Understanding the extent of stakeholder reporting and materiality disclosures in integrated reports, sustainability reports and websites of companies listed on JSE.

A research report submitted by

Philippa Erin Joffe

Student Number: 728573

Cell: 084 209 5585

Email: philippa.joffe@gmail.com

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University of the Witwatersrand

Contents

I. List of abbreviations and acronyms

AA	AccountAbility
CSR	Corporate social responsibility
FASB	Financial Accounting Standards Board
GRI	Global Reporting Initiative
IAASB	International Auditing and Assurance Standards Board
IASB	International Accounting Standards Board
IR	Integrated reporting
IFAC	International Federation of Accountants
IIRC	International Integrated Reporting Council
IOD	Institute of Directors
JSE	Johannesburg Stock Exchange

II. List of tables and figures

III. Abstract

This research examined the extent of stakeholder reporting disclosures and materiality disclosures in the integrated reports, sustainability reports and websites of JSE listed companies. This study investigated how companies disclose their materiality determination process and if they disclose their stakeholder engagement activities. A disclosure checklist, based on the relevant academic and professional literature, was developed by the researcher to quantify and investigate the current reporting disclosures relating to materiality and stakeholder engagement in 2016. The results highlighted the relationship between the disclosures made by companies to determine materiality and stakeholder engagement disclosures in the related reports.

In this study, materiality is a key reporting principle in preparing the integrated report and sustainability report. The results of this research, supported by prior literature, have identified that stakeholder engagement and materiality are related concepts. The King Report on Corporate Governance emphasizes that stakeholder inclusivity is a key reporting principle as stakeholder identification and engagement facilitates the identification and understanding of the material concerns, issues, perceptions, needs and expectations of stakeholders.

Key words: materiality, stakeholder engagement, integrated report, Global Reporting Initiative (GRI), King IV

Chapter 1: Introduction

1.1 Statement of the problem

Over the past two decades, there has been a change in corporate financial reporting from traditional financial statements to the more inclusive integrated report (Institute of Directors, 2009). This change has raised questions relating to what information should be included or excluded from these integrated reports. The introduction of King IV, for instance, promotes the idea that a corporation should not merely operate for its shareholders but also for its various stakeholders (Carels, Maroun, & Padia, 2013; Evan & Freeman, 1993; Institute of Directors in Southern Africa, 2016). The emergence of integrated reporting is partly a reaction to this notion (IRC, 2011). Integrated reporting seeks to combine reporting of both financial and non-financial information in a way that promotes corporate strategy in a transparent manner, aiming to provide benefits to a wider range of stakeholders (Institute of Directors in Southern Africa, 2016).

Given the wider range of stakeholders, organizations are compelled to provide greater transparency and accountability in their reporting. (Kaur & Lodhia, 2014). The role of stakeholder engagement as an overall interactive mechanism and as a part of the reporting process has become increasingly vital in both the private and public sectors (ACCA, 2005). The most effective manner in which companies could liaise with stakeholders was through the reports issued by such corporations (Michelon, Pilonato, & Ricceri, 2015). It has become common practice for these organizations to issue various reports and information on their websites. Due to the change in stakeholder requirements, organizations have started to disclose in their reports that they have conducted their operations in a stakeholder- centric manner (Michelon et al., 2015).

Reporting has shifted towards a stakeholder focus, emphasizing the social and environmental impacts of companies as well as the companies' non-financial performance (Edgley et al, 2015). This has resulted in the preparation of sustainability reports, which highlight the companies' sustainability practices. International standards such as Global Reporting Initiative (GRI) and AccountAbility (AA) 1000 have emphasized the role of stakeholder engagement in the development of integrated reports and sustainability reports. There has been insufficient research to confirm whether organizations actually engage with their stakeholders for reporting purposes (Kaur & Lodhia, 2014) and whether the stakeholder engagement process influences the materiality determination process. It is unclear to what extent stakeholders are included in determining the scope and primacy of material matters to be included in the integrated and sustainability reports. It is on this premise that research question and sub-questions were developed.

