.726	.988	
C22_A_C	CSR practices being driven by corporate governance to deliver democracy and to restore the injustices of the past	.853	.988	
C22_A_D	CSR practices being driven by collective business action for social upliftment	.875	.988	
C22_A_E	CSR practices being driven by collective business action for business ethics	.848	.988	
C22_A_F	CSR practices being driven through political mechanism in the form of ministerial leadership	.748	.988	
C22_A_G	CSR practices being driven through political mechanisms that stimulate new and existing business associations.	.761	.988	
C22_A_H	CSR practices being driven through political mechanisms such as subsidise being provided to organisations for undertaking CSR activities.	.843	.988	
C22_A_I	CSR practices being driven through political mechanisms such as the Deploying of 'soft' regulations	.743	.988	
	CSR practices driven by Cultural Tradition			
C22_B_A	CSR practices being driven by cultural values within various demographics	.792	.988	
C22_B_B	CSR practices being driven by religious values within various demographics	.799	.988	
C22_B_C	CSR practices being driven by communitarianism practices within various demographics	.763	.988	
C22_B_D	CSR practices being driven by charity practices within various demographics	.808	.988	**0.988**
C22_B_E	CSR practices being driven by humanism (Ubuntu) practices within various demographics	.867	.988	
	CSR practices driven by Socio-economic Priorities			
C22_C_A	CSR practices being driven by the provision of adequate health-care needed in developing communities that struggle with socio-economic development challenges.	.888	.988	
C22_C_B	CSR practices being driven by the provision of poverty alleviation initiatives needed in developing communities that struggle with socio-economic development challenges.	.906	.988	

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
C22_C_C	CSR practices being driven by the provision of infrastructure development needed in developing communities that struggle with socio-economic development challenges.	.859	.988	
C22_C_D	CSR practices being driven by the provision of adequate education needed in developing communities that struggle with socio-economic development challenges.	.871	.988	
C22_C_E	CSR practices driven by consumer protection challenges in society	.876	.988	
C22_C_F	CSR practices driven by fair trade challenges in society	.902	.988	
C22_C_G	CSR practices driven by green marketing challenges in society	.895	.988	
C22_C_H	CSR practices driven by climate change challenges	.835	.988	
	CSR practices driven by Maintaining Market Access			
C22_D_A	CSR practices driven by competitive advantage to maintain market access	.845	.988	
	CSR practices driven by Governance Gaps			
C22_E_A	CSR practices driven by governance gaps that fail to provide adequate housing to developing communities in need	.923	.988	
C22_E_B	CSR practices driven by governance gaps that fail to provide adequate roads to developing communities in need	.907	.988	
C22_E_C	CSR practices driven by governance gaps that fail to provide adequate electricity supply to developing communities in need	.917	.988	
C22_E_D	CSR practices driven by governance gaps that fail to provide adequate health-care to communities in need	.897	.988	
C22_E_E	CSR practices driven by governance gaps that fail to provide adequate education to communities in need	.899	.988	
	CSR practices driven by Crises Response			
C22_F_A	CSR practices driven by economic crises such as an economic recession etc.	.840	.988	
C22_F_B	CSR practices driven by social crises such as widespread unemployment etc.	.806	.988	
C22_F_C	CSR practices driven by environmental crises such as climate change etc.	.827	.988	
C22_F_D	CSR practices driven by health-related crises, such as COVID-19	.819	.988	
C22_F_E	CSR practices driven by industrial crises such as when organisational systems fail causing a ripple effect on stakeholders and the surrounding society	.858	.988	

APPENDIX E 4: Reliability Test: SME CSR implementation challenges at various management levels

