



**Impression management: Graphical representation in integrated reports of
state-owned entities in South Africa**

By

Ramatsobane Mahlako Maleka

Student number: 221098269

**A thesis submitted in partial fulfilment of the requirements for the degree of Master of
Accountancy (MACC)**

School of Accounting, Economics and Finance

College of Law and Management Studies

Westville

Supervisors: Josue Mbonigaba and Kiran Baldavoo

January 2021

Plagiarism Declaration

I, Ramatsobane Mahlako Maleka, declare that:

- (i) The research reported in this thesis is my original research, except where otherwise indicated.
- (ii) This thesis has not been submitted for any degree or examination at any other university.
- (iii) This thesis does not contain other persons' data, pictures, graphs, or additional information unless explicitly acknowledged as being sourced from other persons.
- (iv) This thesis does not contain other persons' writing unless explicitly acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:
 - a) their words have been re-written, but the general information attributed to them has been referenced; and
 - b) where their exact words have been used, their writing has been placed inside quotation marks, and referenced;
- (v) This thesis does not contain text, graphics, or tables copied and pasted from the internet unless specifically acknowledged, and the source is detailed in the thesis and in the references sections.



Ramatsobane Mahlako Maleka

221098269

Abstract

Graphical representation in the integrated report is a form of voluntary disclosure, by nature may be subject to bias or distortion by the managers of the preparing entities to yield favourable information or reduce the gravity of the financial information to the stakeholders. This situation prevails when limited evidence exists on how graphical representation may misrepresent the information in many ways, such as the types of graphs selected, the frequency of graphs presented, the quality of graphs presented, and how graphs are measured. Presenting the evidence in respect of these ways, analysing the patterns, frequencies, selectivity, quality, and distortion might alert stakeholders to pay attention to this information when reading these reports. The magnitude of maladministration and corruption in South Africa indicates that impression management (favourable bias) may hide the corruption or be perceived as performing well. The study addresses the usage of graphical representation in integrated reports of state-owned entities (SOEs) in South Africa and determines whether impression management is present. The quantitative research methodology was applied in undertaking this research study due to the objectivity of the method, following the descriptive type of research design. The positivist research paradigm was followed, with its primary focus to determine the genuine truth through a scientific method and objectivity. The study focused on the five years from 2017 to 2021 for entities listed in Schedule 2 (21 entities) of the Public Finance Management Act (PFMA). Only 15 of the 21 entities had integrated reports for the period 2017 to 2020, and only six of the 15 had integrated reports in 2021. Therefore, these 15 SOEs were selected as the sample with a limitation of nine SOEs' integrated reports not published in 2021. Using statistics, a trend analysis strategy was adopted to analyse and present the results. The findings are presented as graphs – with percentages, absolute numbers, and averages. The study found that all SOEs use graphs, selectivity is present. Other graph type is the most common graph used by SOEs, followed by Column graphs. SOEs are more likely to report on favourable information than unfavourable. Graph distortion was present in 75.8% of graphs. It is recommended that guidelines and standards of good graphs are adhered to, and entities to report on relevant and key information to the users of the integrated reports and not following a positive trend bias.

Keywords: Graphical representation, Impression Management, Integrated Reports, SOE, distortion, bias.

Acknowledgements

I would like to thank:

- God for giving me the strength and guiding me through my studies
- Professor Josue for your support and encouragement
- Kiran Baldavoo for your continued guidance and believe in me
- Jeanne Enslin and Ronel Gallie for providing me with editing services
- My family and friends for encouraging me and understanding when I needed to take time out to focus on my studies
- My kids for being my greatest cheerleaders
- My employer for granting me financial assistance and time off to complete my qualification.

Table of Contents

Supervisor's Permission to Submit	Error! Bookmark not defined.
Plagiarism Declaration	ii
Abstract	iii
Acknowledgements	iv
List of Tables	viii
List of Figures	ix
List of Acronyms and Abbreviations	x
CHAPTER 1 INTRODUCTION	1
1.1. Introduction	1
1.2. Background to the Study	2
1.3. Problem Statement	5
1.4. Objectives of the Study	5
1.5. Research Questions	5
1.6. Overview of the Methodology	6
1.7. Brief Literature Review and Contribution of the Study	6
1.8. Brief Overview of the Theories underpinning the Study	6
1.9. Significance of the Study	7
1.10. Study Structure	7
1.11. Chapter Summary	8
CHAPTER 2 LITERATURE REVIEW	9
2.1. Theoretical Literature	9
2.1.1. Stakeholder theory	9
2.1.2. Legitimacy theory	10
2.1.3. Agency theory	11
2.1.4. Corporate governance in South Africa	11
2.1.5. Integrated report	13
2.1.6. Impression management	16
2.2. Empirical Literature	18
2.2.1. Graphs as an impression management tool	18
2.2.2. Frequency of graphs in integrated reports	19
2.2.3. Selectivity of graphs in integrated reports	20

2.2.4.	Graph guidelines	21
2.2.5.	Graphical measurement and distortions	22
2.2.6.	Prior research findings	24
2.3.	Chapter Summary	30
CHAPTER 3 RESEARCH METHODOLOGY		31
3.1.	Research Paradigm	31
3.2.	Research Design	32
3.3.	Research Population	32
3.4.	Research Sample	32
3.5.	Data Collection Methods and Instruments	34
3.6.	Data Validity and Reliability	36
3.7.	Results Presentation and Analysis Plan	36
3.8.	Chapter Summary	38
CHAPTER 4 RESULTS PRESENTATION AND ANALYSIS		39
4.1.	Descriptive Statistics	39
4.2.	Frequency of Graphs	39
4.2.1.	Graphs per sector	39
4.2.2.	Graph types	40
4.3.	Selectivity of Graphs	41
4.3.1.	Graph use	41
4.3.2.	Presentation enhancement	42
4.4.	Graph Guidelines	43
4.5.	Graphical Measurement and Distortions	44
4.6.	Chapter Summary	48
CHAPTER 5 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS		49
5.1.	Summary of the Study	49
5.2.	Conclusion	50
5.3.	Limitations of the Study	51
5.4.	Recommendations	51
5.5.	Suggestions for Further Studies	51
REFERENCES		52
APPENDIX A: ETHICAL CLEARANCE		64
APPENDIX B: TURN IT IN REPORT		65

LIST OF TABLES

Table 1: Study structure	8
Table 2: Graph guidelines	21
Table 3: Summary of emerging market findings	29
Table 4: Schedule 2 state-owned-entities	33
Table 5: Sector analysis of graphical representation	40
Table 6: Graphical representation by graph types	40
Table 7: Usage of graphical representation	42
Table 8: Distribution of graphical representation	42
Table 9: Schedule 2 SOEs' compliance with guidelines of good quality graphs	43
Table 10: Key financial variable graphs measured for distortion	44
Table 11: Distortion distribution of GDI scores	45
Table 12: Material distribution of GDI scores	46
Table 13: Frequency distribution of GDI scores	47

LIST OF FIGURES

Figure 1: Different types of graphs	35
Figure 2: Graph with minimal distortion	45
Figure 3: Graph with material distortion	47

LIST OF ACRONYMS AND ABBREVIATIONS

CGISA	Chartered Governance Institute of Southern Africa
CGN	Corporate Governance Network
CSR	corporate social responsibility
EPS	earnings per share
ESG	environment, sustainability, and corporate governance
GDI	graph discrepancy index
IIRC	International Integrated Reporting Council
JSE	Johannesburg Stock Exchange
KING	King Report on corporate governance
PCAOB	Public Company Accounting Oversight Board
PFMA	Public Finance Management Act
RGD	relative graph discrepancy index
RQ	research questions
SOEs	state-owned entities
UK	United Kingdom
US	United States
WBCSD	World Business Council for Sustainable Development

CHAPTER 1

INTRODUCTION

1.1. Introduction

Traditional financial reporting relates to the analysis of the mandatory financial performance and presentation of financial activities of an entity as required by the applicable accounting standard such as International Financial Reporting Standards and Generally Accepted Accounting Principles (Abeysekera, 2013). Traditional financial reporting primarily focuses on providing information related to a company's financial aspects whilst ignoring non-financial information (Corvino, Doni, & Bianchi Martini, 2020). It is more concerned with shareholders/financiers of capital than diverse stakeholders (Flower, 2015). Therefore, traditional financial reporting doesn't satisfy all its users' needs due to the incomplete information provided, its technical nature, and its difficulty for uninformed users to understand (Manes-Rossi, 2018). However, it is a reliable measure of reporting as it is audited (Barker & Teixeira, 2018). The integrated report is a solution to the challenges posed by traditional financial reporting (Zhu et al., 2020) as it provides its users with an understanding of how the entity has performed, together with additional insights over and above the financial information provided (Simnett & Huggins, 2015; Surty, Yasseen, & Padia, 2018), with its primary objective being to analyse how value is created for stakeholders over the short, medium, and long term (IIRC, 2013), resulting in a meaningful and useful report primarily as a decision making tool.

Integrated reporting is a holistic way of reporting that is forward-looking compared to traditional financial reporting that is retrospective (Owen, 2013). Moreover, the integrated report combines narrative, numbers, and visual information to inform the users (Abeysekera, 2013). Narrative visuals explain specific social, intellectual, governance, and environmental elements better than numbers. These visuals include graphs, tables, charts, and diagrams (Cüre, Esen, & Çalışkan, 2020). The challenge with graphical representation is that it inadvertently affords an opportunity to misrepresent financial and non-financial information (De Klerk & Van Wyk, 2017; Zhang, 2020), which leads to management bias due to subjectivity and flexibility of graphs. Furthermore, graphs may be used for self-gain bias rather than accurate reporting (Brennan & Merkl-Davies, 2013; Godfrey, Mather, & Ramsay, 2003). Therefore, managers may receive incentives due to good performance

management, which motivates them to distort the information for personal interest, resulting in reporting bias.

Management bias presented in graphical representation can cause the information to be ineffective to provide users with an understanding of the integrated report (Beattie & Jones, 1992; Taylor & Anderson, 1986). This study sought to investigate how bias occurs in the integrated reports of SOEs in South Africa with a specific focus on the graphical representation contained in the integrated report. Maladministration and corruption in SOEs may be perceived as an incentive for SOEs to create bias/misstate financial and non-financial information.

1.2. Background to the Study

The PFMA (National Treasury, 1999) applies to various spheres of government, including SOEs. The objective of the PFMA is to ensure accountability, transparency, and sound management of the revenue, expenditure, assets and liabilities of the institutions to which this act applies (National Treasury, 1999). PFMA differentiates SOEs according to their functions, the degree of operating and strategic independence, and the mandate stated in each SOE's founding legislation. Schedule 2 of the PFMA lists 21 SOEs which are categorised as major public entities. These Schedule 2 SOEs are expected to finance their own operations and raise debt funding based on the strength of their respective balance sheets. Nevertheless, they are also expected to contribute towards the policy objectives of the government (Dawood, 2014). However, in recent years, these SOEs' reliance on government financial support in the form of guarantees and recapitalisations has exponentially increased due to, among other things, maladministration and corruption (National Treasury, 2021), which has placed additional pressure on the fiscus.

As one of the core objectives of the PFMA is accountability (National Treasury, 1999), the increased reliance of SOEs on government financial support, in the context of the current constrained fiscal environment, has increased the need for accountability to the public at large. They result in accountability, mismanagement of funds and corruption in SOEs being of concern to the taxpayer (Madonsela, 2018) as contributors to the state purse. Taxpayers' concerns are crucial and cannot be ignored (Cohen & Karatzimas, 2015). In effect, mismanagement of funds and corruption lead to accounting scandals (Dadawala, 2020), which questions the accountability and ethics of management and auditors. Governments at large respond to accounting scandals in various ways (Jones & Baumgartner, 2005) and

attempt to strengthen current controls that are in place (Negash, 2011). The United States issued the Sarbanes-Oxley Act of 2002 in response to the Enron scandal (Public Company Accounting Oversight Board [PCAOB], 2002). From a South African perspective, the Judicial Commission of Enquiry into Allegations of State Capture was established to investigate fraud, corruption, and accounting scandals in different spheres of government, including SOEs. The commission is a form of accountability and seeks to correct the wrongs of the past (Madonsela, 2016). It is clear that – a culture of lack of accountability has arisen within SOEs, where maladministration, corruption and fraud are ignored or hidden under a veil of perceived or tangible incompetence. Maladministration has been witnessed through the early collapse of South African Airways (Haghighattalab, Saghamanesh, Chen, & Mahini, 2018), and the mismanagement of ESKOM (Woode-Smith, 2019) which form part of Schedule 2 SOEs.

Integrated reporting was designed primarily for the private sector to enhance value to its users; nonetheless, it may be applied by the public sector as the reporting elements are similar. It enhances accountability and transparency by providing valuable information, which is a dire need in the public sector (Oprisor, Tiron-Tudor, & Nistor, 2016). Therefore, integrated reporting is seen as an accountability tool in the public sector (Bartocci & Picciaia, 2013). The need for greater accountability in the public sector stems from corruption, which increases the risk that information will be misstated, and result in poor reporting.

In addition, an integrated report aims to provide a consolidated approach to corporate reporting whilst improving the quality of information prepared, promoting efficiency, enhancing accountability and stewardship, and supporting value creation (International Integrated Reporting Council [IIRC], 2013). Therefore, the integrated report is a primary report for many entities (De Villiers, Rinaldi, & Unerman, 2014), with its key pillars based on the six capitals, namely financial, manufactured, intellectual, human, social and relationship, and natural capital which provide insight into the entities' resources and relationships (IIRC, 2013). The capitals are broad and widen the critical thinking about the value created by an entity (Adams, 2015), which are useful in decision making. The integrated report must communicate the capitals' material aspects (García-Sánchez, Raimo, Marrone, & Vitolla, 2020) to avoid a lengthy statement that doesn't create value.

Integrated reporting comprises financial and non-financial information, of which entities are required to link such information in the integrated report whilst creating value for the

stakeholders (Cheng, Green, Conradie, Konishi, & Romi, 2014). This information includes graphical representation, a voluntary method to disclose information in integrated reports, which provides a meaningful synopsis to the uninformed user and the user that prefers summarised presentation (Beattie & Jones, 1997; Kanbaty, Hellmann, & He, 2020). Notwithstanding that, good quality integrated reports are inclusive of graphical representation (Watson, 2012) to capture the users' attention.

Graphical representation refers to graphs and charts used to analyse and summarise the integrated report (Varachia & Yasseen, 2020). There are no criteria or standard graphs which should be included in the integrated report. It is solely at the discretion of the entity preparing the graphs. However, there are recommendations and guidelines (Frownfelter-Lohrke & Fulkerson, 2001; Mather, Mather, & Ramsay, 2005). In line with the agency theory, management determines the report's type and number of graphs (Neu, 1991). Graphs are a visual representation, which are intended to enhance communication and are more likely to be remembered than the written content (Beattie, Dhanani, & Jones, 2008; Beattie & Jones, 1992; Da Silva, Rodrigues, & Silva, 2019; Falschlunger, Eisl, Losbichler, & Greil, 2015). Furthermore, graphs assist the user in understanding and interpreting information presented and support their ability to make rational decisions (Beattie & Jones, 2002), saving them time.

Incorrect use of graphical representation may result in the distortion of information which is a form of impression management (Penrose, 2008). Impression management is a type of bias intending to influence the reactions of others favourably (Merkl-Davies, Brennan, & McLeay, 2011). Applying impression management contradicts the objective of the conceptual framework in that the purpose is to provide useful information to its users (Varachia & Yasseen, 2020). Distorted graphs are of no use for decision making. Further complexity is that graphical representation is not audited as it is considered other information (Halim, 2016), enhancing the management bias. This research is adapted from previous research by Falschlunger et al. (2015) and Varachia and Yasseen (2020). However, it focuses on the South African SOEs' perspective. Research assessing whether graphical representations are used to impose impression management has not been conducted for South African SOEs.