1.2 Purpose of the study

The purpose of this research is to explore the extent of disclosures dealing with stakeholder engagement and materiality in the integrated reports, sustainability reports and websites of JSE listed companies. Through this investigation, the researcher will seek to understand to what extent stakeholders are included in determining the scope and primacy of various matters to be included in the integrated and sustainability reports. After a thorough investigation of the current reporting disclosures, this research will highlight whether a relationship between materiality and stakeholder engagement disclosures exist.

1.3 Research question

The primary research question is:

What do JSE listed companies disclose with regards to stakeholder relations and materiality determination in their integrated reports, sustainability reports and on their websites?

In order to assess the primary research question, it is necessary to break down the primary research question in to the following sub questions**:**

a. What are JSE listed companies disclosing with regards to how materiality is determined in their integrated reports, sustainability reports and on their websites?
b. What are JSE listed companies disclosing with regards to stakeholder engagement in their integrated reports, sustainability reports and on their websites?
c. Is there a correlation or relationship between stakeholder engagement disclosures and materiality determination disclosures?

1.4 Context of the study

This study is concerned with the adoption of materiality as a key reporting principle in the preparation of integrated reports (Edgley, Jones, & Atkins, 2015).The study focuses on materiality because it is a key factor to be considered when determining the inclusion of information in the integrated reports (Edgley et al., 2015) (International Integrated Reporting Council, 2013). This study also places an emphasis on understanding stakeholder relations, as stakeholder engagement has become a critical component of integrated reporting and is essential to good corporate governance (PWC, 2009). Stakeholder engagement has become a tool in determining matters that are material to the stakeholders.

This research aims to refine our current understanding of the concept of materiality and the stakeholder engagement process in an integrated reporting context. To achieve this, this research will focus on analyzing integrated reports, sustainability reports and websites of JSE listed companies. The extent of current disclosures on stakeholder engagement and disclosures of the materiality determination process of JSE listed companies will be assessed. This forms the foundation of this research and will be discussed further as follows.

Materiality

Materiality is not a term with a core meaning; it is a malleable concept (Edgley, 2014). Materiality is a key principle in considering the content and quality of the reported content (Mungoni, 2015). Materiality is a tool used by companies to determine what information should be included in the integrated reports. In order to understand how information is determined to be material, it is necessary to explore how the materiality determination process is disclosed in the integrated reports. Society has placed increased importance on sustainability practices, which has broadened the definition of "materiality". This concept has extended beyond financial impacts to include social and environmental impacts of corporate performance for a stakeholder audience (Edgley et al, 2015).

IIRC provides guidance on the materiality determination process for integrated reporting. According to the IIRC, the concept of materiality is key to both reaching conciseness and to identifying the relevant issues in the companies' value creation process (Fasan & Mio, 2017). As mentioned by Edgley et al (2015), materiality acts as a foundation for financial reporting and determines the relevance of information for stakeholders. The principle of materiality has emerged as an essential item in sustainability reporting (Calabrese, Costa, & Rosati, 2015; Global Reporting Initiative, 2013). By focusing on the core objectives, companies are able to concentrate on the areas of their business that are vital for the achievement of their goals and for influencing stakeholders' decisions (Global Reporting Initiative, 2013). It is therefore necessary to determine how companies engage with their stakeholders and how they determine materiality in the integrated report.

Stakeholder engagement

Stakeholder engagement facilitates the identification and understanding of the material concerns, issues, perceptions, needs and expectations of stakeholders (AA, 2005, 2011; Kaur & Lodhia, 2014). Stakeholder engagement has become a fundamental step in sustainability reporting as it legitimizes the report and demonstrates how an institution accounts for stakeholder concerns (Ferrero-Ferrero, Fernández-Izquierdo, Muñoz-Torres, & Bellés-Colomer, 2018). With the emergence of integrated reporting, the process of determining what information should be included or excluded from integrated reports forms the process of determining materiality. This process has followed a stakeholder inclusivity approach (Institute of Directors in Southern Africa, 2016). A stakeholder inclusive approach is a method in which the company takes into account the legitimate and reasonable needs, interests and expectations of all material stakeholders (Institute of Directors in Southern Africa, 2016).