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
Normative Management Level				
C31_A_A	Lack of integration in the SMEs culture and the SMEs business objectives	.598	.933	
C31_A_B	Lack of integration in the SMEs culture and the SMEs business norms	.637	.933	
C31_A_C	Lack of integration in the SMEs culture and the SMEs business values	.690	.932	
C31_A_D	Lack of commitment and motivation of SME managers and owners towards CSR.	.541	.934	
Strategic Management Level				
C31_B_A	Reluctance of SMEs to communicate CSR practices internally to the business	.511	.934	
C31_B_B	Reluctance of SMEs to communicate CSR practices externally to the business	.512	.934	
C31_B_C	SMEs have limited financial resources to undertake CSR practices	.620	.933	
C31_B_D	SMEs have limited human resources to undertake CSR practices	.703	.932	
C31_B_E	SMEs have limited time to undertake CSR practices	.601	.933	
C31_B_F	SMEs have limited knowledge to undertake CSR practices	.675	.932	
C31_B_G	SMEs have limited awareness to undertake CSR practices	.687	.932	
C31_B_H	SMEs have limited information to undertake CSR practices	.665	.932	
C31_B_I	SMEs have limited legal support to undertake CSR practices	.670	.932	
C31_B_J	SMEs have limited media support to undertake CSR practices	.536	.934	
C31_B_K	SMEs find it difficult to justify or legitimise CSR efforts, since benefits are challenging to measure	.706	.932	**0.936**
Operative Management Level				
C31_C_A	High levels of bureaucracy	.545	.934	
C31_C_B	Standardised CSR guidelines are too complex and inapplicable for SMEs	.626	.933	
C31_C_C	Lack of CSR skills and knowledge	.662	.932	
C31_C_D	SMEs find it difficult to adapt CSR practices and standards to their internal business process	.520	.934	
Environmental Management Level				
C31_D_A	Unstable economic conditions	.585	.933	
C31_D_B	Negative government regulations and policies	.472	.935	
C31_D_C	Poor collaboration among SMEs	.522	.934	
C31_D_D	Poor customer care by SMEs	.436	.936	
C31_D_E	Lack of CSR culture in SMEs	.494	.934	
C31_D_F	Poor supplier care by SMEs	.570	.933	
C31_D_G	The location of the SME business	.421	.936	

APPENDIX E 5: Reliability Test: CSR activities associated with CSR employee dimension

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
Occupational health and safety of employees				
C51_A_A	Providing a safe working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)	.656	.985	
C51_A_B	Providing a healthy working environment (e.g. construction machinery and equipment, labour protection appliances and technical measures)	.706	.985	
C51_A_C	Providing health inductions for employees	.676	.985	
C51_A_D	Providing health training for employees	.681	.985	
C51_A_E	Providing safety inductions for employees	.637	.985	
C51_A_F	Providing safety training for employees	.694	.985	
C51_A_G	Establishment of a self-awareness system for construction safety	.701	.985	
C51_A_H	Improving the self-awareness system for construction safety	.716	.985	
C51_A_I	Establishment of a responsibility system for construction safety	.778	.985	
C51_A_J	Improving the responsibility system for construction safety	.789	.985	
C51_A_K	Providing access to on-site and off-site facilities e.g. Staff areas, drinking water, food	.703	.985	
C51_A_L	Contribute towards design review from construction hazard perspective	.749	.985	
C51_A_M	Regular maintenance of construction machinery and equipment	.716	.985	
C51_A_N	Effective emergency management procedures in place pertaining to: (e.g. injuries, accidents, and occupational diseases)	.741	.985	
C51_A_O	Effective safety supervision in place pertaining to: (e.g. injuries, accidents, and occupational diseases)	.727	.985	
C51_A_P	Regular inspections of employees work practices	.750	.985	
C51_A_Q	Regular health checks	.626	.985	
C51_A_R	Regular notification of health check results	.718	.985	
C51_A_S	Participation of employers representatives in Occupational Health and Safety Commission	.777	.985	
C51_A_T	Participation of employees' representatives in Occupational Health and Safety Commission	.744	.985	
Legal working hours and rest time				
C51_B_A	Compliance with working hours regulation	.761	.985	
C51_B_B	Allocate appropriate working hours according to the type of work	.746	.985	
C51_B_C	Process to manage the weekly maximum overtime and average working time	.765	.985	
Wages and welfare				**0.986**
C51_C_A	Guarantee the professional minimum wage	.702	.985	
C51_C_B	Awareness of all employees on the various components that constitute their wages	.812	.985	
C51_C_C	Process in place to ensure wages are not altered for disciplinary purposes	.783	.985	
C51_C_D	No delay in payment wages and allowances according to the contract of employment	.750	.985	
C51_C_E	Commitments to improve staff welfare	.827	.985	
C51_C_F	Give special allowances to employees under special work conditions	.694	.985	
C51_C_G	Additional remuneration for overtime work	.700	.985	