1.3. Problem Statement

Graphical representation is a form of voluntary disclosure in the integrated report, and there is no standard way of preparing this (Frownfelter-Lohrke & Fulkerson, 2001). Voluntary disclosures in their nature are subject to management selections (Halim, 2016). Therefore, they may be subject to bias or distortion by the managers of these entities to yield favourable information or reduce the gravity of the financial information to the stakeholders. This situation prevails when limited evidence exists on how graphical representation may misrepresent the information in many ways, such as the types of graphs selected, the frequency of graphs presented, the quality of graphs presented, and how graphs are measured. Presenting the evidence in respect of these ways, analysing the patterns, quality, frequencies, and other indicators might alert stakeholders to pay attention to this information when reading these reports. The evidence might also help prevent such practices as managers become aware of the public awareness of the evidence. Maladministration in SOEs in South Africa has been an issue of concern in South Africa. SOEs are not self-sufficient and rely heavily on funding the government is required to facilitate with government guarantees, making them prone to impression management of graphs. A South African study by De Klerk and Van Wyk (2017) found that impression management is present in graphs of mining companies, as well as a study by Varachia and Yasseen (2020) conducted on JSE listed companies in South Africa. Both studies established selectivity and distortion.

1.4. Objectives of the Study

This study investigated whether impression management through graphical representation is present in the integrated reports of SOEs in South Africa. The following were the objectives of the study:

- Assess the patterns of graph types by frequency.
- Assess the patterns of graph types by selectivity.
- Assess the quality of graphs of SOEs against recommended guidelines.
- Apply GDI to assess discrepancies in the information conveyed by graphs.

1.5. Research Questions

The following were the four RQ of this study:

RQ1: What is the frequency of SOE graph occurrence in integrated reports?

RQ2: What type of graphs are presented in the integrated reports of SOEs?

RQ3: Do SOE graphs presented in integrated reports comply with the guidelines of good quality graphs?

RQ4: Are SOE graphs included in integrated reports distorted?

1.6. Overview of the Methodology

The quantitative research methodology was applied in undertaking this research study due to the objectivity of the method, following the descriptive type of research design. The integrated reports are considered secondary data as the data is publicly available on the SOEs' websites, resulting in no interaction with the SOEs. The study focused on five years for entities listed in Schedule 2 of the PFMA. Integrated reports that are not publicly available for the five years would have limited the study, and therefore the SOEs were excluded from the sample. Graphs disclosed in the SOE integrated reports were analysed for frequency, selectivity, good quality, and distortion.

1.7. Brief Literature Review and Contribution of the Study

Historical research on graphical representation focused on impression management in, among other things, annual reports of companies in Europe (Falschlunger et al., 2015), Australia (Mather, Ramsay, & Serry, 1996), the United Kingdom (Beattie & Jones, 1992), the United States of America (Cho, Michelon, & Patten, 2012), Hong Kong (Courtis, 1997), and South Africa using top 100 listed companies (Varachia & Yasseen, 2020). Therefore, this research aimed to adapt prior research done from the South African SOE perspective. Few studies have been conducted on the research topic in developing countries, even fewer studies in South Africa. Research assessing whether graphical representations are used to impose impression management has not been conducted for South African SOEs. In addition, the reliance on graphical representation by the users of the integrated report provides relevance of this study in the South African SOE context.

1.8. Brief Overview of the Theories underpinning the Study

Three theories were identified as relevant to this study: stakeholder theory, legitimacy theory and agency theory. The stakeholder theory is applicable through its attempt to create value for stakeholders aligned to the primary objective of integrated reporting. The legitimacy theory is pertinent as it relates to perception and the need for acceptance which creates an

opportunity or pressure for management bias and manipulation. Where the agency theory problem exists, it too creates an opportunity for management bias for personal gain. The details on these theories are provided in Chapter 2 Literature Review.

1.9. Significance of the Study

The magnitude of maladministration and corruption in South Africa's SOEs provides relevance and significance to this study. Furthermore, the public's call for accountability dictates that integrated reports provide reliable, meaningful, understandable, and useful information. Limited research has been conducted on graphs in South Africa, and none to my knowledge from an SOE perspective. The study's outcome will benefit the preparers of integrated reports, users of integrated reports and academia. The preparers of integrated reports will better understand the impact of graphical representation used in the integrated reports as they may not be aware of the reporting bias or distortion. The study will benefit the users of integrated reports by being mindful of impression management, aware that bias and distortion exist, and alert for it. This study will benefit academia as additional literature in impression management and a graphical representation, filling the gap in the literature that currently exists from a South African perspective and forming a basis for future research.

1.10. Study Structure

This study has five chapters that are structured as follows:

Chapter 1 entails the Introduction, Background, Problem Statement, Objectives of the study, Research Questions, Significance of the study, and overview of the study.

Chapter 2 entails the Literature Review, which comprises theories applicable in this research, empirical literature, and details previous researchers' findings with the research objectives and research questions, which translates into investigation and analysis that this research endeavoured to achieve.

Chapter 3 entails the detail of the research methodology used in the study, highlighting the research paradigm, research design, population, data collection methods, instruments and management.

Chapter 4 provides the results and analysis of the study by interpretation of the data collected.

Chapter 5 summarises and concludes the study based on the results and significant findings, providing recommendations concerning the study and limitations of the study where applicable.

Table 1: Study structure

Chapters	Chapter detail
Chapter 1	Introduction
Chapter 2	Literature Review
Chapter 3	Research Methodology
Chapter 4	Results Presentation and Analysis
Chapter 5	Summary, Conclusions and Recommendations

1.11. Chapter Summary

This chapter introduced the topic of impression management: graphical representation in integrated reports of SOEs in South Africa. The chapter detailed the background of this study which formed the basis for the study, and clearly stated the problem statement, objectives, research questions and significance of the study.

The next chapter provides insights into theoretical and empirical literature on impression management of graphical representation.

CHAPTER 2

LITERATURE REVIEW

This chapter provides insights into research theories relating to integrated reporting and impression management. Furthermore, the chapter reviews the current empirical literature on integrated reports, impression management, graph usage, measurement, and distortion from both an international and South African perspective.

2.1. Theoretical Literature

This section highlights three research theories identified as applicable and relevant to integrated reporting and impression management: stakeholder theory, legitimacy theory, and agency theory. In addition, it provides in-depth insight into literature on corporate governance, integrated reporting and impression management.

2.1.1. *Stakeholder theory*

A stakeholder is defined as individuals/groups/companies interested in achieving an organisation, such an interest not confined to financial interest (Baumfield, 2016). Stakeholder theory accounts for all stakeholders and concludes that all stakeholders are impacted by an entity (Donaldson & Preston, 1995). The primary focus of stakeholder theory is to create value; stakeholder theory is more effective when all stakeholders' value is maximised (Freeman, Wicks, & Parmar, 2004). Value is defined differently for each stakeholder due to the varied interest each stakeholder has (Jensen, 2017); value is historical as well as forward-looking (Ruf, Muralidhar, Brown, Janney, & Paul, 2001) in the form of, among other things, growth, profitability and sustainability.

In addition, the stakeholder theory boosts the accountability of an entity to all stakeholders as it recognises that there are more users interested in an organisation than just the shareholders (Parmar et al., 2010). Therefore, a well-written integrated report will satisfy all stakeholders' needs. An integrated report's primary objective is to provide value for all its stakeholders, which aligns well with the stakeholder theory as different stakeholders derive value in different ways (Flower, 2015) due to the diverse interests of each stakeholder group (Freeman et al., 2004). Stakeholder theory can be linked to including non-financial information graphs in the integrated reports (Farneti, Casonato, Montecalvo, & De Villiers, 2019) as not all stakeholders are interested in financial information. Graphs that contain

distortion demonstrate an ineffective utilisation of graphs as a communication instrument in the integrated report (Varachia & Yasseen, 2020), which impacts the stakeholders' value.

2.1.2. Legitimacy theory

Legitimacy is defined as a perception, essentially how others perceive an organisation (Suchman, 1995). Legitimacy theory describes how an entity will continuously attempt to certify that they are perceived as operating within social standards (Georgiou & Jack, 2011), thus ensuring that there is an acceptance of a behavioural pattern by society. However, the perception may lead to bias when seeking acceptance from society (Spears, Jetten, & Doosje, 2001). In most cases, legitimacy will be achieved when an organisation's value system is aligned to that of a larger social system to which they belong (Lindblom, 1994), which is mainly influenced by external environments. However, due to dependency on external environments, there is no guarantee of long-term acceptance and value (García-Sánchez et al., 2020).

From the integrated report perspective, ensuring compliance with the integrated framework is a form of legitimacy as such a report is voluntary to prepare and disclose (Abeysekera, 2013). For emerging markets like South Africa, they disclose the report to gain investor confidence (Hadro, Klimczak, & Pauka, 2017). Additionally, legitimacy motivates voluntary reporting like the integrated report (Corvino et al., 2020). There is a perception that entities who report on ESG aspects are more acceptable to society.

Consequently, not preparing the integrated report may affect the legitimacy of entities (Camilleri, 2018), and this legitimacy, if lost, is difficult to regain or repair, which makes other entities choose to rather prepare the integrated report even though coming at a cost so as to avoid jeopardising legitimacy and reputation (Simnett & Huggins, 2015). Moreover, integrated reports are used by some entities for legitimacy reasons and, as a result, have become ceremonial rather than accountable, resulting in impression management for entities to present information that is favourable rather than unfavourable (Haji & Anifowose, 2016), as well as focusing on the financial capital and ignoring the other means even if they are material in nature which is a form of selectivity. Therefore, the legitimacy theory was applied to the study through the research objective selectivity, by entities electing to disclose favourable graphs instead of a balanced disclosure (Maama & Mkhize, 2020). Cho et al. (2012) confirmed this in their study.

2.1.3. *Agency theory*

Agency theory is defined as a relationship where one party carries out the mandate of another party, and these parties are referred to as agent and principal (Shapiro, 2005). Agent is referred to as the party that carries out the mandate whilst the principal owns such a mandate. As a result, managers of an organisation are required to carry out the mandate of stakeholders and make decisions that will maximise value for the stakeholders. Where such value is maximised, there will likely be greater benefits for all stakeholders (Tse, 2011). However, where there are failed relationships between managers and stakeholders or a deviation in the mandate to be carried out, there will be a disparity in value created (Worsham, Eisner, & Ringquist, 1997). These failed relationships occur when managers and shareholders' interests are not aligned (Camilleri, 2018; Sathyamoorthi, Baliyan, Dzimiri, & Wally-Dima, 2017), resulting in the agency problem.

Consequently, there are three main challenges with the agency theory, namely the needs of the agent and principal are not aligned, creating a mismatch of the mandate to be carried out, there is a mismatch in the risk appetite of the agent and principal, and it is difficult for the principal to ascertain the actions of the agent (Eisenhardt, 1989). As a result, managers who use impression management for personal gain conflict with the agency theory (Yasseen, Mohamed, & Moola-Yasseen, 2019). They would act in their interest instead of those of the shareholder.

As the managers are responsible for determining whether graphs are disclosed and to what extent (Halim, 2016), this gives rise to the agency theory problem where managers may engage selectivity bias through electing to disclose in the integrated report graphs that are favourable to the entity (Da Silva et al., 2019) and not disclosing unfavourable graphs. Moreover, the agency problem contradicts with accountability principle (Bartocci & Picciaia, 2013) as the needs of stakeholders at large are ignored for management bias and gain.

2.1.4. *Corporate governance in South Africa*

Companies are structured to include governing bodies/board members who provide oversight and strategic role (Paniagua, Rivelles, & Sapena, 2018). It is required that the board members have sufficient knowledge and skills to carry out their duties. However, they must be part of mentorship programmes to, inter alia, understand the role, manage ethics and

integrity, gain additional insights that will enable them to take decisions in areas unfamiliar to them (Corporate Governance Network [CGN], 2018). Good corporate governance refers to policies and procedures that are well implemented and result in a practical/efficient running of the company (Sathyamoorthi et al., 2017), resulting in minimal accounting scandals and the agency problem. The King Code plays a crucial role in contributing to good corporate governance (Corporate Governance Network [CGN], 2019) due to the ethical leadership role carried out by board members.

The KING Report has emphasised the significance of non-financial reporting, and KING II recommended companies to produce sustainability reports. KING III and KING IV advocate for companies to produce integrated reports (Mans-Kemp & Van der Lugt, 2020). CSR is defined as initiatives taken by the corporate sector to develop society and share in a country's socio-economic development (Umare & Ramteke, 1953). CSR is voluntary and has no contractual obligations (Haque, Salat, & Raju, 2015) to address societal needs and advocate for stakeholder theory.

In line with KING II recommendations, CSR is a sustainability report containing social and environmental information. It provides the user of the report with transparency on the company's activities (Cini & Ricci, 2018) that are not present in a traditional financial report. King III was released in 2009 and encouraged integrated reporting as it covers financial and sustainability factors (De Villiers, Rinaldi, et al., 2014; Dumay, Bernardi, Guthrie, & Demartini, 2016; Setia, Abhayawansa, Joshi, & Huynh, 2015), which enhances good corporate governance. Therefore, CSR is linked to integrated reporting.

Following from King III, on or after 1 March 2010, entities listed on the JSE were required to prepare integrated reports as part of their debt listing requirements whilst consolidating material elements of information separately reported elsewhere in different reports (Abeysekera, 2013; De Villiers, Rinaldi, et al., 2014; Haji & Anifowose, 2016; Owen, 2013; Soumillion, 2018). Entities that could not adhere to this requirement were expected to explain their reasons (Simnett & Huggins, 2015). This resulted in a prepare or explain the initiative.

The rationale for South Africa to adopt an integrated report was to appeal to international investors and enhance corporate governance (Haji & Anifowose, 2016). This legislative requirement was first seen in South Africa (Cheng et al., 2014), although many countries

and companies not listed on the JSE followed suit. For these reasons, South Africa has played a critical role in integrated reporting implementation (Du Toit, Van Zyl, & Schütte, 2017). The KING III required 400 JSE listed companies to prepare integrated reports or bestow reasoning for non-preparation. South Africa is considered a pioneer in integrated reporting (Soumillion, 2018); however, developing countries have not fully embraced integrated reporting and are slow to adopt it (Juma, Tumwebaze, & Orobia, 2018). Nevertheless, integrated reports have been subject to error and distortion (Setia et al., 2015), effectively questioning faithful presentation of disclosures.

Integrated reporting leads to good corporate governance (Corvino et al., 2020), and good corporate governance translates into long-term value for stakeholders. Non-financial information such as ESG managed well through good corporate governance practices leads to sustainable growth (Mervelskemper & Streit, 2017) that effectively improves shareholder value and profitability.

2.1.5. Integrated report

The objective of the integrated report is to provide users of the report with an understanding of how the entity has performed, giving users more insight into the entity than what is in the traditional financial report (Surty et al., 2018). Therefore, it fills the gap with traditional financial reporting (Simnett & Huggins, 2015). The integrated report ensures that an entity that creates and sustains value in the short, medium, and long term (IIRC, 2013) for all stakeholders aligns with the stakeholder theory.

In addition, the integrated report reports on historical and future performance focusing on the elements of the six capitals (Abeysekera, 2013), therefore providing transparency required by society, especially in a corruption-prone environment (Hess, 2019). An integrated report is intended to be the primary source of information relating to an entity, whether standalone or a separate report (IIRC, 2013). Hence the integrated report will enhance the understanding of users by providing a whole spectrum of information which is both financial and non-financial (Adams, 2015; De Villiers, Unerman, Rinaldi, Brown, & Dillard, 2014). The user can determine the value they want to derive from the entity and assess the entity risk to determine if they still want to associate with it. Integrated reporting can lead to effective disclosures (García-Sánchez et al., 2020). In addition to companies registered on the JSE, South African public entities such as universities and SOEs prepare

integrated reports (Guthrie, Dumay, Veltri, & Silvestri, 2015) due to the holistic approach and reporting the integrated report offers.