Integrated reporting provides a platform for strategic stakeholder communication (Raemaekers, Maroun, & Padia, 2016). In theory, the integrated report should provide stakeholders with relevant and material information, including the identification of material issues, the impacts of these issues and their relationship with the principle risks and opportunities (Raemaekers et al., 2016). It is understood that stakeholder engagement and materiality are closely related (Ferrero-Ferrero et al., 2018). Stakeholder engagement contributes to the identification of material aspects, making it possible to find out the reasonable expectations and interests of stakeholders (Global Reporting Initiative, 2013). Materiality improves the stakeholder–organization relationship by addressing those issues that are relevant to the organization and its stakeholders (Calabrese, Costa, Levialdi, & Menichini, 2016) consistently with the stakeholder theory (Ferrero-Ferrero et al., 2018)

1.5 Significance of the study

Corporate reporting has shifted from a shareholder-centric approach towards a broader and more inclusive stakeholder based approach. This reflects the directors' acknowledgement of stakeholder accountability and stakeholder engagement in integrated reporting (Ferrero-Ferrero et al., 2018; Kaur & Lodhia, 2014). Disclosures in company reports have changed to include more stakeholder-centric reporting (Solomon & Maroun, 2012)

The variation in the adaption of the materiality concept appears to stem from the different logics involved (Section 2.1) and, without a definitive basis for determining or defining 'materiality' in an integrated reporting context, the understanding of what should be disclosed in an integrated report is entirely at the discretion of an entity's management (Dawkins & Ngunjiri, 2008). The result is that companies, auditors and stakeholders have interpreted the concept of 'materiality' differently. For this reason, it is essential for companies to engage with material stakeholders and determine their primary material concerns that need to be disclosed in the integrated and sustainability reports.

Theoretical and practical contributions

This study intends to address the research questions and to broaden knowledge on the current materiality practices and processes, which shape the integrated report. This study also intends to provide information about current stakeholder engagement mechanisms to practitioners and the engagement opportunities available to stakeholders (Kaur & Lodhia, 2014). This study will highlight the current stakeholder engagement and materiality disclosures.

In theory, stakeholder engagement and materiality are closely related (Ferrero-Ferrero et al., 2018). This research will give insight as to whether a relationship exists between the materiality determination process and stakeholder reporting. Through an analysis of the integrated report, sustainability report and websites, the researcher will explore to what extent stakeholders are included in determining the scope and importance of various matters to be included in these reports. This will highlight whether current disclosure practices are aligned with the academic literature and theories.

1.6 Assumptions, limitations and delimitations

This study does not intend to address the assurance aspect of the reports nor does it intend to analyze the quality of disclosures made. In order to reduce researcher bias, the reports have only been analyzed for presence or absence of the relevant disclosures as identified using the disclosure checklists (Raemaekers et al., 2016).

For the purpose of this research, only the top 40 JSE listed companies were analyzed. An industry analysis was not performed; this is recommended as an area for further research. The research will only deal with materiality and stakeholder engagement in the context of South African integrated reports. When dealing with materiality, this research will solely focus on determination of materiality from the company's perspective. This research does not explore how materiality will be determined. Rather, the current disclosure of the determination process is explored. Materiality disclosure does not refer to the correct identification of material issues by companies. Rather, it refers to the extent to which companies disclose the materiality determination process and the issues they consider to be material (Fasan & Mio, 2017).

1.7 Report structure

The starting point of this paper is to understand the context of integrated reporting and the effect of integrated thinking on corporate reporting, which is discussed in section 2.1. A key principle in the preparation of integrated reports is the concept of materiality and the process of engaging with stakeholders, which is explored further in section 2.2 and 2.3. Section 3 addresses the research methodology used in conducting this research. The findings are discussed at length in Section 4. Section 5 concludes and summarises the objectives of the research, key findings and closing remarks.

Chapter 2: Literature review

2.1 Emergence of integrated reporting

Integrated reporting is defined as "a holistic and integrated representation of the company's performance in terms of both its finance and its sustainability" (IOD, 2009, p. 54). One of the objectives of integrated reporting is to communicate the link between the financial and non-financial information in one report (IOD, 2009). An integrated report should provide stakeholders with a concise overview of an organization, integrating and connecting important information about strategy, risks and opportunities and relating them to social, environmental, economic and financial issues (IIRC, 2013). This is achieved by following the materiality determination process that enables preparers of integrated reports to assess material matters to be included in the integrated reports which includes engaging with stakeholders. (This is discussed further in section 2.2 and 2.3) Corporate reporting has shifted from the classical financial statements to the more encompassing integrated report, mainly due to government reporting requirements and stakeholder pressure (Montabon et al, 2007).