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	Staff employment			
C51_D_A	Provide fair job opportunities	.687	.985	
C51_D_B	Provide equitable job opportunities	.680	.985	
C51_D_C	All employees are formally contracted	.703	.985	
C51_D_D	The organisation abides by laws regarding the non-employment of child labour	.657	.985	
C51_D_E	Human resources policy in place to attract qualified staff	.718	.985	
C51_D_F	Human resource policy in place to retain qualified staff	.712	.985	
	Education and training			
C51_E_A	Appropriate training for the job, as well as specific OHS and W training	.771	.985	
C51_E_B	Employees are aware of relevant organisational regulations	.823	.985	
C51_E_C	Employees are aware of relevant organisational rules	.758	.985	
C51_E_D	Employees are aware of relevant organisational values	.793	.985	
C51_E_E	Career guidance plan in place for employees	.810	.985	
	Freedom of association and bargaining			
C51_F_A	Employees have the right of association and freedom to join trade unions	.711	.985	
C51_F_B	The organisation supports the existence of trade unions	.642	.985	
C51_F_C	The organisation supports the functions of trade unions	.650	.985	
C51_F_D	The organisation supports the maintenance of communication and dialog with trade unions at all times	.622	.986	
C51_F_E	An effective and confidential system in place for employee complaints	.787	.985	
C51_F_F	Negotiate employee benefits with trade unions	.630	.986	
C51_F_G	An effective and confidential procedure in place to manage employee complaints	.801	.985	
	Harmonious labour/management relationship			
C51_G_A	Employees representation and participation in corporate decision-making	.754	.985	
C51_G_B	Appropriate information channels to inform employees about any organisational changes	.760	.985	
C51_G_C	Employees who are experiencing personal problems receive appropriate support	.771	.985	
C51_G_D	Systems in place to manage employees who are sick and no longer able to continue in existing capacity	.741	.985	
	Human rights measures			
C51_H_A	Organisational values do not interfere with employee beliefs	.654	.985	
C51_H_B	Organisational values do not interfere with employee customs	.637	.985	
C51_H_C	Organisational values do not interfere with employee legal rights	.734	.985	
C51_H_D	Prohibit harassment of the employees	.668	.985	
C51_H_E	Prohibits abuse of the employees	.676	.985	
C51_H_F	Prohibits corporal punishment towards employees	.682	.985	
C51_H_G	Employees are not forced to work beyond what they are legally entitled to do	.749	.985	
C51_H_H	Human rights policies in place to assess and deal with human rights performance	.800	.985	

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
C51_H_I	Human rights procedures in place to assess and deal with human rights performance	.766	.985	
C51_H_J	Employees are provided with appropriate cultural environment	.740	.985	
C51_H_K	Employees are provided with appropriate cultural facilities	.730	.985	

APPENDIX E 6: Reliability Test: CSR activities associated with CSR shareholder dimension

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	Shareholder legal revenues			
C52_A_A	Maintain their shareholder revenues	.751	.945	
C52_A_B	Maintain their shareholder profits	.835	.942	
C52_A_C	Enhance their shareholder revenues	.752	.945	
C52_A_D	Enhance their shareholder profits	.747	.945	
C52_A_E	Increase in value of shareholder shares	.712	.946	
	Accurate disclosure of corporate status and development prospects			
C52_B_A	Accurate information on corporate operating performance	.781	.944	
C52_B_B	Accurate information on corporate financial performance	.800	.943	
C52_B_C	Accurate information on corporate sustainable development prospects (e.g. social and environmental performance)	.806	.943	
	Decision-making participation			
C52_C_A	Shareholders participation in corporate decision-making on major corporate activities	.733	.945	
C52_C_B	Shareholders participation in decision-making regarding corporate income distribution	.733	.945	
	Shareholder relationship management system			
C52_D_A	Establish the sense of being responsible to shareholders	.796	.943	
C52_D_B	Establish the sense of being an agency of shareholder relationship management.	.668	.948	0.**949**

APPENDIX E 7: Reliability Test: CSR activities associated with CSR customer dimension

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	Quality and safety of construction product			
C53_A_A	Quality of buildings and their components	0.713	0.966	
C53_A_B	Durability of buildings and their components	0.786	0.965	
C53_A_C	Attainment of legal requirements	0.668	0.966	
C53_A_D	Attainment of safety requirements	0.710	0.966	
C53_A_E	Elimination of potential safety threats to the customer	0.635	0.967	
C53_A_F	Elimination of potential safety threats to the community	0.731	0.966	
C53_A_G	The organisation employs a good record keeping system that enables easy analysis of all incidents during the construction process	0.787	0.965	
C53_A_H	The organisation employs a good record keeping system that enables easy response to all incidents during the construction process	0.777	0.965	
C53_A_I	Establish a project quality management system	0.849	0.965	
	Customer satisfaction			
C53_B_A	Complete project within budget	0.648	0.966	
C53_B_B	Complete project on time	0.756	0.966	
C53_B_C	The organisation has a policy to meet customers' needs	0.738	0.966	
C53_B_D	The organisation has a policy to meet customers' expectations	0.725	0.966	
C53_B_E	Procedures in place to manage customer complaints properly	0.761	0.966	
C53_B_F	Maintains an appropriate relationship with the supervision engineers and consultants	0.730	0.966	
	Customer service culture			**0.967**
C53_C_A	Has set up an appropriate asset management system (e.g. Construction maintenance and post-construction service)	0.851	0.965	
	Disclosure of true performance information of the organisation			
C53_D_A	Investment on developing innovative construction materials	0.733	0.966	
C53_D_B	Investment on developing innovative construction methods	0.827	0.965	
C53_D_C	Investment on developing innovative construction technology	0.773	0.965	
C53_E_A	Accurate information on corporate credit records	0.846	0.965	
C53_E_B	Accurate information on corporate finance records	0.789	0.965	
C53_E_C	Accuracy of credit records of compliance with contract	0.787	0.965	
C53_E_D	Accurate information on product quality credit records	0.786	0.965	
C53_E_E	Accurate information on corporate tax credit records	0.213	0.971	