A good quality integrated report equally reports on good and bad news (Watson, 2012) without emphasising good news. In addition, reports on a balance of narrative information, tables, and graphs (Chartered Governance Institute of Southern Africa [CGISA], 2020) are material to avoid lengthy reports that are not relevant. Moreover, it has high-level summaries of material information and links the six capitals (Watson, 2012) to avoid providing unconnected information that is not integrated. Furthermore, reporting on a balance of historical and forward-looking information (World Business Council for Sustainable Development [WBCSD], 2014) ensures an overall balanced and good quality integrated report.

Stakeholders at large are calling for more inclusion of non-financial information in reporting (Coram, Mock, & Monroe, 2011; Corvino et al., 2020) in line with the holistic view of integrated reporting that improves the quality of reporting (Juma et al., 2018). Non-financial information is important to all stakeholders, including investors (Rezaee & Tuo, 2017), as it provides additional information that would not be contained in the traditional financial report.

Non-financial information can be disclosed as a standalone or consolidated report like the integrated report (Wingard & Vorster, 2001). However, the integrated report has been deemed superior (Mervelskemper & Streit, 2017). The benefits of non-financial reporting are communication, transparency, and accountability (Maama & Mkhize, 2020). Furthermore, non-financial information is required to be inclusive of non-financial indicators that complement financial reporting (Coram et al., 2011), such as measures present in the balanced scorecard (Frigo, 2012). These non-financial performance indicators are crucial in measuring performance as they impact decision-making (Coram et al., 2011) and are considered value relevant (Sievers, Mokwa, & Keienburg, 2013). However, non-financial performance indicators are more valuable when their outcome is negative rather than positive (Hutton, Miller, & Skinner, 2003) for effective decision making.

In a study done by Senne (2017) on the readability of integrated reports in South Africa, it was found that most of the readers do not read the full integrated report. They rather scan for specific sections on which they want to focus. This indicates that graphs will be of relevance

to this type of reader. An integrated report allows for graphical representation as it summarises information into segments (IIRC, 2013). Graphs are a form of visual information that helps users assess trends and patterns (Pierro, Bergel, & Ducasse, 2021). This is a benefit for the user of the integrated report as a considerable part of the human mind is designed to read visual information (Abeysekera, 2013). However, graphs don't provide much detail but rather a better impact on the integrated report's understanding.

The challenge with integrated reports is that voluntary type reports in their nature create an incentive for management bias (Rezaee & Tuo, 2017) through incentives they receive when the company performance is good. Secondly, there is no standardisation in how the integrated reports are prepared (Bose, 2020). Thirdly, the reports are inclined to be boilerplate or general, thus not providing information useful to stakeholders for sound decision making (Fisch, 2018). Additionally, integrated reporting comes at a cost that can affect an entity's bottom line (Haji & Anifowose, 2016). The cost relates to financial costs of preparation and remuneration cost should additional personnel be required (Mervelskemper & Streit, 2017).

Moreover, auditors do not assure the fair presentation of integrated reports, which creates a further opportunity for management bias (Beattie & Jones, 1992; Da Silva et al., 2019; Halim, 2016; Taylor & Anderson, 1986). Nevertheless, auditors treat the report as other information as stipulated in the international standards on auditing ISA 720 and are required to ensure that it is not materially inconsistent. Therefore, making impression management very difficult to detect and report on.

Haji and Anifowose (2016) and Surty et al. (2018) both highlighted that there had been an increase in the quality of the integrated report that companies produce over time. Consequently, there is a relationship between the value derived from the integrated report and usage of the integrated report. As quality increases, there is an increased likelihood that more users will drive value from the integrated report. The value will result in a useful integrated report to the stakeholder and enhance the user understanding of an entity (Landau, Rochell, Klein, & Zwergel, 2020). The benefits of a well prepared integrated report are, among other things, strong stakeholder engagements, improved decision making, better disclosures that increase trust within the entity, and interconnected reporting (Manes-Rossi, 2018). While integrated reports are useful when prepared well, they can be leased to issue when they are done to provide a wrong impression about the quality of the manager.

2.1.6. *Impression management*

Impression management emanates from social psychology, focusing on individual behaviour to influencing public perception (Wang, 2016), influencing the user's understandability to achieve a certain narrative (Provis, 2010). Impression management techniques may be used for various perspectives; however, from a financial reporting perspective, it is used to increase a company's reputation and acceptance by the public (Maama & Mkhize, 2020; Wang, 2016), either through narrative information or graphical information representation. Furthermore, impression management is used to breach the gap between a company's current performance and its desired performance (Leary & Kowalski, 1990).

Impression management about integrated reports relates to selecting and formatting the information presented to distort the user's understanding and perception of the entity's performance (Aerts & Yan, 2017; Godfrey et al., 2003; Leung, Parker, & Courtis, 2015). Moreover, impression management relates to the intentional omission of vital information and the intentional use of jargon (Leung et al., 2015) to increase the complexity of information presented and decrease the ability of the user to understand.

There are two types of users of the financial reports, namely informed users and uninformed users. Informed users refer to, among other things, management of the company and majority shareholders. Uninformed users refer to, among other things, employees of the company and minority shareholders (Cohen & Karatzimas, 2015). Impression management is used to convince uninformed users of the legitimacy of an organisation (Neu, 1991). Furthermore, impression management is used for various reasons such as: to reduce the impact of an organisation's damaged reputation, to restore confidence in the users of the integrated report, for legitimacy reasons and for personal gain (Brennan & Merkl-Davies, 2013).

A company's profitability is a factor in the likelihood of engaging in impression management (Yasseen, Moola-Yasseen, & Padia, 2017). Impression management is likely to be exercised by companies performing poorly or in crisis (Dvorski Lacković, Kovšca, & Lacković Vincek, 2017). A study by Pasko, Minta, Rudenko and Hordiyenko (2020) concurs with this. A study done in Northern Europe found that worst-performing companies focus more on the future to deviate attention from their results whilst top-performing companies focus on their current state to draw attention to their performance.

Another study on Portuguese companies revealed that publicly visible companies engage in impression management by emphasising favourable performance and less on unfavourable performance (Oliveira, Azevedo, & Borges, 2016). Furthermore, Courtis (1998) proved that a poor performing company that receives media traction is likely to obscure the integrated reports by making the report complex and difficult to read and understand. Therefore, observing the state of SOEs in South Africa makes them prone to engaging in impression management to improve the negative outlook that exists.

Accounting scandals intentionally manipulate financial statements, mainly relating to complex means to misuse funds, overstated revenues, understated expenditure, overstated assets, and understated liabilities (Omoriegbe & Ebhodaghe, 2020). Rezaee (2002) agreed with this definition as he stated that an accounting scandal is a deliberate misstatement or deliberate omission in the financial statements to deceive the users of financial statements.

Accounting scandals are mainly caused by various factors: management incompetence, management greed, fraud collaboration by management and auditors to intentionally misstate financial information (Pong, Fraser, Barlaup, Drønen, & Stuart, 2009). Collaboration seems to be the more prominent factor (Ajibolade & Ogundele, 2006). Management conducted fraudulent activities and used the auditors to cover up for them in their audit report by expressing a false audit opinion that misled the financial statements' users.

South Africa has had several accounting scandals over the past years that have put the accounting profession in disrepute, further making the public/users doubt the financial statements' competency, relevance, reliability, and accuracy, especially because these financial statements are audited (Van der Merwe, 2018). The preparers and assurers of financial reports are knowledgeable and technical. Thus, they should have controls in place to detect such scandals and put controls in place to mitigate scandals in the future.

According to Business Insider (2020), the accounting profession has failed the stakeholders repeatedly by members being involved in accounting scandals such as the following:

- Multiple Gupta scandals associated with KPMG, where the Gupta family used their influence to have their way within the corporate and public sector, thus impacting professional judgement and professional scepticism of accountants.

- Steinhoff associated with Deloitte, resulting in profits and assets inflated by R250 billion.
- VBS Mutual Bank, associated with KPMG, resulted in the looting of R2 billion due to fraud and corruption. KPMG signed off the fraudulent audit report
- Tongaat Hulett associated with Deloitte, which resulted in equity being overstated by R3.5 billion. This questions accounting policies adherence to accounting standards and correct application of the standard.

There is a relationship between impression management and accounting scandals in that information that contains impression management has a consequence of resulting in accounting scandals (Brennan & Merkl-Davies, 2013). The ultimate consequence of accounting scandals is their contribution to global recessions (Cronje, 2014).

2.2. Empirical Literature

This section reviews current literature on impression management of graphs as contained in the integrated reports in line with the research objectives.

2.2.1. Graphs as an impression management tool

Graphs utilised correctly are considered an effective and efficient form of communication, superior to narrative information, numbers, and tables due to their ability to capture and retain user attention (Ying Hill & Milner, 2003). The usage of graphical representation as an impression management tool occurs in three ways: selectivity, presentational enhancements and measurement distortion (Beattie et al., 2008), which result in reporting bias.

Selectivity refers to the decision to disclose graphs in the integrated reports, which occurs when graphs relating to positive information are disclosed juxtaposed with negative information (Cho et al., 2012; Kanbaty et al., 2020). Presentational enhancements are when certain graph features are used as an emphasising tool (Cüre et al., 2020). Measurement distortion refers to the asymmetry between the graph presented and the graph's data (Da Silva et al., 2019).

Falschlunger et al. (2015) investigated whether graphs are utilised for impression management by assessing 50 listed European companies' annual reports over seven years. Graphs relating to both financial and non-financial variables were analysed, and the study found that the most common financial variable graph disclosed in the annual report is

earnings followed by sales. The study determined the commonly used graph as column charts followed by pie charts. They established that graphs are likely to emphasise positive trends and conceal negative ones, and graph measurement was distorted mainly on column graphs. They also established that graphs influence users' perception of annual reports and do not improve their understanding of annual reports.

Steinbart (1989) highlighted criteria for graph accuracy, and indicated that values plotted on graphs relating to financial variables must equal the actual values in the annual financial statements. Additionally, the values plotted on the graphs should reflect the actual percentage change between the values in the graph. Graphs are useful to the users of integrated reports only to the extent that they are fairly presented (Mather et al., 1996) and free from distortion.

2.2.2. Frequency of graphs in integrated reports

Users of integrated reports are not keen on spending hours reading these integrated reports to understand an entity (Engelbrecht & Ballot, 2015). The inclusion of graphs aids in reducing time spent reading a report and ensuring that value is obtained from the report. Therefore, it is paramount to consider the reader during the preparation phase of graphs (Ying Hill & Milner, 2003) to determine their knowledge base to provide clear communication and avoid unnecessary complex graphs. According to the CGISA (2020), a good integrated report has a balance of narrative information supported by hyperlinks, tables, and graphs. However, some companies elect to ignore graphs in their integrated reports. Graphs included in the integrated report are prepared from data to simplify how information is presented (Tufte, 1983) and reduce narrative disclosures that go unnoticed (Cho et al., 2012). However, incorrect use of data to create graphs leads to misrepresentation and inconsistency (Cüre et al., 2020), which is ineffective reporting.

A study conducted over ten years found that the use of graphs in the integrated reports, which form part of the value creation process, increased (Ali, Lodhia, & Narayan, 2020). More and more preparers are electing to present graphs in the integrated reports. The benefit of graphical representation is that it leads the user to focus on specific information as compared to where there are no graphs (Rämö, 2011). Therefore graphs should not be used in isolation in the integrated reports but rather to enhance the written content (Falschlunger et al., 2015) to ensure that the user understands the integrated report.

There is no set number of graphs that should be included in an integrated report; graphs are included as a mechanism to engage and capture the user's attention of the integrated report (Frownfelter-Lohrke & Fulkerson, 2001). Studies have shown that graphs are used in more than 70% of large companies' integrated reports (Falschlunger et al., 2015) due to their ability to capture reader attention and focus whilst retaining the reader's attention (Halim, 2016). Therefore, making graphs a crucial communication tool (Kanbaty et al., 2020) enhances the integrated report's readability.

2.2.3. Selectivity of graphs in integrated reports

Selectivity is a form of bias, where a choice is made to report on what is favourable and less of what is unfavourable (Godfrey et al., 2003; Leung et al., 2015; Yasseen et al., 2019). About graphs, selectivity refers to the choice of graphs utilised for the integrated report and the utilisation of visual enhancements such as vivid colours and 3D shapes. These draw users' attention (Beattie & Jones, 2002). The choice of graphs is at the entity's discretion (Goundar, 2009) and should be based on the type of information being shared and measured, i.e. nominal, interval, ratio (Ying Hill & Milner, 2003). Favourable graphs may be visually appealing, whilst unfavourable graphs are ordinary (Mather et al., 2005). This causes visual enhancements. Therefore, favourable graphs are positive and unfavourable graphs are negative for the entity.

The strategic decision regarding the size and location of graphs is also used to draw the user's attention (Beattie & Jones, 1992). As a way of emphasising a positive bias, a preparer may create a specific focus with font, highlights and tone (Brennan & Merkl-Davies, 2013; Kanbaty et al., 2020). It's been established that bar graphs are an effective and efficient way to present variable financial information (Frownfelter-Lohrke & Fulkerson, 2001). However, graphs are costly to prepare (Courtis, 1997), and their benefits must exceed the cost to appeal to preparers of the integrated reports. Bar graphs are more informative in presenting financial information than line charts (Rosdini, Sari, Amrania, & Yulianingsih, 2020) due to them being appropriate for nominal data (Ying Hill & Milner, 2003). Graphic formatting relates to graph selection, determination of X and Y axes, the addition of titles and labels (Taylor & Anderson, 1986), which are essential in graph preparation. Graphs that are not appropriately prepared can mislead users, thus impairing their decision-making abilities (Penrose, 2008).

Presentational enhancements occur when there is more attention and emphasis on a positive outcome of an entity and obscuring the negative outcome to deviate the users' attention (Merkl-Davies et al., 2011; Muiño & Trombetta, 2009), which is an ineffective way of communicating (Beattie & Jones, 1999). Previous research has revealed that there is an association between graph selectivity and poor performance. The poorer the organisation's performance, the more impression management bias will be applied on the graphs (Cho et al., 2012) to reduce the impact of the poor performance.

2.2.4. Graph guidelines

The usage of graphs in the integrated report is solely at the entity's discretion in preparing the report as there are no set standards on how this should be done (Burgess, Dilla, Steinbart, & Shank, 2008; Ying Hill & Milner, 2003). The lack of standard information and guidelines creates an opportunity for impression management (Tufte, 1983). Professional accounting bodies and regulators do not guide how graphs should be constructed and to what standard (Courtis, 1997) and are likely to provide a standard only when a huge problem becomes evident from the lack of standards (Bartocci & Picciaia, 2013). The lack of standards contributes to subjectivity and a need for preparing graphs in the integrated report to apply judgment (Ying Hill & Milner, 2003). This subjectivity has been why some companies choose not to present graphs in their reports (Davison & Warren, 2017), although there is a gradual increase in companies presenting graphs.

Prior studies have been conducted on guidelines to be applied while preparing graphs to reduce the subjectivity (Courtis, 1997; Frownfelter-Lohrke & Fulkerson, 2001; Mather et al., 2005; Rosdini et al., 2020; Tufte, 1983; Ying Hill & Milner, 2003); however, for this study, the guideline of good graphs as outlined by Frownfelter-Lohrke and Fulkerson (2001) and Rosdini et al. (2020) were adapted as follows:

Table 2: Graph guidelines

Graphs have clear titles and labels
Numerical labels should be clearly shown at the end of the bar and not inside the bar
Graph borders must be defined
Graphs must have gridlines
Graphs must have a scale and a zero baseline
Graphs must avoid multiple scales

Graphs must have a maximum of 6 colours

Although many researchers have come up with guidelines (Frownfelter-Lohrke & Fulkerson, 2001; Tufte, 1983), the preparation entity's discretion is what leads to manipulation and reporting bias in the form of graph enhancements (Beattie & Jones, 1997). Graph enhancements create an illusion by making a graph appear in a way that is different to the actual graph (Cüre et al., 2020). Vivid graphs are eye-catching and draw user attention (Gelmini, Bavagnoli, & Comoli, 2016; Zhang, 2020), for which an opportunity exists to use vivid graphs in instances where the preparer of the graph wants to emphasise information contained in the graph and in contrast to deviate attention by shying away from vivid graphs. However, a vivid and colourful graph doesn't translate into a better graph than a dull looking graph (Engelbrecht & Ballot, 2015). A great graph is informative regardless of how it looks.