Visser (2005) mentions that legislative reform, such as the changes to the Companies Act and Johannesburg Stock Exchange (JSE) listing requirements, globalization, codification of corporate governance and stakeholder activism all have an effect on the perceptions surrounding corporate reporting. Institutional pressure, stakeholder pressure, and the strengthening of corporate legitimacy or reputation have been common themes researchers have explored as determinants of integrated reporting (de Villiers, Hsiao, & Maroun, 2017).

An integrated report is not a collection of the financial statements and sustainability but rather an incorporation of material information allowing stakeholders to assess an entity's performance and its ability to create and sustain value (Solomon & Maroun, 2012; IIRC, 2013). This integrated report is critical for stakeholder communication and is the organization's primary report to stakeholders. (Mervyn King's Foreword, IRCSA, 2011)

Financial reports are intended to provide information mainly to investors while non-financial reports address a broader audience i.e. the stakeholders (Fasan & Mio, 2017). With the emergence of integrated reporting, a stakeholder inclusive approach is incorporated in reporting. The interests and requirements of all material stakeholders are considered and not solely the interests of the providers of capital.

According to Solomon and Maroun (2012), "South Africa has long been recognized as a pioneer in promoting corporate governance reform". As a result of political, social and environmental challenges, South Africa has taken a lead, through its stakeholder-orientated corporate governance reports, in forcing businesses to embed social, environmental and governance considerations into their operations.

The financial accounting concept of 'materiality' is relevant to the integrated report (Lamberton, 2005). The content of integrated reports relies on materiality and the IIRC (2013) stressed that only material information for decision-making purposes is to be included in the report (Solomon & Maroun, 2012). Through stakeholder engagement, material matters can be identified which will form the content of the integrated report.

2.2 Materiality

Theoretical framework for understanding materiality: institutional logics

Edgley et al, (2015) presents three competing logics namely; market, professional and stakeholder logics. Through the application of institutional logics, a further understanding of materiality can be obtained. Materiality has been shaped mainly by two logics: a market and a professional logic (Edgley et al, 2015). According to Edgley et al. (2015), auditors are said to have a professional logic while shareholders have market logic. Companies prepare integrated reports based on their perceptions of what society expects (Deegan & Blomquist, 2006).

Research has indicated that society prefers reports that encompass corporate responsibility, social and environmental issues (Dawkins & Ngunjiri, 2008). With these expectations, it is implied that there is a new “stakeholder logic” influencing the concept of materiality and disclosures (Edgley et al, 2015).

These three competing logics are discussed as follows: Market logic is concerned with the accumulation and maintenance of material financial wealth (Friedland & Alford, 1991). Market rationale has shaped traditional accounting materiality as a concept designed to protect shareholders from misleading information (Edgley, 2014). The concept of materiality in financial audit has been shaped by the market logic or capitalist rationale. The shareholder focus of accounting materiality is crucial to the effective operation of capital markets (Edgley et al, 2015).

Professional logic is a logic adopted by auditors to perform financial audits. This logic bridges the gap between public interest and market expectations and supports professional guidance about financial audit and materiality practices (Edgley et al, 2015). This is reflected in the duties that auditors have to shareholders (Edgley et al, 2015). The protection of public interest is inherent in this logic.

The adoption of materiality into sustainability reporting introduces the new societal stakeholder logic; it extends the focus of reporting, from a narrow financial account, to the non-financial impacts of organizations on society (Edgley et al, 2015). With the focus broadened to include both financial and non-financial information, stakeholder logic emphasizes the importance of corporate social responsibility.

A shift to stakeholder logic appeared to be changing materiality's role in corporate reporting. A stakeholder-based understanding of materiality incorporates the significant impact of a company on its environment (Edgley et al, 2015). Due to the trending stakeholder logic, materiality practices have started to involve identifying key stakeholders and their information needs in a process called stakeholder engagement.