APPENDIX E 8: Reliability Test: CSR associated with supplier and partner dimension

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	Maintain an appropriate partner relationship			
C54_A_A	Contractual obligations are met and suppliers are paid in timely manner	.736	.929	
C54_A_B	Contractual obligations are met and contractors are paid in timely manner	.711	.930	
C54_A_C	Mutual respect for laws	.738	.928	
C54_A_D	Mutual respect for regulations	.744	.928	
C54_A_E	Mutual respect for business ethics	.747	.928	
	Enhance communication with partners/suppliers			
C54_B_A	Disclose organisation-to-supplier (partner) policies and establish appropriate safeguards	.769	.926	
C54_B_B	Disclose organisation-to-supplier (partner) commitments and establish appropriate safeguards	.724	.929	**0.935**
C54_B_C	Effective communication with suppliers/partners	.842	.923	
	Promote CSR performance of partners and suppliers			
C54_C_A	Record the CSR commitment and performance of suppliers and partners	.694	.931	
C54_C_B	Assess the CSR commitment and performance of suppliers and partners	.739	.929	

APPENDIX E 9: Reliability Test: CSR activities associated with government dimension

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	Pay tax			
C55_A_A	Pay required tax payments as stipulated by law	.763	.781	
	Obey the requirements of laws and policy			
C55_B_A	Abide by the law (codes of conduct, anti-corruption, building regulation) and bear other obligations stipulated by the government	.835	.759	**0.851**
C55_B_B	Actively support the public welfare activities that government initiated	.575	.870	
	Provide employment opportunities			
C55_C_A	Provide employment opportunities for society	.640	.831	

APPENDIX E 10: Reliability Test: CSR activities associated with environment and resources dimension

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
Conservation of energy and resources				
C56_A_A	Water conservation and harvesting in construction process and building operation	.864	.974	
C56_A_B	Land use efficiency	.836	.975	
C56_A_C	Minimizing construction demolition waste to landfill and energy consumption	.825	.975	
C56_A_D	The organisation encourages responsible utilisation of resources	.750	.976	
C56_A_E	The organisation promotes the use of renewable resources and alternative energy systems	.865	.974	
C56_A_F	Scientific and technological innovation (energy conservation/reduce consumption of resources) during construction process	.797	.975	
C56_A_G	The organisation trains labour force to encourage resource saving	.828	.975	
C56_A_H	The organisation trains labour force pertaining to the awareness of environmental protection	.868	.974	
Environment protection				
C56_B_A	Construction practices that reduce pollution emissions (e.g. gas, dust, sewage, solid waste and other hazardous substances)	.849	.974	
C56_B_B	Impact evaluation of the construction project on the environment during project planning, construction, and operation stages	.823	.975	**0.976**
C56_B_C	Establishment of corporate environmental management system	.836	.975	
C56_B_D	Improvement of corporate environmental management system	.896	.974	
C56_B_E	Compliance with environmental laws and regulations in the construction industry	.784	.975	
C56_B_F	The organisation engages in R and D of building designs that improve the energy efficiency	.817	.975	
C56_B_G	The organisation engages in appropriate R and D that encourages green construction (e.g. green building design, green materials, new construction methods)	.837	.975	
C56_B_H	Appropriate waste disposal processes	.820	.975	
C56_B_I	Appropriate waste recycling processes	.825	.975	

APPENDIX E 11: Reliability Test: CSR activities associated with CSR community dimension