Where the guidelines of good graphs are not adhered to, there is an increased likelihood that the graph will be misleading and misrepresented (Pierro et al., 2021), which is of no value to the user of the integrated report, compared to where good quality graphs are prepared with guidelines so that they are meaningfully represented. Prior research by Rosdini et al. (2020) has proven that graphical representation without gridlines leads to bias due to the illusion created with the graph, making a bar/column graph appear to be similar even when it is actually different.

2.2.5. *Graphical measurement and distortions*

There are various ways in which graphical representation can be distorted, such as graphs with no base make changes in the graph appear greater than they are; graphs that avoid rate-of-change; using multi-amount scales is complex and not easily understood; use of irregular stratum at the top of the graph; graphs that are presented in the years that are favourable and omitted during unfavourable years; and time series reversed and extended scale ranges (Taylor & Anderson, 1986). Moreover, graph distortion makes the entity look good and suggests a favourable performance due to impression management (Cho et al., 2012; Mather et al., 2005).

There are different ways to determine and measure graph distortion, such as the lie factor, GDI, and RGD (Mather et al., 2005). The first such measure to be developed was the lie factor, the difference between the graph data and the actual data (Tufte, 1983). It is calculated

with the formulae: the size of effect shown on the graph \div size of the effect on data. A variation of the lie factor >1.05 and <0.95 indicates a material distortion.

The second measure is the GDI which was a modification of the lie factor and which assesses whether there is an indication of misstatement of a trend (Steinbart, 1989); GDI calculated as: $GDI = 100 \times [(a \div b) - 1]$, where a = percentage change presented in the graph, b = percentage change presented in the data. A variation of 0% of GDI suggests no distortion and constitutes a perfect graph; however, a 5% positive/negative variation shows minimal distortion (Tuft, 1983). Consequently, a 10% positive/negative variation is considered a significant distortion and is unacceptable (Beattie & Jones, 2002). It is evidenced in prior studies that GDI is the most used distortion measure.

In contrast to previous research, Mather et al. (2005) established that GDI is not an accurate distortion measure. Its lack of consistency and emphasis on trends may result in high sensitivity detected for minor changes in data, especially with negative scales or understatements. RGD was developed as an alternative measure to GDI. It brings in consistency and measures the height of the last column on a graph and the height that it should have been (Mather et al., 2005). RGD is calculated as $RGD = (g2 - g3) \div g3$, using the following parameters:

$g2$ = height of last column on the graph

$g3$ = the correct height of last column (if plotted accurately). Calculated as $g3 = (g1 \div d1) \times d2$

$g1$ = height of first column on the graph

$d1$ = value of first data point (first column)

$d2$ = value of last data point (last column)

An increase in RGD illustrates a favourable trend, and a decrease illustrates an unfavourable trend. A variation of 2.5% shows distortion as RGD's variation is equivalent to half of GDI's variation. The shortcoming of RGD is that it cannot be calculated if $g3$ is zero, although such occurrence is possible. The difference between GDI and RGD, according to Mather et al. (2005), is that GDI gives an impression of a measure of distortion whilst RGD gives a measure of distortion.

2.2.6. Prior research findings

Non-South African studies

A sample of 319 companies in the fortune 500 was selected to examine graphs in the annual reports. The frequency of graph occurrence in the annual report was calculated as 79% of the companies in the sample elected to present graphs in the annual reports (Steinbart, 1989). The commonly used graph type was bar charts representing 78% of graphs presented. Moreover, graph distortion was conducted using GDI as a measure and a materiality level of 10%, indicating a mean GDI score of 11% distortion of key financial variable graphs (Sales, income, and dividends). Furthermore, 26% of graphs were distorted with a discrepancy index of 10%. These results prove that significant distortion is present in graphs that will be inconsistent compared to the financial information in the financial statements.

Frownfelter-Lohrke and Fulkerson (2001) conducted a study on graph quality by selecting 74 companies as a sample over a period of 10 years, which resulted in a total of 270 annual reports and 2 270 graphs relating to both US companies and non-US companies. Seventy-nine percent of annual reports presented graphs, with non-US companies having on average 9.36 graphs and the South African company in the sample having no graphs. On average, more financial variable graphs were presented than non-financial. Graph distortion was tested and evidenced on the graphs with 81% average distortion on US companies and 173% average for non-US companies. In addition, 43% of graphs in the sample did not have a scale, and 17% of the graphs didn't have a zero baseline. Furthermore, 35% of the graphs were found to use multiple scales. This proves that graph quality was impaired as graphs did not follow the graph guidelines of good quality graphs, resulting in bias and distortion of presentation enhancements.

Selectivity bias in the choice of graphs was evidenced in the sustainability reports of US companies (Cho et al., 2012), with a primary focus on positive performance trends. Poorer social-performing companies disclosed more favourable graphs related to social aspects than companies with good social performance ratings. From a sample size of 77 companies, only 68 (88%) companies disclosed graphs in their sustainability reports that summed to 570 graphs, of which 451 graphs, 79.1%, disclosed favourable trends. RGD was used to measure distortion on graphs with a cut-off point of 2.5%. Therefore, any measure above or below 2.5% is considered to distort a graph. From a sample of 570 graphs, 125 graphs, 21.9%, were found to be distorted. Seventy-four graphs were favourably distorted, and 51 graphs were

unfavourably distorted. Therefore, there is clear evidence of impression management through selectivity bias and graph distortion.

In a study by Beattie and Jones (1992), 240 large listed UK companies' annual reports were examined for graph usage. Only 79% of the companies used graphs. The study found that companies that performed well with the EPS increase included graphs in the annual report that measured key financial variables as compared to those companies that had a decrease in EPS—resulting in 73% of companies with an increase in EPS emphasising the companies' good performance through the inclusion of key financial variable graphs of companies. With graph types, column graphs represented 64% of the graphs used. Moreover, GDI was used to measure graph distortion with an index of zero and a materiality level of 5%. They established that 30% of the key financial variable graphs (Sales, Profit, EPS, and Dividends per share) indicated measurement distortion, which amounted to 142 graphs, with 103 graphs showing a favourable distortion and 39 graphs showing an unfavourable distortion. The mean GDI score was calculated at 10.7%. Impression management is engaged through selectivity bias and graph distortion.

Jones, Melis, Gaia, and Aresu (2020) based their study on 46 European commercial banks' annual reports from different countries: Italy, France, Germany, UK, and Spain, for the period 2005 to 2010 of which the relevance of the period covered periods before and after the 2008 global financial crisis. The study focused on stock market performance graphs with 256 graphs for the said period. Selectivity of graphs was tested to establish whether there was a difference in the frequency of stock market performance graphs presented pre- and post-financial crisis periods. It was detected that graphs decreased on average by 79%. In comparison, the favourable graph presented decreased from 68% to 47% post-crisis as companies were affected by the global crisis. Line graphs were a favoured graph used with 84% average dominance. RGD was used as a measure of graph distortion with a materiality level of 2.5%, and 85% of the graphs were established to be distorted with an average mean calculated at 163.1% and a favourable distortion of 305.2%, which clearly shows that impression management was used to reduce the impact of the crisis on graphs.

A study of integrated reports related to the IIRC pilot programme was conducted by Melloni, Caglio and Perego (2017), resulting in a sample of 148 integrated reports from 2013 to 2014, of which 7% of the sample related to the African continent. It was discovered that poor

performing companies complicated their integrated reports making it difficult for the user to understand, deviating attention from the poor performance.

An Australian study was conducted relating to the use and presentation of graphs (Mather et al., 1996), comprising 143 listed companies and 44 non-profit entities inclusive of government. It was established that 80% of companies disclosed graphs in the annual reports, although listed companies (83%) included more graphs than the non-profit entities (73%). Selectivity was assessed for financial variables, and good performing companies were more likely to include key financial variable graphs than bad performing companies. This was evidenced by 71% inclusion of graphs where company profit increased as compared to 62% inclusion of graphs where company profit decreased. GDI was used to measure distortion with a 10% materiality level to determine the existence of graph distortion in the Australian listed companies, and 21.3% of key financial variables (Sales, profit, and dividends) were found to be distorted with 11.3% favourable and 10% unfavourable, the average/mean distortion calculated at 16%. For the non-profit entities, a materiality of 5% was used to determine distortion, and it was found that 32% distorted graphs favourably whilst 19% distorted the graphs unfavourably. The mean GDI was calculated at 105.6%, which is very high compared to the listed companies of 16%. The same sample was used by Mather et al. (2005). However, using RGD as a distortion measure with the materiality of 2.5%, which is equivalent to a GDI of 5%, it was proven that distortion changes when RGD is used as a measure of distortion compared to GDI. This resulted in a change in results for 14% of the graphs (34 graphs).

A study conducted in Hong Kong investigating whether graphs disclosed in the annual reports are effective or misleading was based on public companies listed on the stock exchange resulted in two samples of 364 annual reports (1992–1993) and 327 annual reports (1994–1995) for which samples were across 12 industrial sectors (Courtis, 1997). Only 38% and 35% of the companies in both samples included graphs in their annual reports. Therefore, the graphing environment is immature about other countries' studies, resulting in an average of 5.3 graphs and 4.98 graphs per company. Column charts were used more than other graphs at 62.5%, and the key financial variables reported were sales and profit. The lie factor was used to measure graph distortion with a variance of 5% that resulted in 52% of the graphs being distorted, and 72% of the companies had at least one graph not meeting

standards of good graph mainly relating to misuse of scales. Impression management was detected through selectivity, distortion, and presentational enhancements.

Da Silva et al. (2019) conducted a study on graph usage in company reports on 180 Brazilian companies from 1997 to 2014, amounting to 3 240 annual reports and 7 669 graphs. Graph selectivity was detected as 81% of the graphs disclosed were from companies that presented a profit. Furthermore, 68% of the graphs showed presentational enhancements (mainly in the form of 3D graphs).

Forty-nine Turkish companies were evaluated based on their sustainability index for 2018 to 2019 for impression management in graphs. The companies collectively had 502 graphs (Cüre et al., 2020) and 98% of the companies disclosed graphs. Vertical bar graphs (column graph) were the preferred type of graph, amounting to 41% of the graphs. Moreover, 77% of the graphs disclosed had a favourable trend which is a form of selectivity. RGD was used to measure distortion with a materiality level of 2.5%. Further, 55% of graphs in the reports were distorted of which 28% were favourably distorted. Therefore, selectivity and graph distortion were evidenced.

Farneti et al. (2019) examined the effect of social disclosures on the adoption of integrated reporting of New Zealand SOEs for 2009–2017 and detected that the disclosures decreased post-adoption of integrated reporting due to disclosures not being material. An integrated reporting framework requires companies to disclose material information relevantly.

South African research

With ESG reporting, a study was conducted in the South African mining sector on graphs, resulting in a sample of 87 integrated reports for the years 2010 to 2013 (De Klerk & Van Wyk, 2017) using qualitative research methodology. Eighty-six percent of integrated reports disclosed graphs with an average of 23 graphs per the report, and column graphs were more prominent totalling 53% of the graphs. GDI was used as a measure of distortion, and it was detected that 61% of graphs were favourably distorted and 39% not. Social graphs were reported on more than governance and environmental graphs, which highlights selectivity.

A South African study on the graph used in the integrated reports based on 98 JSE listed companies was conducted on 2017 annual reports, with 98% of such companies presenting graphs in their integrated reports collectively totalling 4008 graphs with an average of 40.9

graphs (Varachia & Yasseen, 2020) with column graphs representing 34% of graphs. Furthermore, 61.3% of the graphs disclosed were financial variable graphs, and 38.7% were non-financial variables. Key financial variables identified were sales, profit, earnings per share, and dividends per share; 82% of graphs did not have gridlines, and 14% of graphs were disclosed in reverse time sequence, which contradicts graph guidelines. GDI was used to measure distortion with materiality of 5%, which resulted in 68% of graphs being distorted – 57% of graphs were favourably distorted, and the average GDI was 134%. Companies do not always disclose quality graphs and in line with graph guidelines, and graph distortion exists. Therefore, impression management has proven to exist concerning graph usage and presentation.

Mans-Kemp and Van der Lugt (2020) examined the usefulness and quality of integrated reporting of 100 JSE listed companies over the period 2013–2018. They established that a high-quality integrated report is achieved with a strong ESG performance, high EPS, and high financial leverage.

Du Toit et al. (2017) reviewed integrated reports for the period 2012–2014 of four JSE listed companies for environmental, social, and ethical items and compared the results with a study done for the period 2009–2011. The study found a decline in the amount of information disclosed that relates to non-financial information

Surty et al. (2018) investigated integrated reporting trends of SOEs for 2013–2015 and established that 2013 and 2014 integrated reports were poor as they contained insufficient information. However, 2015 was found to be satisfactory in that it contained a sufficient amount of details. Thus, demonstrating that the amount of information disclosed increased over this period could still be improved to provide more details (good)/a large number of details (excellent).

Yasseen et al. (2017) examined JSE listed companies' narrative disclosures in the form of chairman's statements to determine the presence of impression management practices. Fifty most profitable and 50 least profitable JSE listed companies as of 31 December 2014 were selected as a sample. It was established that unprofitable companies use passive sentences more than profitable ones, and extremely unprofitable companies are less likely to engage in passive impression management. These findings contrast with those of Clatworthy and Jones (2006), from which this study was replicated.

Emerging market findings

South Africa, Brazil, China, and Turkey form part of emerging markets as ranked by the International Monetary Fund (Duttagupta & Pazarbasioglu, 2021), thus making their results highly comparable. The table below summarises the findings and results of the emerging markets which was used as a comparison tool concerning this study: this table is placed here before the chapter summary (Section 2.3) because it summarises the discussion.

Table 3: Summary of emerging market findings

Study	Origin	Number of reports	Graph frequency	Graph selectivity	Good graph quality	Graph distortion measure	Graph distortion Results
(Courtis, 1997)	Hong Kong	691 reports 1992 - 1995	36.5% column graph at 62.5%	34.8% of graphs relate to financial variables	48%	Lie Factor	52%
(Da Silva et al., 2019)	Brazil	3 240 reports 1997 - 2014	Range between 1.58 % and 9.33%	81% of graphs were from profitable companies	32%	N/A	N/A
(Cüre et al., 2020)	Turkey	98 reports 2018 - 2019	98% column graph at 41%	77% graphs of favourable trends	N/A	RGD	55%
(De Klerk & Van Wyk, 2017)	South Africa	87 reports 2010 - 2013	86% column graph at 53%	Social graphs	N/A	GDI	61%
(Varachia & Yasseen, 2020)	South Africa	98 2017	98% column graph at 34%	61.3% financial graphs	18%	GDI	68%

Contribution of this study to the literature

This study emphasises graph usage in the integrated reports from a South African public entity perspective which has not been done before. Current literature on integrated reports in South Africa focuses on narrative information of integrated reports and the readability of integrated reports. There is a gap in the literature as very few studies have been conducted on graph use in South Africa, and none have been conducted on public entities as studies

focus usually on private companies. The study will thus contribute to the improvement in the quality of graphs in the integrated report, through the awareness of impression management and understanding the impact of graph selectivity, having graphs of good quality and standard, and graphs that are free from distortion.

2.3. Chapter Summary

Graphs should not be summarised so that crucial information obtained in detail is lost but rather highlighted (Courtis, 1997). Graphs used effectively create value for the integrated report users, although the graphs can inadvertently allow misrepresenting financial and non-financial information, warranting the information misleading (Beattie & Jones, 1992). Moreover, management bias presented in graphical representation can cause the information to be ineffective to provide users with an understanding of the integrated report and for effective economic decision making (Penrose, 2008).