Stakeholders include a wide variety of individuals and, as such, stakeholder logic is all encompassing (Edgley et al, 2015). The integrated report is aimed at stakeholders with the objective of managing perceptions, which is aligned with stakeholder logic (Dawkins & Ngunjiri, 2008; Solomon & Maroun, 2012). As argued by the International Integrated Reporting Council (IIRC), integrated reports are becoming an important source of information for stakeholders interested in companies' financial and non- financial performance and their ability to generate sustainable returns.

Stakeholder logic has revolutionized the understanding of the concept of materiality in the integrated report (Edgley et al, 2015). With the emergence of integrated reporting, the process of determining materiality has followed a stakeholder inclusivity approach, which involves engaging with stakeholders to identify material matters.

Materiality in the context of integrated reporting

Materiality plays a crucial role in determining the matters to be included in an integrated report and ensuring conciseness of the report. The purpose of materiality assessment in sustainability reporting is to identify, select and prioritize aspects and indicators that better reflect the company's most significant economic, environmental and social impacts and that have the most significance to companies and their stakeholders (Calabrese et al., 2016). The objective of materiality is to provide stakeholders with relevant, complete and coherent information for the assessment of company performance (Calabrese et al, 2015). Through sustainability reports, stakeholders can establish if a company's actions are in line with their values and expectations.

The materiality approach in integrated reporting differs from that of financial statement reporting. In the realm of financial information disclosure, both the FASB and the IASB have a user utility approach to materiality (Fasan & Mio, 2017) . According to the two accounting bodies, the omission or misstatement of items is material if it could influence the judgment of the report users (IASB, 2010). This approach is also employed in the definition of non-financial information materiality (Fasan & Mio, 2017).

The definition in the non-financial information context of the report is quite similar to that of the financial context. It focuses on ‘stakeholders’ rather than on investors, and on ‘judgments, decisions and actions’ rather than on investment decisions (AccountAbility, 2016; Fasan & Mio, 2017). However, the concept of materiality for sustainability reporting is more complex because it is “concerned with a wider range of impacts and stakeholders” (GRI, 2013). According to the IIRC guidance for preparation of integrated reports, preparing report content involves: establishing parameters for the materiality determination process, filtering matters by identifying their relevance, evaluating their importance and prioritizing them based on their relative importance and finally, setting the reporting boundary bydetermining disclosures (Committee).

According to the GRI guidelines, materiality reflects an organization’s significant economic, environmental and social impacts, together with their influence on stakeholders’ assessments and decisions (Global Reporting Initiative, 2013). According to the GRI (2000):

> *“The materiality determination process begins with identification of the aspects and any other relevant topic, and their boundaries. The next step is prioritization of the aspects and any other relevant topics from Step 1, to identify those that are material and therefore to be reported on. To implement the Materiality Principle, each aspect should be assessed on ‘Influence on stakeholder assessments and decisions’ and ‘Significance of organization’s economic, environmental and social impacts’.*
>
> *This step is followed by validation where the Principles of Completeness and Stakeholder Inclusiveness are applied to finalize the identification of the report content. Finally, after the report has been published, it is important that the organization undertakes a review”.*

The prior research provides guidance to preparers of integrated reports and sustainability reports on the process that should be followed when determining material matters to be included in these reports. This research aims to provide additional insight by analyzing the extent to which the process of determining materiality is disclosed in the integrated report and sustainability reports.

In order to complete this research, a materiality disclosure checklist was constructed by the researcher, which was grounded in the prior research. The checklist is used to determine the extent of disclosures made by top 40 JSE listed companies with regards to the materiality determination process and will therefore address sub-question a) of this research. This checklist was formulated using theoretical frameworks such as GRI and IIRC, which provides guidance on the materiality determination process. The checklist also takes into consideration the guidance provided by audit firms in determining materiality, which were found on their websites. The indicators will be discussed in Table 1.

This research investigates the extent to which stakeholders were actually engaged in the materiality determination process by analyzing the disclosures made in the integrated report, sustainability report and websites of the top 40 JSE listed companies. The analysis was performed by using the disclosure checklists (Table 1 and Table 2).

Prior literature suggests that an in order to identify and prioritize material matters, it is important to assess a company's impact on both internal and external stakeholders through a process of stakeholder engagement. The concept of materiality for non-financial information is more complex as it is concerned with a wider range of impacts (environmental and social) and stakeholders (Lai, Melloni, & Stacchezzini, 2017).