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	Project impact on community			
C57_A_A	Commitments to protect local environment	.723	.924	
C57_A_B	Minimise safety hazards to the community	.806	.916	
C57_A_C	Maintain good communication channels with neighbours	.702	.926	
	Build harmonious community			
C57_B_A	Participate in community activities and provide some financial support where appropriate	.855	.911	**0.930**
C57_B_B	Build community welfare facilities	.800	.917	
C57_B_C	Business promotes work opportunities to the local community	.734	.923	
C57_B_D	Communicate of corporate values and create long-term relationship with the local community	.821	.914	

APPENDIX E 12: Reliability Test: CSR activities associated with the CSR competitor dimension

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	Operation ethically			
C58_A_A	Establish self-regulatory mechanisms and abide by the law	.774	.899	
C58_A_B	Actively coordinate with construction-related associations	.828	.888	
C58_A_C	Actively comply with the construction-related regulations of associations	.815	.891	**0.916**
	Fair competition			
C58_B_A	Prohibit bribery and other unacceptable business practices	.731	.908	
C58_B_B	Boycott illegal behaviour in the construction market, maintain market order	.779	.898	

APPENDIX E 13: Reliability Test: CSR activities associated with the CSR NGOs dimension

Coding	Variables	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Total Cronbach's Alpha coefficient
	Social and public service strategy			
C59_A_A	Provide care and support for disadvantaged groups where appropriate	.698	.940	
C59_A_B	Business engages in public and cultural activities, support public education	.807	.928	
C59_A_C	Business provides funds and sponsorships where appropriate for public or social welfare purposes	.841	.923	**0.938**
C59_A_D	Business provides assistance wherever appropriate for public health activities	.908	.914	
C59_A_E	Business provides assistance wherever appropriate for disaster prevention activities	.832	.925	
C59_A_F	Business encourages its employees to take part in public welfare activities	.806	.928	

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University Capacity Development Grant (UCDG)

16th June 2020

Mr LL Wentzel
Department: Construction Management & Quantity Survey
Faculty: Engineering & Built Environment
Cape Peninsula University of Technology
PO Box 652
Cape Town
8000

Dear Mr Wentzel

Reference: UCDG - Improvement of Qualifications Programme (IQP): Outcome

We are pleased to inform you that your application PD-2020-000198 to support the completion of your doctoral study entitled: "A Corporate Social Responsibility Model to Achieve Sustainable Business Performance of SMEs in the South African Construction Industry" in the form of a "Lecturer Replacement/Study leave" grant in 2020/2021 has been approved.

Your UCDG Improvement of Qualification Programme funding comprises:

Item awarded	Amount
Replacement costs	R160 000 00
Research running costs	R 40 000.00
Total	R200 000.00

As a grantee, you are expected to accept, complete, sign, scan (or convert to PDF) and return the UCDG IQP grant conditions within one week after receipt of this award letter. For details on how to access the award, kindly contact Ms Phathiswa Swaartbool, at swaartboolp@cput.ac.za.

Wishing you all the best with your future research endeavours.

Yours sincerely,

Prof Dina Burger
Director: Research
Office of the Deputy Vice-Chancellor Research, Technology, Innovation and Partnerships (RTIP)

CC Faculty Assistant Dean (Acting): Ms T Stringer
    Faculty Research Coordinator: Prof T Ojumu
    Head of Department (Acting): Dr E Simpeh
    Supervisor: Dr JA Fapohunda

The Relationship Between the Integration of CSR and Sustainable Business Performance: Perceptions of SMEs in the South African Construction Industry

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Abstract Although studies relative to redirecting the unsustainable trajectory of small and medium enterprises (SMEs) in the South African construction industry (SACI) have been extensively conducted, current statistics show that 70%-80% of construction SMEs in the SACI fail within their first five years of existence, raising concerns regarding their sustainability. This paper attempts to address the negative trajectory by exploring the concept of corporate social responsibility (CSR), investigating the organisational perceptions of SMEs in the SACI relative to the relationship between the integration of CSR and sustainable business performance (SBP). Existing literature was used to provide an overview of this relationship taking into consideration the views of SMEs in both developed and developing countries. The empirical study was conducted utilising a quantitative research approach in the form of an online questionnaire survey. The research data was analysed using both descriptive (mean, standard deviation etc.) and inferential (Analysis of Variance ANOVA) statistics. Based on the research approach and data analysis, the findings revealed that SMEs in the SACI similarly perceive the relationship between the integration of CSR and SBP to be a positive one, implying that the practice of CSR within construction businesses should lead to SBP, and serve as a meaningful guide in addressing the unsustainable trajectory of SMEs in the SACI . The findings could guide government agencies such as the construction industry development board (cidb) to embed CSR education within contractor development programs, linking the adoption of CSR to the contractor grading system.