The prior studies range from different continents and countries. However, there is consistency in the findings and conclusions made. Firstly, where graph distortion was tested, all the results yielded distortion. What differs is the nature, extent, significance, and amount of distortion. Secondly, selectivity bias is evident from the graphs selected and companies electing to present favourable juxtaposition negative outcomes. With the limited studies conducted on the quality of graphs, studies show mixed results. Some reflect the poor quality contrasted to good. This finding is not surprising as there are no standards available to assess quality graphs. Nevertheless, presentation enhancements have been witnessed. Therefore, impression management in line with the research objectives and questions has been accomplished: frequency of graphs, selectivity of graphs, graph quality and graph distortion.

CHAPTER 3

RESEARCH METHODOLOGY

Chapter 2 entailed existing literature on integrated reporting, impression management and the use of graphs. The literature demonstrates the importance of graphs and the consequences of incorrect use, which impacts the value of the integrated report, faithful representation, and decision-making.

This chapter entails the research methodology selected to conduct the research study and the execution thereof, providing the detail in which the study was conducted, enlisting the strategies that were used for data collection, analysing data collected in response to the research question.

3.1. Research Paradigm

Research methods determine how a study will be conducted in response to the research problem and questions; two research methods exist, namely qualitative and quantitative (Taguchi, 2018). The type of research method applied is based on the study's nature, scope, and data type (Siedlecki, 2020). Qualitative research is flexible and more subjective than quantitative research (Bryman & Bell, 2018). Quantitative research is objective and requires quantifiable data collection in numerical form and analysis using statistical methods (Apuke, 2017) to get to a single reality that cannot be manipulated and that allows for easier comparison of data (Basias & Pollalis, 2018).

This study used the quantitative research method to investigate whether impression management of graphical representation is used in integrated reports of SOEs in South Africa. The quantitative approach was selected due to its objectivity (reduction in bias). More structured and large data was expected from this study as informed by the research objectives (Ragab & Arisha, 2018), which is in line with prior research.

The study followed the positivist research paradigm, primarily to determine the genuine truth through a scientific method and objectivity (Bryman & Bell, 2018). Positivism advocates for a single truth (Ragab & Arisha, 2018), making the study's outcomes replicable as objectivity and independence were maintained throughout, and results are factual generalisations. Moreover, positivism assumes that the researcher can be detached from their research resulting in a neutral observation (Khaldi, 2017). The paradigm was deemed appropriate for

this study as the study sought to investigate whether impression management exists in graphical representations of SOE integrated reports. The integrated reports were obtained directly from the SOE websites. The information is publicly available and requires no research participants, further enhancing objectivity (Khaldi, 2017), and a detachment from the research object.

3.2. Research Design

Research design indicates how data will be collected and analysed (Groenewald, 2004). This study followed a non-experimental research design using a descriptive research study. In non-experimental research, there is no manipulation of variables due to the independence and objectivity of research (Khaldi, 2017). Descriptive research requires the researcher to collect data about events, situations and conditions that occur in the present (Siedlecki, 2020), with the purpose to describe the graphs in the integrated reports by studying them. This study has done so by collecting SOE integrated reports and determining whether graphs are utilised as an impression management tool, which is in line with previous researchers (Cüre et al., 2020; Falschlunger et al., 2015; Varachia & Yasseen, 2020).

3.3. Research Population

For this research study, the focus was on Schedule 2 entities of the PFMA, which are the major public entities. There are 21 such entities. This research was based on the five years from 1 April 2016 to 31 March 2021. The significance of the period selected allows the impact of the change in administration (President, Cabinet and Parliament) in 2018 to be juxtaposed with the previous administration.

The research analysed whether the Judicial Commission of Enquiry into Allegations of State Capture or the COVID-19 pandemic impacted impression management. This approach is consistent with other researchers. The research period covered periods before the 2008 financial crisis and after the crisis (Jones et al., 2020), ensuring that the period is balanced and not biased.

3.4. Research Sample

The entire population of 21 SOEs was determined as an appropriate sample size as the population is less than 30 (Delice, 2010). SOE websites were inspected to determine whether integrated reports were prepared for the entire five-year period. The entire population

couldn't be used as a sample because not all 21 SOEs had integrated reports for the five years. The entities that didn't have integrated reports for at least four financial years were excluded from the sample and considered a study limitation. Table 4 lists the results that indicate only 15 SOEs prepared reports in the said period. Only six of the 15 SOEs had integrated reports for the full 5-year period. The remaining nine had integrated reports for four years, 2017 to 2020, as the 2021 integrated reports had not been finalised when the study was concluded. Therefore, 15 SOEs were selected for testing, which amounted to 66 integrated reports for five years instead of 75 integrated reports, notwithstanding that the number of graphical representations in each report varies. The sample size allowed for quality and adequate research due to the similar characteristics of Schedule 2 entities (Morse, 1991). The Schedule 2 SOEs are listed in Table 4.

Table 4: Schedule 2 state-owned-entities

Name of entity	Integrated reports prepared 2017–2021	Eligible for sampling
Air Traffic and Navigation Services Company	2017, 2018, 2019, 2020	Yes
Airports Company	2017, 2018, 2019, 2020, 2021	Yes
Alexkor Limited	2017, 2018, 2019, 2020	Yes
Armaments Corporation of South Africa	2017, 2018, 2019, 2020	Yes
Broadband Infrastructure Company (Pty) Ltd	2017, 2018, 2019, 2020, 2021	Yes
Central Energy Fund Pty (Ltd)	2017, 2018, 2019	No
DENEL	2017, 2018, 2019, 2020	Yes
Development Bank of Southern Africa	2018, 2019, 2020	No
ESKOM	2017, 2018, 2019, 2020, 2021	Yes
Independent Development Trust	2017, 2018, 2019	No
Industrial Development Corporation of South Africa Limited	2017, 2018, 2019, 2020, 2021	Yes
Land and Agricultural Bank of South Africa	2017, 2018, 2019	No
SA Broadcasting Corporation Limited	2017, 2018, 2019, 2020	Yes
SA Forestry Company Limited	2017, 2018, 2019, 2020	Yes

Name of entity	Integrated reports prepared 2017–2021	Eligible for sampling
SA Nuclear Energy Corporation	2017, 2018, 2019, 2020	Yes
SA Post Office Limited	2017, 2018, 2019, 2020	Yes
South African Airways Limited	2017	No
South African Express (Pty) Limited	None	No
Telkom SA Limited	2017, 2018, 2019, 2020, 2021	Yes
Trans-Caledon Tunnel Authority	2017, 2018, 2019, 2020	Yes
Transnet Limited	2017, 2018, 2019, 2020, 2021	Yes

3.5. Data Collection Methods and Instruments

The data source comprised the integrated reports of the 21 Schedule 2 entities for the financial years ending 31 March 2017 – 31 March 2021. Integrated reports of SOEs are publicly available on their respective websites, which are uploaded annually after such a report has been tabled in parliament by the SOE. No permission is required to access the integrated reports. The integrated reports are considered secondary data types of research instruments. Therefore, the study followed archival research as the integrated reports are maintained on the SOE websites (Mills & Helms Mills, 2018). The integrated reports are tabled in August; therefore, the March 2021 reports were only available from September 2021 onwards. However, 9 SOE's integrated reports were not finalised and published by 15 November 2021 and therefore considered a limitation of the study. Integrated reports of SOEs were downloaded directly from the SOEs websites, thus resulting in no interaction with the SOEs. During the data collection process, it was established that six of the SOEs did not have integrated reports for the entire five-year period and they were thus excluded from the sample and considered as a limitation of the research study, resulting in a sample of 15 SOEs.

Integrated reports for the five years were downloaded by the researcher from the respective websites, where available. The Integrated reports were downloaded in the year 2021 and saved on the researcher's laptop. The reports were in PDF format and impossible to manipulate. A Microsoft Excel spreadsheet was used to record all the required details obtained in the integrated reports as explained in the next sections.

Assessment of patterns of graph types by frequency

All graphs included in the integrated report were captured in Excel for the various years, detailing what type of graphs have been used in the integrated reports and the frequency thereof. Figure 1 illustrates the different types of graphs that were used to test the SOEs' types of graphs in the integrated reports. Another graph refers to any graph other than Column, Pie, Line, Bar, combined.



Figure 1: Different types of graphs

Assessment of the patterns of graph types by selectivity

Selectivity requires a detailed split of the graphs between non-financial and financial variables, with a further split of the economic variable to key financial variable graphs of sales and profit consistent with prior studies. In addition, a test of positive versus negative graphs was performed on the financial variable graphs using binominal probability.

Assessment of the quality of graphs of SOE against recommended guidelines

The financial variable graphs in the integrated reports were tested for quality in line with graph guidelines as outlined in Table 2 in Chapter 2. The applied guidelines have a straight answer of yes or no for precise findings.

Application of GDI to assess discrepancies in the information conveyed by graphs

The distortion test was conducted using GDI as it is the most commonly used method. The study adopted an acceptable variance for GDI as a 5% variance and a material variance of 10% and more.

3.6. Data Validity and Reliability

Data collected needs to be tested against validity and reliability to be meaningful to the research. Validity refers to the truthfulness of the findings and an assessment of whether the measurement indicator achieves the intended objective of producing an appropriate result for the specific data being tested (Bryman & Bell, 2018). Therefore, eliminating a mismatch of what you want to test and what you are testing. For this study, validity was addressed by obtaining integrated reports from the respective websites, testing the reports against the research questions, and analysing the data against measurement indicators (formulas and guidelines). Research questions were obtained from previous studies that ensured that the measurement indicators aligned with what was to be tested, thus assuring validity.

Reliability relates to whether the data collected is measurable or not and whether the research results can be repeated (Bryman & Bell, 2018). For the research to be repeated, measurement criteria need to be consistent. For reliability to be addressed, validity must first be guaranteed before considering reliability as its measuring concept. This research study's reliability is certain as data collected was from a secondary data and measurable, as seen in previous research and identified measurement criteria. Therefore, for this research, validity and reliability were achieved as this research is an adaptive type of research that has been tested and proven meaningful.

3.7. Results Presentation and Analysis Plan

Each SOE's integrated report was reviewed first to determine the presence of graphs in the reports. The integrated reports were analysed so that they were in a format that could be

reported on. A trend analysis strategy was adopted using statistics to analyse and present the results.

Statistical analysis was used to analyse the data collected as follows:

- Assess the patterns of graph types by frequency: Integrated reports were inspected to identify the frequency of graph occurrence and type of graphs used in the report. The graphs used in the integrated reports per SOE were counted and listed in Microsoft Excel. In assessing the type of graphs used in the integrated report, the different graphs (i.e. column, bar, pie chart etc.) used were assessed, thus listing (in Microsoft Excel) how many different types of graphs were used per SOE. Furthermore, average graphs usage was calculated per sector the SOE belongs to. This was summarised and presented as findings, listing how many graphs each SOE used in each report.
- Assess the patterns of graph types by selectivity: Selectivity was split into two tests. First, identifying the topics of graph selected in each report and assessing presentation enhancement. In assessing the topics of graphs used in the integrated report, the different variables (financial and non-financial) were assessed, thus listing (in Microsoft Excel) how many different types of graphs were used per SOE. Lastly, a binomial test was performed to test positive juxtaposed negative graphs for presentation enhancements.
- The binominal test is performed when there are only two options to a test, thus assessing the distribution of options (Kaempf, 1995). In this study, the positive juxtaposed negative graphs. Due to the test having two options, there was an equal probability of graphs being positive or negative. However, not all graphs would represent the probability of 50% negative graphs and 50% positive graphs. It resulted in a distribution calculated based on information with constant repetition (Skellam, 1948), graphs with constant positive or negative trends.
- Assess the quality of graphs of SOEs against recommended guidelines: There is currently no definition of what makes a good graph. Thus, a checklist of good graphs as listed in Table 2 was used to test whether graphs used in the integrated reports of SOEs comply with such guidelines and are of good quality, and don't lead to presentation enhancements.

- Apply GDI to assess discrepancies in the information conveyed by graphs: GDI was applied to measure distortion in graphs. The measurement distortion also tested positive distortion juxtaposed negative distortion.

As the study relied on secondary information analysis, the preparers of SOE integrated reports were not engaged determining the reasons for graph frequency, selectivity, quality, or distortion. The study, however, presents the findings objectively without bias. The findings are presented as percentages, absolute numbers, and averages (mean).

3.8. Chapter Summary

This chapter has described the researcher's methodology in conducting the study. It explained that the quantitative research methodology was applied to investigate impression management in the graphical representation in integrated reports of SOEs in South Africa. Secondary data (downloaded integrated reports) was used, the data was captured in Microsoft Excel and subsequently analysed.

Chapter 4 presents the findings of the study. The findings are based on the analysis of the data obtained from graphs in the integrated reports.

CHAPTER 4

RESULTS PRESENTATION AND ANALYSIS

Chapter 3 entailed the research methodology adopted in the study, highlighted the sample size, data collection methods and instruments, and provided an overview of how data was analysed when conducting the research and is presented in this thesis. This chapter presents the study's findings using descriptive statistics and also presents the interpretation of the research questions and objectives.

Add key findings as

4.1. Descriptive Statistics

The results indicate that all 15 SOEs (100%) used graphical representation in the integrated reports in the five-year period under review. The total number of graphical models in the integrated reports amounted to 2 612 graphs, equating to 174.1 charts per entity.

4.2. Frequency of Graphs

The frequency of graphs objective was analysed based on the sector of the SOE and type of graphs disclosed.

4.2.1. *Graphs per sector*

The 15 SOEs form part of seven sectors in government and Table 5 below illustrates a sector analysis of graph usage and number of SOEs. The public enterprise sector had the most graphs, which constituted 32.6% of the total graphs at 852 graphs, followed by the communications sector which constituted 28.7% with 749 graphs, followed by the transport sector at 13.1% with 368 graphs. These three sectors altogether contributed to 75.4% of the total graphs.

It was found that the Judicial Commission of Enquiry into Allegations of State Capture did not have an impact on the graph selectivity, as the average number of graphs per entity did not decrease or increase from 2018 after the Commission was established. However, the COVID-19 had an impact as SOEs disclosed less graphs in 2020 and 2021.

Table 5: Sector analysis of graphical representation

Sector	Number of entities in sector	Number of graphs used per sector	Percentage of graphs used per sector	Average graph usage per entity
Communications	4	749	28.7%	187.3
Defence	1	70	2.7%	70.0
Energy	1	83	3.2%	83.0
Public Enterprises	5	852	32.6%	170.4
Trade and Industry	1	359	13.7%	359.0
Transport	2	368	14.1%	184.0
Water and Sanitation	1	131	5.0%	131.0
Total	15	2612	100.0%	174.1

4.2.2. *Graph types*

The most common graph type used was the other graph (35.2%), as shown in Table 6, followed by the column (23.4%) and the pie chart (20.1%). Other graphs included any other graph type not listed in Table 6, for instance, area graphs, radar graphs, bubble graphs and scatter graphs. Other graphs are not straightforward and tend to be confusing to the reader.

In Table 3, the summary of emerging market findings, four out of the five companies found the column graph to be the most common graph (Cüre et al., 2020; De Klerk & Van Wyk, 2017), which contradicts the findings of this study, although column type graph is second most common graph type. Furthermore, 3.2% of the graphs had columns and lines in one graph that is difficult to interpret (Taylor & Anderson, 1986) and is often confusing and misleading.

Table 6: Graphical representation by graph types

Graph type	Total number of graphs	Percentage of graphs
Column	610	23.4%
Pie chart	526	20.1%
Line	92	3.5%
Bar	382	14.6%

Combined (columns and lines in one graph)	83	3.2%
Other	919	35.2%
Total	2612	100.0%

4.3. Selectivity of Graphs

Selectivity was tested by identifying the topics of graph selected in each report and assessing presentation enhancement.