The weakness in this approach is the broad definition of stakeholders (Freeman, 1984). It may result in a piece of information being material for one stakeholder but not necessarily material for another (Fasan & Mio, 2017). To determine whether information is relevant to stakeholders, companies are encouraged to use a “materiality matrix” tool as recommended by the GRI (2013). This tool attempts to include information that is both material to the company and its stakeholders; for example, the process-oriented AA1000 framework developed by AccountAbility offers a five-step test to determine what is material and what is not, which seemingly should result “in a comprehensive and balanced understanding and prioritization of its material sustainability issues” (AccountAbility, 2008, p. 13). “

A materiality matrix is qualitative matrix with two axes. The horizontal axis represents an evaluation of the importance of any given sustainability issue to the stakeholders. The vertical axis represents the importance of the given sustainability issue to the corporation itself. An example of this matrix is illustrated below.

Figure 1: Materiality Matrix – Extract from JSE listed company annual report (2016) [1]

The positioning of the issues on the materiality matrix is based upon stakeholder engagement. This is a dialogue-based process which reveals the level of importance of sustainability issues to stakeholders (Bing & Amran, 2017). In implementing materiality analyses, companies should identify the issues that are material. If an issue is identified as material, this item should be included and explained in company reporting with reference to the allocation of resources

[1] Extract from British America Tobacco 2016 Integrated report http://www.batsa.co.za/

and efforts (Khan et al., 2016). Materiality is thus the threshold at which issues become sufficiently relevant to be reported (Bing & Amran, 2017).

The link between stakeholder engagement and materiality is illustrated clearly in the materiality matrix. The prior research indicates that the determination of the materiality in the context of integrated reporting is linked to the process of stakeholder engagement. It is through the stakeholder engagement process that the preparers will determine which information and data should be included in the report (Manetti, 2011). It is on this foundation that the sub question c) was developed. This research will investigate whether in practice, a correlation between materiality and stakeholder engagement actually exists by analyzing the disclosures made by top 40 JSE listed companies by using the disclosure checklists (Table 1 and 2).

Table 1: Materiality disclosure checklist

No	Indicator	Explanation	Sub-component of each indicator	References
1	Materiality definition	This will indicate whether companies define materiality and the framework or standard used to define materiality. It will determine whether companies define the objective of the materiality assessment	What materiality means to the company, Definition of Materiality	KPMG, 2014
2	Materiality determination process	This indicator will measure the presence or absence of a materiality determination process and if this process is in line with a theoretical framework such as GRI or IIRC.	How the outcome of the materiality process will feed into reporting (sustainability reporting or integrated reporting), frequency of performing process	KPMG, 2014
3	Identification of relevant matters, aspects or topics	This is indicates how companies identify aspects and any other relevant topics, and their boundaries. It will indicate how companies identify relevant matters based on the ability to affect value creation	Method of identification, people responsible for compiling list of material topics, categories of potential material topics (Internal and External factors)	(GRI, 2013), (IIRC, 2013) KPMG, 2014 EY 2014
4	Evaluating importance of the relevant matters	This will indicate how companies evaluate which matters or aspects is material by determining their magnitude of their effect, probability of occurrence and the area of the effect	Methodology used to "score" each topic	(IIRC, 2013) KPMG, 2014
5	Inclusion of stakeholder engagement in materiality determination	This indicator evaluates the inclusion of stakeholder engagement in the process of determining materiality as a tool to prioritize the aspects and any other relevant topic as identified in Point 3 to identify those that are material and therefore to be reported on	Consider the relevant stakeholders for each topic and asses the importance of each topic to them. Existence of stakeholder panel to give feedback on your materiality outcomes	(GRI, 2013). KPMG, 2014 (Calabrese et al., 2016; Lai et al., 2017)
6	Use of materiality matrix to prioritize topics	This indicator evaluates whether or not companies disclose a materiality matrix. A materiality or equivalent is a visual representation indicating the correlation between topics that have an influence on stakeholder decisions (shown on one axis) and the significance of topic to the company (shown on the other axis)	Picture of matrix	(GRI, 2013). (Bing & Amran, 2017) (AccountAbility, 2008)

2.3 Stakeholder reporting

Stakeholder reporting requires an organization to disclose information to the people who may be affected by its operations and decisions. Freeman (1984) argued that in addition to shareholders, there are many other interest groups who can affect or be affected by the firm's behavior such as employees, customers, suppliers, government and the public in general. The issue of stakeholder involvement assumes central importance in reporting standards such as AA1000 and the GRI Sustainability Reporting Guidelines (Belal, 2002).