4.3.1. *Graph use*

Table 7 shows that the SOEs used graphs to disclose both financial and non-financial information (Adams, 2015), taking cognisance of the importance of a holistic disclosure. More non-financial graphs, 74.1%, were disclosed than the financial graphs, 25.9%, perhaps due to the importance and significance of service delivery in SOEs. As much as it is important to provide feedback on financial performance, SOEs are accountable and responsible for service delivery, unlike the private sector. Non-financial graphs related to non-financial information, such as ESG, transformation, and procurement.

In comparison to prior studies, financial graphs of 25.9% are low. According to a study by Courtis (1997), financial graphs were found to constitute 34.8% of the total graphs, and Varachia and Yasseen (2020) found financial graphs disclosed to be 61.3%. Therefore, South African private companies disclose more financial variable graphs, whilst South African SOEs disclose more non-financial variable graphs.

The financial variables in this study were further split into two key financial variables (sales and profit/loss) and the other (any financial graph disclosed that is not relating to sales or profit/loss). The other category disclosed graphs relating to, among other things, expenditure, investments, debt, assets, cash flow. The other category of financial graphs was the most disclosed graphs at 17.8% and not the key financial variables of sales and profit loss, which is on par with prior studies (Varachia & Yasseen, 2020). Sales were the most disclosed key financial variable at 5.7%.

Table 7: Usage of graphical representation

Variable graph	Total number of graphs	Percentage of graphs
<i>Financial variable</i>	676	25.9%
Key financial variable - Sales	149	5.7%
Key financial variable - Profit/Loss	61	2.3%
Other	466	17.8%
<i>Non-financial variable</i>	1936	74.1%
Total Graphs	2612	100.0%

4.3.2. Presentation enhancement

To test the impression management of graphs, an analysis was performed on financial variable graphs with positive and negative trends testing presentation enhancements. Table 8 indicates that 57.5% of financial variable graphs included in the integrated reports showed a positive trend compared to 42.5% that showed a negative trend. A binomial test was conducted to test the positive juxtaposed negative trend. The results show a binomial probability of 0.031, showing a slight bias toward positive information. Therefore, SOEs are likely to report on financial variable information (cumulative probability was found to be 52.4%) favourable to them than unfavourable.

Table 8: Distribution of graphical representation

Financial graphs	Total number of graphs	Percentage of graphs	Binominal Z ratio
Financial variable graphs with positive trends	389	57.5%	-0.02 (=0.031)
Financial variable graphs with negative trends	287	42.5%	
Total financial graphs	676	100.0%	

4.4. Graph Guidelines

As presented in Table 2, graph guidelines were used to assess financial variable graphs' compliance with good graph guidelines. As illustrated in Table 9, the study found that the majority of the graphs, 95.7%, have clear titles and labels. Therefore, the graphs were precise, and the intention of the graph was established. Numerical labels that are shown inside the bar make it difficult to read the numbers (Frownfelter-Lohrke & Fulkerson, 2001). A total of 66.9% of the graphs showed numerical labels clearly and at the end of the bar and not inside the bar.

Graph borders were defined for 42.3% of the graphs. Thus, most of the SOEs are not complying with the guideline of defining graph borders. Graph gridlines assist the reader in seeing exactly what the value of the graph is (Rosdini et al., 2020). Only 39.8% of the graphs had significantly low gridlines and indicated non-compliance to good graph guidelines.

According to Taylor and Anderson (1986), good graphs avoid multiple scales, confusing, and interpretation may be intended for a different meaning. A total 88.5% of the graphs avoided multiple scales. Colourful graphs are eye-catching and appeal to the reader more than dull looking graphs (Engelbrecht & Ballot, 2015); 91.4% of the graphs had six colours or less, avoiding the obfuscation with colour.

Failure to comply with guidelines of good quality graphs leads to presentational enhancements (Ying Hill & Milner, 2003). It was found that 60.2% of the graphs have no gridlines, which translates to a potential of graph value misinterpretation. This is the only guideline where non-compliance was material. Therefore, the majority of the graph guidelines are adhered to, resulting in SOEs not using presentational enhancements as a means of distorting graphs.

Table 9: Schedule 2 SOEs' compliance with guidelines of good quality graphs

Guideline	Percentage of graphs
Graphs have clear titles and labels - Yes	95.7%
Graphs have clear titles and labels - No	4.3%
Numerical labels are clearly shown at the end of the bar and not inside the bar – Yes	66.9%
Numerical labels are clearly shown at the end of the bar and not inside the bar – No	33.1%

Graph borders are defined - Yes	42.3%
Graph borders are defined - No	57.8%
Graphs have gridlines - Yes	39.8%
Graphs have gridlines - No	60.2%
Graphs avoid multiple scales - Yes	88.5%
Graphs avoid multiple scales - No	11.5%
Graphs have a maximum of 6 colours - Yes	91.4%
Graphs have a maximum of 6 colours - No	8.4%
Total number of financial variable graphs assessed	676

4.5. Graphical Measurement and Distortions

GDI was used to measure distortion on key financial variable graphs using an acceptable variance of +/- 5% and a material variance at +/- 10%. Distortion was assessed on the key financial graphs amounting to 210 graphs. However, only 99 graphs could be used for GDI measurement as the graphs were either column or bar graphs. The remaining 111 graphs' GDI couldn't be calculated due to the nature of graphs, graphs being either pie charts, line charts or other graphs. Table 10 shows that 75.8% of the graphs were found to be distorted, which is in line with prior studies (Da Silva et al., 2019), and 24.2% of the graphs showed minimal or no distortion. Figure 2, measuring year on year revenue, is one of the graphs that was found to have minimal distortion

Table 10: Key financial variable graphs measured for distortion

Key financial variable measurement	Number of graphs	Percentage of distortion
Distorted	75	75.8%
No distortion/Minimal distortion	24	24.2%
Total	99	100.0%

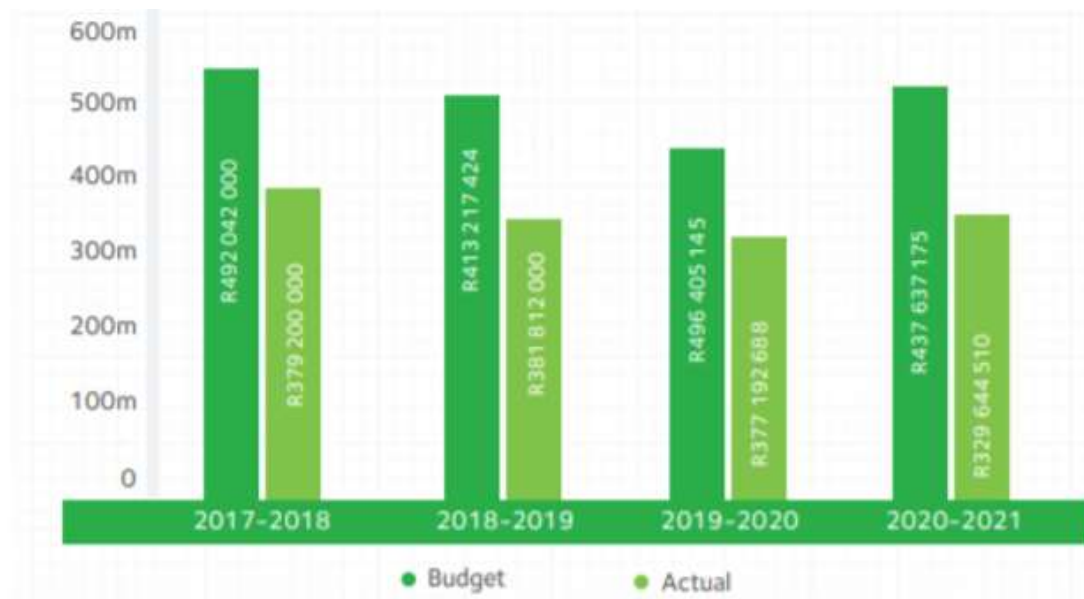


Figure 2: Graph with minimal distortion

Positive trend distortion occurs where good performance is emphasised, and poor performance is understated (reducing the impact of the negative information). Table 11 establishes that 60% of the key financial graphs that were distorted had a positive trend. Therefore, the SOEs are more likely to distort information that is in their favour indicating impression management bias. This finding is similar to that of the study by De Klerk and Van Wyk (2017), which found a 60.7% distortion of the favourable trends graphs, but contradicts that of the study by Cüre et al. (2020) that found only 28.6% favourable distortion. This indicates mixed results between the prior studies; however, the results are similar from a South African perspective. The binominal probability test shows that SOEs are more likely than not to distort graphs that show a positive trend, although the probability is not material. The cumulative probability for positive trend was found to be 53.7%.

Table 11: Distortion distribution of GDI scores

Key financial variable measurement	Total number of graphs	Percentage of graphs	Binominal Z ratio
Distortion of financial variable graphs with positive trends	59	59.6%	0.10 (=0.081)
Distortion of financial variable graphs with negative trends	40	40.4%	
Total Financial graphs	99	100.0%	

Table 12 provides an analysis of the graphs that were materially distorted, therefore with a variance of +/->10%. The results in Table 11 show that 61 of the 99 graphs have material distortion and that 60.7% of the material distortions show a positive trend. Varachia and Yasseen (2020) found a 57.1% favourable material distortion and Cüre et al. (2020) found a 62.6% favourable material distortion trend. Therefore, the results of this study are on par with those of prior studies. The binominal probability is insignificant, and the cumulative probability was calculated to be 54.5%. Figure 3 below, measuring sales performance, illustrates a graph with material distortion.

Table 12: Material distribution of GDI scores

Key financial variable measurement	Total number of graphs	Percentage of graphs	Binominal Z ratio
Distortion of financial variable graphs with positive trends	37	60.7%	0.12 (=0.104)
Distortion of financial variable graphs with negative trends	24	39.3%	
Total financial graphs	61	100.0%	



Figure 3: Graph with material distortion

A further analysis was made on the distortion to determine the frequency distribution of the GDI scores, as provided in Table 13. It was found that the highest frequency is at $-5 < \text{GDI} < 5$, which is no/minimal distortion at 24.2%, followed by $10 \leq \text{GDI} < 25$, which is a material distortion at 17.2%. Furthermore, 2% of the graphs showed a more than 1 000% distortion, indicating very significant impression management through bias. However, it may be due to a lack of knowledge and understanding of graph creation. The mean GDI score was calculated at 132.8%, and the material means GDI score at 215.4%, which is very high. The mean GDI is similar to Mather et al. (1996) at 105.6% and Varachia and Yasseen (2020) at 134%.

Table 13: Frequency distribution of GDI scores

GDI %	Number of graphs	Percentage of graphs
GDI \leq -1000	0	0.0%
-1000 < GDI \leq -500	0	0.0%
-500 < GDI \leq -100	1	1.0%
-100 < GDI \leq -50	8	8.1%
-50 < GDI \leq -25	2	2.0%
-25 < GDI \leq -10	11	11.1%
-10 < GDI \leq -5	6	6.1%
-5 < GDI < 5	24	24.2%
5 \leq GDI < 10	8	8.1%
10 \leq GDI < 25	17	17.2%
25 \leq GDI < 50	3	3.0%
50 \leq GDI < 100	4	4.0%
100 \leq GDI < 500	9	9.1%
500 \leq GDI < 1000	4	4.0%
1000 \leq GDI	2	2.0%
Total	99	100.0%

Mean GDI score (n=99) 132.8

Material Mean GDI score (n=61) 215.4

4.6. Chapter Summary

This chapter has provided and analysed the findings of the study. The key findings in the study are as follows:

- It was found that 100% of the SOEs disclose graphs in the integrated reports.
- The most common graph type to disclose is the other graph, and positive trend information is more likely to be disclosed than negative information.
- Most SOEs follow the graph guidelines except for the gridlines, as 60% of the graphs did not have gridlines.
- Distortion is present in the key financial graphs, especially positive trend information.

Chapter 5 summarises and concludes the study's findings and provides recommendations for future studies.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

It is clear that in earlier years graphs were used sparingly; however, more and more entities have been presenting graphs in recent years. In the emerging markets, environment column graphs are a preferred graph type. Where selectivity is investigated, results ascertain its existence. Studies shy away from determining the quality of graphs; however, where tested, quality is impaired at less than 50% quality. In contrast, distortion is present at above 50% regardless of which method is used to measure distortion.

Chapter 4 presented and analysed the findings of the study. This chapter concludes the study and summarises the findings relating to each research objective. Limitations present in the study are highlighted, areas for further studies are stipulated, and recommendations are provided.

5.1. Summary of the Study

This study aimed to analyse graphs by investigating whether impression management through graphical representation is present in the integrated reports of SOEs in South Africa. The study investigated 66 integrated reports of SOEs using descriptive statistics to establish this. Impression management was assessed through the frequency of graphs, selectivity of graphs, compliance with good graph guidelines and graph distortion. Binominal tests were used to further analyse the findings on the graphs.

The findings in relation to the research objectives are: The first research objective was to determine the use of graphs. This was done by determining whether SOEs disclose graphs, the type of disclosed graphs, and calculating the average number of graphs used in the integrated reports per SOE sector. From the sample of 15 SOEs, all SOEs disclosed graphs in the integrated reports, which amounted to 2 612 graphs. This suggests that the SOEs know the importance of summarising information, acknowledging the different types of readers of the integrated reports, and appreciating the importance of voluntary disclosure information compared to traditional reporting. The most common graph type disclosed was other graphs at 35.2%, followed by column graphs at 23.4%. The sector that disclosed the most graphs is the public enterprises sector, with 852 graphs, and the average number of graphs per SOE was calculated to be 174.1 graphs.

The second research objective assessed whether selectivity bias was present in the integrated reports assessing the graph use and presentation enhancement. It was found that SOEs prefer to disclose non-financial graphs at 74.1%, compared to financial graphs at 25.9% disclosure. Key financial graphs amounted to 8% of the total graphs, with sales graphs being more prominent at 5.7% in line with research by Cüre et al. (2020). Presentation enhancement was present as SOEs disclosed more positive trend graphs (389) than negative trend graphs (287), with this finding suggesting that impression management is present in the selection of graphs.

The third research objective assessed whether the graphs in the integrated reports adhered to the guidelines of good graphs. The majority of the graph guidelines were adhered to, except for graph gridlines and graph borders. A total of 60.2% of the graphs did not have gridlines, and 57.8% didn't have borders. Therefore, four of the good graph guidelines have mostly been adhered to. Graphs without gridlines and borders led to impression management, lack of gridlines more significantly than lack of borders as it is very difficult to interpret a graph accurately that doesn't have gridlines. Only 4.3% of the graphs didn't have clear labels, 33.1% of the graphs had labels inside the bar and not at the end, 11.5% of the graphs had multiple scales, and 8.4% had more than six colours which led to eye-catching graphs. Holistically, there is slight non-compliance with good graph guidelines

The last research objective relates to distortions, where key financial variable graphs were assessed and measured for distortions using GDI. An acceptable variance of $\pm 5\%$ was adopted, and a material variance of $\pm 10\%$. It was found that 75 out of 99 graphs were distorted, and 61 graphs were materially distorted. SOEs disclosed more graphs with positive trends distortion, 59.6%, than negative trends. The mean GDI score was calculated as 132.8%, and the material means GDI score as 215.4%. Both these statistics indicate very significant distortion that translates into impression management on the graphs, particularly on positive trend graphs.

5.2. Conclusion

The research objectives and questions set out in the Introduction have been responded to and concluded upon. The research methodology as documented was adequately followed. Impression management was present in the graphs of SOEs through selectivity, presentation enhancement and measurement distortions. This study confirms previous studies by De Klerk and Van Wyk (2017) and Varachia and Yasseen (2020) conducted in South Africa

that found that impression management is present in graphs used in integrated reports. What differs is the extent of the bias.

5.3. Limitations of the Study

The sample size referred to entities listed in Schedule 2 of the PFMA, which indicates a limitation of the study as not all South African SOEs or companies were considered. Therefore, the results of this study may not be representative of private companies. Any other variables impacting impression management not mentioned in this study were not considered. Narrative information and tables in the integrated reports were not considered when undertaking this study.

There is very little research done on the impression management of graphs in South Africa. The available research was incorporated in the study and supplemented with research from emerging markets.

5.4. Recommendations

The findings indicate that there is impression management on graphs. The following recommendations are outlined to reduce impression management. Firstly, ensuring that guidelines and standards of good graphs are adhered to. Secondly, reporting on relevant and key information to the users of the integrated reports and not following a positive trend bias. Lastly, affiliating with graph measurement standards and understanding distortion: not ignoring the relationship between the percentage change in the value of the data and the percentage change presented in the graph. There are limited studies on graphs performed in the African continent and specifically in South Africa. This is a developing area for future research.

5.5. Suggestions for Further Studies

This study can be extended in future studies to determine the extent of impression management of graphs to the reader of the integrated report and determine whether the preparers of the integrated reports are aware of the impression management, therefore assessing whether the bias was intentionally erroneous. Furthermore, similar studies could be conducted in South Africa on both the public and private sectors as very little research has been done on graphs.

REFERENCES

- Abeysekera, I. (2013). A template for integrated reporting. *Journal of Intellectual Capital*, 14(2), 227-245.
- Adams, C. A. (2015). The international integrated reporting council: a call to action. *Critical Perspectives on Accounting*, 27, 23-28.
- Aerts, W., & Yan, B. (2017). Rhetorical impression management in the letter to shareholders and institutional setting: A metadiscourse perspective. *Accounting, Auditing & Accountability Journal*, 30(2), 404-432.
- Ajibolade, S., & Ogundele, B. (2006). A cultural perspective of financial disclosures in Nigerian corporate financial statements. *The Nigerian Accountant*, 39(3), 49-62.
- Ali, I., Lodhia, S., & Narayan, A. K. (2020). Value creation attempts via photographs in sustainability reporting: a legitimacy theory perspective. *Meditari Accountancy Research*, 29(2), 247-263.
- Apuke, O. D. (2017). Quantitative research methods: A synopsis approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 33(5471), 1-8.
- Barker, R., & Teixeira, A. (2018). Gaps in the IFRS conceptual framework. *Accounting in Europe*, 15(2), 153-166.
- Bartocci, L., & Picciaia, F. (2013). Towards integrated reporting in the public sector. In Busco, C., Frigo, M., Riccaboni, A., & Quattrone P. (eds), *Integrated Reporting* (pp. 191-204). Cham.: Springer. https://doi.org/10.1007/978-3-319-02168-3_12
- Basias, N., & Pollalis, Y. (2018). Quantitative and qualitative research in business & technology: Justifying a suitable research methodology. *Review of Integrative Business and Economics Research*, 7(1), 91-105.
- Baumfield, V. S. (2016). Stakeholder theory from a management perspective: Bridging the shareholder/stakeholder divide. *Australian Journal of Corporate Law* 187, 31. <https://ssrn.com/abstract=2864191>
- Beattie, V., Dhanani, A., & Jones, M. J. (2008). Investigating presentational change in UK annual reports: A longitudinal perspective. *The Journal of Business Communication*, 45(2), 181-222.
- Beattie, V., & Jones, M. J. (2002). Measurement distortion of graphs in corporate reports: an experimental study. *Accounting, Auditing & Accountability Journal*, 15(4), 546-564.

- Beattie, V., & Jones, M. J. (1999). Australian financial graphs: An empirical study. *Abacus*, 35(1), 46-76.
- Beattie, V., & Jones, M. J. (1997). A comparative study of the use of financial graphs in the corporate annual reports of major US and UK Companies. *Journal of International Financial Management & Accounting*, 8(1), 33-68.
- Beattie, V., & Jones, M. J. (1992). The use and abuse of graphs in annual reports: theoretical framework and empirical study. *Accounting and business research*, 22(88), 291-303.
- Bose, S. (2020). Evolution of ESG reporting frameworks. In Esty, D. C., & Cort, T. (eds), *Values at Work* (pp. 13-33). Cham.: Palgrave Macmillan.
- Brennan, N. M., & Merkl-Davies, D. M. (2013). Accounting narratives and impression management. In Jack, L., Davison, J., & Craig, R. (eds.) *The Routledge companion to accounting communication* (pp. 109-132). London: Routledge.
- Bryman, A., & Bell, E. (2018). *Business research methods*. Oxford: Oxford University Press.
- Burgess, D. O., Dilla, W. N., Steinbart, P. J., & Shank, T. (2008). Does graph design matter to CPAs and financial statement readers? *Journal of Business & Economics Research*, 6(5). Retrieved from <https://doi.org/10.19030/jber.v6i5.2423>
- Business Insider. (2020). The biggest South African business scandals over the past decade. *Buiness insider South Africa*. Retrieved from <https://www.businessinsider.co.za/the-top-south-african-business-scandals-the-past-decade-2020-1>
- Camilleri, M. A. (2018). Theoretical insights on integrated reporting: The inclusion of non-financial capitals in corporate disclosures. *Corporate Communications: An International Journal*, 23(4), 567-581.
- Chartered Governance Institute of Southern Africa (CGISA). (2020). CGISA Integrated Reporting Awards 2020: The resilience test Judges' report. South Africa: CGISA.
- Cheng, M., Green, W., Conradie, P., Konishi, N., & Romi, A. (2014). The international integrated reporting framework: key issues and future research opportunities. *Journal of International Financial Management & Accounting*, 25(1), 90-119.
- Cho, C. H., Michelon, G., & Patten, D. M. (2012). Impression management in sustainability reports: An empirical investigation of the use of graphs. *Accounting and the Public Interest*, 12(1), 16-37.
- Cini, A. C., & Ricci, C. (2018). CSR as a driver where ESG performance will ultimately matter. *Symphonya: Emerging Issues in Management*, 1, 68-75.

- Clatworthy, M. A., & Jones, M. J. (2006). Differential patterns of textual characteristics and company performance in the chairman's statement. *Accounting, Auditing & Accountability Journal*, 19(4), 493-511.
- Cohen, S., & Karatzimas, S. (2015). Tracing the future of reporting in the public sector: introducing integrated popular reporting. *International Journal of Public Sector Management*, 28(6), 449-460.
- Coram, P. J., Mock, T. J., & Monroe, G. S. (2011). Financial analysts' evaluation of enhanced disclosure of non-financial performance indicators. *The British Accounting Review*, 43(2), 87-101.
- Corporate Governance Network (CGN). (2019). *Key issues for governing bodies to consider*. CGN.
- Corporate Governance Network (CGN). (2018). *Mentorship for governing body members*. CGN.
- Corvino, A., Doni, F., & Bianchi Martini, S. (2020). Corporate governance, integrated reporting and environmental disclosure: Evidence from the South African context. *Sustainability*, 12(12), 4820.
- Courtis, J. K. (1998). Annual report readability variability: tests of the obfuscation hypothesis. *Accounting, Auditing & Accountability Journal*, 11(4), 459-472.
- Courtis, J. K. (1997). Corporate annual report graphical communication in Hong Kong: effective or misleading? *The Journal of Business Communication*, 34(3), 269-284.
- Cronje, C. (2014). Corporate accounting scandals. *Word and Action= Woord en Daad*, 53(423), 15-17.
- Cüre, T., Esen, E., & Çalışkan, A. Ö. (2020). Impression management in graphical representation of economic, social, and environmental issues: An empirical study. *Sustainability*, 12(1), 379. Retrieved from <https://doi.org/10.3390/su12010379>
- Da Silva, K. D. C., Rodrigues, F. F., & Silva, C. A. T. (2019). Impression management using graphical resources in Brazilian company reports. *International Journal of Accounting and Finance*, 9(1), 1-27.
- Dadawala, V. (2020). What we can learn from the Gupta brothers. *Safundi*, 21(4), 486-492.
- Davison, J., & Warren, S. (2017). Visual methodologies for accounting and accountability. In *The Routledge companion to qualitative accounting research methods* (pp. 112-128): Routledge.
- Dawood, G. (2014). State-owned enterprises and quasi-fiscal activities in South Africa. Cape Town: International Budget Partnerships.

- De Klerk, M., & Van Wyk, L. (2017). *Impression management and the use of graphs in integrated reports of South African mining sector*. Southern African Accounting Association.
- De Villiers, C., Rinaldi, L., & Unerman, J. (2014). Integrated reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing & Accountability Journal*, 27(7), 1042-1067.
- De Villiers, C., Unerman, J., Rinaldi, L., Brown, J., & Dillard, J. (2014). Integrated reporting: On the need for broadening out and opening up. *Accounting, Auditing & Accountability Journal*, 27(7), 1120-1156.
- Delice, A. (2010). The sampling issues in quantitative research. *Educational Sciences: Theory and Practice*, 10(4), 2001-2018.
- Donaldson, T., & Preston, L. (1995). The stakeholder theory of the corporation: Concepts, evidence, and implications. *Academy of management Review*, 20(1), 65-91.
- Du Toit, E., Van Zyl, R., & Schütte, G. (2017). Integrated reporting by South African companies: a case study. *Meditari Accountancy Research*, 25(4), 654-674.
- Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P. (2016). Integrated reporting: A structured literature review. *Accounting Forum*, 14(3). Retrieved from <http://dx.doi.org/10.1016/j.accfor.2016.06.001>
- Duttagupta, R., & Pazarbasioglu, C. (2021). *Miles to go: The future of emerging markets*. Retrieved from <https://www.imf.org/external/pubs/ft/fandd/2021/06/the-future-of-emerging-markets-duttagupta-and-pazarbasioglu.htm>
- Dvorski Lacković, I., Kovšca, V., & Lacković Vincek, Z. (2017). *A literature review on impression management techniques usage in financial reporting*. Paper presented at the BEE 2017 Conference papers, 112-116.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57-74.
- Engelbrecht, L., & Ballot, C. (2015). *Analysis: Beyond the integrated report*. Retrieved from <https://www.accountancysa.org.za/analysis-beyond-the-integrated-report/>
- Falschlunger, L. M., Eisl, C., Losbichler, H., & Greil, A. M. (2015). Impression management in annual reports of the largest European companies. *Journal of Applied Accounting Research*, 16(3), 383-399.
- Farneti, F., Casonato, F., Montecalvo, M., & De Villiers, C. (2019). The influence of integrated reporting and stakeholder information needs on the disclosure of social information in a state-owned enterprise. *Meditari Accountancy Research*, 27(4), 556-579.

- Fisch, J. E. (2018). Making sustainability disclosure sustainable. *GEO LJ*, 107, 923-966.
- Flower, J. (2015). The international integrated reporting council: a story of failure. *Critical Perspectives on Accounting*, 27, 1-17.
- Freeman, R. E., Wicks, A. C., & Parmar, B. (2004). Stakeholder theory and “the corporate objective revisited”. *Organization Science*, 15(3), 364-369.
- Frigo, M. L. (2012). The balanced scorecard: 20 years and counting. *Strategic Finance*, 94(4), 49-53.
- Frownfelter-Lohrke, C., & Fulkerson, C. L. (2001). The incidence and quality of graphics in annual reports: An international comparison. *The Journal of Business Communication*, 38(3), 337-357.
- García-Sánchez, I.-M., Raimo, N., Marrone, A., & Vitolla, F. (2020). How does integrated reporting change in light of COVID-19? A Revisiting of the content of the integrated reports. *Sustainability*, 12(18), 7605. Retrieved from <https://doi.org/10.3390/su12187605>
- Gelmini, L., Bavagnoli, F., & Comoli, M. (2016). On a new impression management technique. *Global Review of Accounting and Finance*, 7(1), 144-164.
- Georgiou, O., & Jack, L. (2011). In pursuit of legitimacy: A history behind fair value accounting. *The British Accounting Review*, 43(4), 311-323.
- Godfrey, J., Mather, P., & Ramsay, A. (2003). Earnings and impression management in financial reports: The case of CEO changes. *Abacus*, 39(1), 95-123.
- Goundar, N. (2009). *Impression management in financial reports surrounding CEO turnover*. Retrieved from <http://docs.business.auckland.ac.nz/Doc/Impression-management-in-financial-reports-surrounding-CEO-turnover-%E2%80%93-A-descriptive-analysis.pdf>
- Groenewald, T. (2004). A phenomenological research design illustrated. *International journal of Qualitative Methods*, 3(1), 42-55.
- Guthrie, J., Dumay, J., Veltri, S., & Silvestri, A. (2015). The Free State University integrated reporting: a critical consideration. *Journal of Intellectual Capital*, 16(2), 443-462.
- Hadro, D., Klimczak, K. M., & Pauka, M. (2017). Impression management in letters to shareholders: Evidence from Poland. *Accounting in Europe*, 14(3), 305-330.
- Haghighattalab, S., Saghamanesh, M., Chen, A., & Mahini, S. S. (2018). *Ethical control within systemic accident analysis models*. Paper presented at the 2018 IEEE International Conference of Safety Produce Informatization (IICSPI).

- Haji, A. A., & Anifowose, M. (2016). The trend of integrated reporting practice in South Africa: ceremonial or substantive? *Sustainability Accounting, Management and Policy Journal*, 7(2), 190-224.
- Halim, H. A. (2016). Visual representations strategies in chairperson's statement in Malaysia: An analysis of impression management. *International Journal of Academic Research in Business and Social Sciences*, 6(12), 245-255.
- Haque, T., Salat, A., & Raju, S. A. (2015). Corporate social responsibility an opposite view. *The Cost and Management ISSN*, 5090, 43(5), 25-33.
- Hess, D. (2019). The transparency trap: Non-financial disclosure and the responsibility of business to respect human rights. *American Business Law Journal*, 56(1), 5-53.
- Hutton, A. P., Miller, G. S., & Skinner, D. J. (2003). The role of supplementary statements with management earnings forecasts. *Journal of Accounting Research*, 41(5), 867-890.
- International Integrated Reporting Council (IIRC). (2013). *The International Integrated Reporting Framework*. Retrieved from <https://integratedreporting.org/resource/international-ir-framework/>
- Jensen, M. C. (2017). Value maximisation, stakeholder theory and the corporate objective function. *European Financial Management*, 7(3), 297-317.
- Jones, B. D., & Baumgartner, F. R. (2005). *The politics of attention: How government prioritizes problems*. Chicago: University of Chicago Press.
- Jones, M. J., Melis, A., Gaia, S., & Aresu, S. (2020). Impression management and retrospective sense-making in corporate annual reports: Banks' graphical reporting during the global financial crisis. *International Journal of Business Communication*, 57(4), 474-496.
- Juma, B., Tumwebaze, Z., & Orobias, L. (2018). The adoption of integrated reporting: A developing country perspective. *Journal of Financial Reporting and Accounting*, 17(1), 2-23.
- Kaempf, U. (1995). The binomial test: A simple tool to identify process problems. *IEEE Transactions on semiconductor manufacturing*, 8(2), 160-166.
- Kanbaty, M., Hellmann, A., & He, L. (2020). Infographics in corporate sustainability reports: Providing useful information or used for impression management? *Journal of Behavioral and Experimental Finance*, 26(2), 1-14.
- Khaldi, K. (2017). Quantitative, qualitative or mixed research: which research paradigm to use? *Journal of Educational Social Research*, 7(2), 15-15.