Theoretical framework for understanding stakeholder reporting

The following theoretical frameworks can explain stakeholder reporting. These are stakeholder theory, legitimacy theory and institutional theory. Stakeholder theory argues that organizations must bear in mind the different perspectives and expectations of a variety of constituents, not only holders of capital (Freeman, 1984). Stakeholder theory encourages companies to obtain clarity on the manner in which they conduct business, specifically with regard to the interactions that they have with their stakeholders (Freeman, Wicks, & Parmar, 2004). Another approach to understanding stakeholder inclusiveness is legitimacy theory. Legitimacy theory recognizes that a social contract must exist between the organization and society (Post & Preston, 2012). In this regard, the organization operates to meet the social demands in exchange for the approval by society of its objectives (Post & Preston, 2012). Lastly, institutional theory states that, to achieve legitimacy or prestige, organizations should be accountable to the expectations of the environment, which include pressure elements, such as rules and norms (Meyer & Rowan, 1977). These institutional pressures encourage businesses to adopt socially responsible behaviour. These organizations are held accountable to society and encourages communication with stakeholders (Ferrero-Ferrero et al., 2018). Berman et al., (1999) proposes that since a firm's activities affect the wellbeing of a wide range of stakeholders in addition to shareholders the firm is morally responsible, and therefore accountable, to all these stakeholders.

Who are stakeholders?

The process of identifying stakeholders is vital for stakeholder reporting. This process consists of identifying key stakeholders, their stakes, characteristics and relationships (Guibert & Roloff, 2017). According to Freeman (1984), a stakeholder is defined as 'any group or individual who can affect or is affected by the achievement of the organization's objectives'. Freeman (1984) suggests that if a company is responsive to the needs of its stakeholders, they develop good relationships, which provide a competitive advantage for the company. Freeman (1984) identifies shareholders, customers, competitors, employees, suppliers, special interest groups, environmentalists, media, consumer advocates, governments and local communities as all stakeholders of the companies.

It is possible to identify and categorize stakeholders in numerous ways. Waddock (2001) distinguishes between primary stakeholders that constitute the business (owners, employees, customers and suppliers) and critical secondary stakeholders on whom the business depends for infrastructure (e.g. communities and governments). Freeman (1984) describes stakeholders as 'narrow' or 'broad'. The narrow definition includes groups who are vital to the survival and success of the corporation.

The broad definition includes any group or individual affects or is affected by the corporation (Freeman, 1984). Henriques and Sadorsky (1999) class four critical stakeholder groups:

- Regulatory stakeholders (e.g. governments, trade associations, informal networks, a given firm's competitors);
- Organizational stakeholders (e.g. customers, suppliers, employees, and shareholders);
- Community stakeholders (e.g. community groups, environmental organizations, and other potential lobbies); and
- The media.

King IV defines stakeholders as:

> *"Those groups or individuals that can reasonably be expected to be significantly affected by an organizations business activities, outputs or outcomes, or whose actions can reasonably be expected to significantly affect the ability of the organization to create value over time" (International Intergrated Reporting Council, 2013, p. 33)*

King IV further categorizes the stakeholders into two groups: the external and internal stakeholders. Internal stakeholders are directly affiliated with the organization and include its governing body, management, employees and shareholders (Institute of Directors, 2016). External stakeholders could include trade unions, civil society organizations, government, customers and consumers (Institute of Directors, 2016).