- Landau, A., Rochell, J., Klein, C., & Zwergel, B. (2020). Integrated reporting of environmental, social, and governance and financial data: Does the market value integrated reports? *Business Strategy and the Environment*, 29(4), 1750-1763.
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological bulletin*, 107(1), 34-47.
- Leung, S., Parker, L., & Courtis, J. (2015). Impression management through minimal narrative disclosure in annual reports. *The British Accounting Review*, 47(3), 275-289.
- Lindblom, C. K. (1994). *The implications of organizational legitimacy for corporate social performance and disclosure*. Paper presented at the Critical Perspectives on Accounting Conference, New York.
- Maama, H., & Mkhize, M. (2020). Integrated reporting practice in a developing country—Ghana: legitimacy or stakeholder oriented? *International Journal of Disclosure and Governance*, 17(4), 230-244.
- Madonsela, S. D. S. (2018). *Reviving accountability principles in state owned companies: a critical study of the governance frameworks governing state owned companies in South Africa* (unpublished Masters dissertation). Durban: University of KwaZulu-Natal.
- Madonsela, T. (2016). *State of Capture Report No. 6 of 2016/17*. Retrieved from https://www.gov.za/sites/default/files/gcis_document/201611/stateofcapturereport14october2016_1.pdf
- Manes-Rossi, F. (2018). Is integrated reporting a new challenge for public sector entities? *African Journal of Business Management*, 12(7), 172-187.
- Mans-Kemp, N., & Van der Lugt, C. T. (2020). Linking integrated reporting quality with sustainability performance and financial performance in South Africa. *South African Journal of Economic and Management Sciences*, 23(1), 1-11.
- Mather, D., Mather, P., & Ramsay, A. (2005). An investigation into the measurement of graph distortion in financial reports. *Accounting and Business Research*, 35(2), 147-160.
- Mather, P., Ramsay, A., & Serry, A. (1996). The use and representational faithfulness of graphs in annual reports: Australian evidence. *Australian Accounting Review*, 6(12), 56-63.
- Melloni, G., Caglio, A., & Perego, P. (2017). Saying more with less? Disclosure conciseness, completeness and balance in integrated reports. *Journal of Accounting and Public Policy*, 36(3), 220-238.

- Merkel-Davies, D. M., Brennan, N. M., & McLeay, S. J. (2011). Impression management and retrospective sense-making in corporate narratives. *Accounting, Auditing & Accountability Journal*, 24(3), 315-344.
- Mervelskemper, L., & Streit, D. (2017). Enhancing market valuation of ESG performance: Is integrated reporting keeping its promise? *Business Strategy and the Environment*, 26(4), 536-549.
- Mills, A. J., & Helms Mills, J. (2018). Archival research. In Cassell, C., Cunliffe, A., & Grandy, C. (eds), *The SAGE handbook of qualitative business and management research methods: Methods and challenges* (ch. 3). London: SAGE.
- Morse, J. M. (1991). *Strategies for sampling*. In Morse, J. M. (ed.), *Qualitative nursing research: A contemporary dialogue* (pp. 127-145). London: Sage Publications.
- Muiño, F., & Trombetta, M. (2009). Does graph disclosure bias reduce the cost of equity capital? *Accounting and Business Research*, 39(2), 83-102.
- National Treasury. (2021). *Budget review*. Retrieved from <http://www.treasury.gov.za/documents/national%20budget/2021/review/FullBR.pdf>
- National Treasury. (1999). *Public Finance Management Act (PFMA)*. Retrieved from <http://www.treasury.gov.za/legislation/pfma/act.pdf>
- Negash, M. (2011). *Rethinking accountability and corporate reporting in South Africa*. Retrieved from <https://hsf.org.za/publications/focus/focus-60-january-2011-making-south-africa-work-rules-of-the-game/MNegash.pdf>
- Neu, D. (1991). Trust, impression management and the public accounting profession. *Critical Perspectives on Accounting*, 2(3), 295-313.
- Oliveira, J., Azevedo, G., & Borges, F. (2016). Impression management and self-presentation dissimulation in Portuguese chairman's statements. *Corporate Communications: An International Journal*, 21(3), 388-408.
- Omoriegbe, N., & Ebhodaghe, L. E. (2020). Effects of accounting scandals on public confidence. *Project: The effects of accounting scandals on public confidence in financial reports*. Retrieved from https://www.researchgate.net/publication/342898947_EFFECTS_OF_ACCOUNTING_SCANDALS_ON_PUBLIC_CONFIDENCE
- Oprisor, T., Tiron-Tudor, A., & Nistor, C. S. (2016). The integrated reporting system: A new accountability enhancement tool for public sector entities. *The Audit Financiar journal*, 14(139), 747-747.

- Owen, G. (2013). Integrated reporting: A review of developments and their implications for the accounting curriculum. *Accounting Education*, 22(4), 340-356.
- Paniagua, J., Rivelles, R., & Sapena, J. (2018). Corporate governance and financial performance: The role of ownership and board structure. *Journal of Business Research*, 89, 229-234.
- Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., & De Colle, S. (2010). Stakeholder theory: The state of the art. *Academy of Management Annals*, 4(1), 403-445.
- Pasko, O., Minta, S., Rudenko, S., & Hordiyenko, M. (2020). Do poor and good performing companies report differently? The readability and impression management in corporate narrative documents: evidence from Northern Europe. *Business: Theory and Practice*, 21(2), 835-849.
- Penrose, J. M. (2008). Annual report graphic use: a review of the literature. *The Journal of Business Communication*, 45(2), 158-180.
- Pierro, G. A., Bergel, A., & Ducasse, S. (2021). An interdisciplinary model for graphical representation: Descriptive and prescriptive case studies. In *Software engineering and formal methods. SEFM 2020 collocated workshops* (pp.147-158). Retrieved from https://www.researchgate.net/publication/348545671_An_Interdisciplinary_Model_for_Graphical_Representation
- Pong, C., Fraser, I., Barlaup, K., Drønen, H. I., & Stuart, I. (2009). Restoring trust in auditing: Ethical discernment and the Adelphia scandal. *Managerial Auditing Journal*, 24(2), 183-203.
- Provis, C. (2010). The ethics of impression management. *Business Ethics: A European Review*, 19(2), 199-212.
- Public Company Accounting Oversight Board (PCAOB). (2002). *Sarbanes-Oxley Act of 2002*. Retrieved from https://pcaobus.org/About/History/Documents/PDFs/Sarbanes_Oxley_Act_of_2002.pdf
- Ragab, M., & Arisha, A. (2018). Research methodology in business: A starter's guide. *Management and Organizational Studies*, 5(1), 1-14.
- Rämö, H. (2011). Visualizing the phronetic organization: The case of photographs in CSR reports. *Journal of Business Ethics*, 104(3), 371-387.
- Rezaee, Z. (2002). *Financial statement fraud: Prevention and detection*. New York: John Wiley & Sons.

- Rezaee, Z., & Tuo, L. (2017). Voluntary disclosure of non-financial information and its association with sustainability performance. *Advances in Accounting*, 39, 47-59.
- Rosdini, D., Sari, P. Y., Amrania, G. K. P., & Yulianingsih, P. (2020). Decision making biased: How visual illusion, mood, and information presentation plays a role. *Journal of Behavioral and Experimental Finance*, 27(C), 100347. Retrieved from <https://econpapers.repec.org/scripts/redir.pf?u=http%3A%2F%2Fwww.sciencedirect.com%2Fscience%2Farticle%2Fpii%2FS2214635020300034;h=repec:eee:beexfi:v:27:y:2020:i:c:s2214635020300034>
- Ruf, B. M., Muralidhar, K., Brown, R. M., Janney, J. J., & Paul, K. (2001). An empirical investigation of the relationship between change in corporate social performance and financial performance: A stakeholder theory perspective. *Journal of Business Ethics*, 32(2), 143-156.
- Sathyamoorthi, C. R., Baliyan, P., Dzimiri, M., & Wally-Dima, L. (2017). The impact of corporate governance on financial performance: The case of listed companies in the consumer services sector in Botswana. *Advances in Social Sciences Research Journal*, 4(22). Retrieved from <https://doi.org/10.14738/assrj.422.3925>
- Senne, L. (2017). *The value creation of integrated reporting: a stakeholder perspective and organisational performance*. Pretoria: University of Pretoria.
- Setia, N., Abhayawansa, S., Joshi, M., & Huynh, A. V. (2015). Integrated reporting in South Africa: some initial evidence. *Sustainability Accounting, Management and Policy Journal*, 6(3), 397-424.
- Shapiro, S. P. (2005). Agency theory. *Annual Review of Sociology*, 31, 263-284.
- Siedlecki, S. L. (2020). Understanding descriptive research designs and methods. *Clinical Nurse Specialist*, 34(1), 8-12.
- Sievers, S., Mokwa, C. F., & Keienburg, G. (2013). The relevance of financial versus non-financial information for the valuation of venture capital-backed firms. *European Accounting Review*, 22(3), 467-511.
- Simnett, R., & Huggins, A. L. (2015). Integrated reporting and assurance: where can research add value? *Sustainability Accounting, Management and Policy Journal*, 6(1), 29-53.
- Skellam, J. G. (1948). A probability distribution derived from the binomial distribution by regarding the probability of success as variable between the sets of trials. *Journal of the Royal Statistical Society, Series B*, 10(2), 257-261.
- Soumilion, V. (2018). *The value relevance of integrated reporting in South Africa* (unpublished MSc dissertation). Belgium: University of Ghent.

- Spears, R., Jetten, J., & Doosje, B. (2001). The (il) legitimacy of ingroup bias: From social reality to social resistance. In Jost, J., & Major, B. (eds), *The social psychology of power* (pp.251-283). New York: The Guilford Press.
- Steinbart, P. J. (1989). The auditor's responsibility for the accuracy of graphs in annual reports: Some evidence of the need for additional guidance. *Accounting Horizons*, 3(3), 60-70.
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management Review*, 20(3), 571-610.
- Surty, M., Yasseen, Y., & Padia, N. (2018). Trends in integrated reporting: A state owned company analysis. *Southern African Business Review*, 22(1). Retrieved from <https://doi.org/10.25159/1998-8125/3841>
- Taguchi, N. (2018). Description and explanation of pragmatic development: Quantitative, qualitative, and mixed methods research. *System*, 75, 23-32.
- Taylor, B. G., & Anderson, L. K. (1986). Misleading graphs-guidelines for the accountant. *Journal of Accountancy*, 162(4), 126-135.
- Tse, T. (2011). Shareholder and stakeholder theory: After the financial crisis. *Qualitative Research in Financial Markets*, 3(1), 51-63.
- Tufte, E. R. (1983). *The visual display of quantitative information*. Cheshire, Connecticut: Graphics Press.
- Umare, M. N., & Ramteke, N. B. (1953). Corporate social responsibility management in India: A tool to enhance the socio-economic parameters. *International Journal of Research and Development in Technology & Management*, 20(8), 1-11.
- Van der Merwe, M. (2018, July 26). VBS CEO probe one of 265 others as SAICA seeks to restore faith in accounting field. *News24*. Retrieved from <https://www.news24.com/fin24/companies/financial-services/vbs-ceo-probe-one-of-265-others-as-saica-seeks-to-restore-faith-in-accounting-field-20180726>
- Varachia, Z., & Yasseen, Y. (2020). The use of graphs as an impression management tool in the annual integrated reports of South African listed entities. *Journal of Economic and Financial Sciences*, 13(1), 1995-7076.
- Wang, J. (2016). Literature review on the impression management in corporate information disclosure. *Modern Economy*, 7(6), 725-731.
- Watson, A. (2012). Integrated reporting – The South African experience. *The CPA Journal*, 87(7), 10-13.

- Wingard, H. C., & Vorster, Q. (2001). Financial performance of environmentally responsible South African listed companies. *Meditari: Research Journal of the School of Accounting Sciences*, 9(1), 313-332.
- Woode-Smith, N. (2019). A history of Eskom*: why did it fail?(* until 1987 known as Escom). *Cabo*, 2019(1), 21-30.
- World Business Council for Sustainable Development (WBCSD). (2014). *Integrated reporting in South Africa: From concept to practice*. South Africa: WBCSD.
- Worsham, J., Eisner, M. A., & Ringquist, E. (1997). Assessing the assumptions: A critical analysis of agency theory. *Administration & Society*, 28(4), 419-440.
- Yasseen, Y., Mohamed, W., & Moola-Yasseen, M. (2019). The use of impression management practices in the chairman's statements in South African annual reports: an agency theory perspective. *Communicare: Journal for Communication Sciences in Southern Africa*, 38(1), 37-56.
- Yasseen, Y., Moola-Yasseen, M., & Padia, N. (2017). A preliminary study into impression management practices in chairman's statements in South African annual reports: an attribution theory perspective. *Communicare: Journal for Communication Sciences in Southern Africa*, 36(1), 47-66.
- Ying Hill, W., & Milner, M. (2003). Guidelines for graphical displays in financial reporting. *Accounting Education*, 12(2), 135-157.
- Zhang, J. (2020). The impact of vivid graphical presentation of financial information in digital annual reports on investors' impressions of management and firm performance. *Journal of Information Systems*, 34(3), 233-253.
- Zhu, C., Hinthorn, W., Xu, R., Zeng, Q., Zeng, M., Huang, X., & Jiang, M. (2020). Boosting factual correctness of abstractive summarization with knowledge graph. *arXiv e-prints*, arXiv, 2003.08612

APPENDIX A: ETHICAL CLEARANCE



Ms Ramatsobane Mahlako Maleka (221098269)
School Of Acc Economics&Fin
Westville

Dear Ms Ramatsobane Mahlako Maleka,

Original application number: 00013466

Project title: Impression management: Graphical representation in integrated reports of State-Owned Entities in South Africa

Exemption from Ethics Review

In response to your application received on [redacted], your school has indicated that the protocol has been granted **EXEMPTION FROM ETHICS REVIEW**.

Any alteration/s to the exempted research protocol, e.g., Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through an amendment/modification prior to its implementation. The original exemption number must be cited.

For any changes that could result in potential risk, an ethics application including the proposed amendments must be submitted to the relevant UKZN Research Ethics Committee. The original exemption number must be cited.

In case you have further queries, please quote the above reference number.

PLEASE NOTE:

Research data should be securely stored in the discipline/department for a period of 5 years.

I take this opportunity of wishing you everything of the best with your study.

Yours sincerely,



Prof Mabutho Sibanda
Academic Leader Research
School Of Acc Economics&Fin

UKZN Research Ethics Office
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Website: <http://research.ukzn.ac.za/Research-Ethics/>

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville

INSPIRING GREATNESS

APPENDIX B: TURN IT IN REPORT

Impression Management: Graphical representation in integrated reports of state-owned entities in south africa

ORIGINALITY REPORT

6 %	6 %	4 %	1 %
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	hdl.handle.net Internet Source	<1 %
2	jefjournal.org.za Internet Source	<1 %
3	pure.royalholloway.ac.uk Internet Source	<1 %
4	www.saaa.org.za Internet Source	<1 %
5	proceedings.informingscience.org Internet Source	<1 %
6	Submitted to Royal Holloway and Bedford New College Student Paper	<1 %
7	pdfs.semanticscholar.org Internet Source	<1 %
8	www.tandfonline.com Internet Source	<1 %
	eprints.utas.edu.au	

APPENDIX C: PROOF OF EDITING



/ JEANNE ENSLIN
FREELANCE LANGUAGE PRACTITIONER

Editing certificate TO WHOM IT MAY CONCERN

Language editing

I, Jeanne Enslin, acknowledge that I did the language editing of Ramatsobane Mahlako Maleka's thesis in partial fulfilment of the requirements for the degree of Master of Accountancy at the University of KwaZulu-Natal.

The title of the thesis is:

Impression management: Graphical representation in integrated reports of state-owned entities in South Africa.

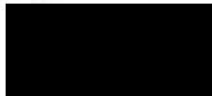
Detailed feedback of all the language editing done has been provided to the student in writing and is evident in the version of the document in track changes and with comments. The quality of the final document, in terms of language, formatting and references, remains the student's responsibility.



Jeanne Enslin
Language editor
082-6961224.

Technical editing

I, Ronel Gallie, acknowledge that I did all aspects of the technical editing of Ramatsobane Mahlako Maleka's thesis in partial fulfilment of the requirements for the degree of Master of Accountancy at the University of KwaZulu-Natal. Detailed feedback has been provided.



Ronel Gallie
Technical editor
084 7780 292

J H Enslin BA (US); STD (US); Hons Translation Studies (UNISA)