From the literature above, it is evident that the challenge faced by companies is the broad definition of stakeholders (Freeman, 1984). For effective communication, it is necessary for companies to determine their key stakeholders. According to King IV, internal stakeholders are always material stakeholders, but external stakeholders may or may not be material (Institute of Directors, 2016). Based on the above research, it becomes clear that the process of identifying material stakeholders is a complex task for management and preparers of integrated and sustainability reports. The disclosure checklist (Table 2) includes the identification of stakeholders as an indicator for stakeholder engagement. This

Stakeholder engagement

Stakeholder engagement is defined as "the process used by an organization to engage relevant stakeholders for a purpose to achieve accepted outcomes." (AccountAbility, 2008). The fundamental principle to stakeholder engagement is the principle on inclusivity. (Owen et al, 2001).

Stakeholder inclusiveness is an important principle in integrated reporting as it recognizes stakeholder engagement as a tool for understanding the expectations and interests of stakeholders (Global Reporting Initiative, 2013). Engaging stakeholders is essential for an appropriate analysis of materiality (AccountAbility, 2015; Global Reporting Initiative, 2013). Quality stakeholder engagement in sustainability reporting and accounting process increases responsiveness, transparency and accountability (Kaur & Lodhia, 2014).

One of the fundamentals of the integrated reporting process is stakeholder engagement (Deloitte, 2014). It is the key starting point for a company as it demonstrates the responsiveness of the company to the legitimate needs and concerns of key stakeholders (Deloitte, 2014). Stakeholder engagement plays a role in defining materiality and relevance of the information communicated. Stakeholder engagement in sustainability accounting and reporting is specifically of interest because it is an important tool for identifying and understanding material concerns, issues, perceptions, needs and expectations of stakeholders in relation to sustainability issues (Kaur & Lodhia, 2014).

The process of stakeholder engagement is necessary for understanding the stakeholder expectations and needs, in order to define report content and the organization's sustainability activities (GRI, 2011). A robust stakeholder engagement model is vital for companies to understand and respond to legitimate stakeholder concerns (Deloitte, 2014).

Dawkins and Ngunjiri (2008) noted that amongst their identified reasons for integrated reporting is to maintain legitimacy in the eyes of stakeholders. Corporate failures attract criticism and, in an attempt to maintain and enhance perceptions, entities disclose more information (Dawkins & Ngunjiri, 2008). Stakeholder perceptions have changed dramatically from 'inform me' to 'engage me' (Kaur & Lodhia, 2014). This shift requires organizations to understand and to address their concerns through proactive engagement approaches such as partnerships and collaborations (Andriof et al. 2002).

Stakeholder interests and expectations drive the content of integrated reports, therefore the success of integrated reports depends on how effectively companies engage and communicate with their stakeholders. Meaningful stakeholder engagement should be a process of sharing views through genuine dialogue between the stakeholders and the management of the organization (Gao & Zhang, 2006). Gao and Zhang (2001) emphasize that dialogue should be a two-way process where stakeholders are not merely listened to but also responded to. It is important to have feedback from stakeholders on social and ethical performance (Belal, 2002).

According to AA1000 standard, stakeholder engagement is not about organizations abdicating responsibilities for their activities, but rather using leadership to build relationships with stakeholders thereby improving overall performance, accountability and sustainability (Gao & Zhang, 2006). King III notes the importance of acknowledging the effects of stakeholders' perceptions on a company's reputation (IOD, 2009). It is further noted that transparent and effective communication with stakeholders increases stakeholders' trust and confidence in the company (IOD, 2009). Although stakeholder dialogue is a critical aspect of sustainability accounting and reporting, there is a lack of evidence as to whether such engagement and dialogue is actually happening currently (Gao & Zhang 2001; Unerman 2007). Due to the lack of evidence provided in prior literature, the researcher developed sub question b) to assess whether such engagement and dialogue is actually happening by analyzing the disclosures made by the top 40 JSE listed companies in their integrated reports, sustainability reports and websites.

The essential aspects of stakeholder engagement are: the means used by organizations to build relationships with stakeholders, the approaches adopted by organizations to engage stakeholders, the extent of engagement that is actualized in the sustainability accounting and reporting process (Kaur & Lodhia, 2014). According to King III, the board should disclose in the integrated report, the nature of the companies' dealings with stakeholders and the outcomes of these dealings (IOD, 2009). This is pivotal for the performance of this research.

This research aims to explore whether companies disclose key aspects of stakeholder engagement in their integrated reports, sustainability reports and websites.

The stakeholder engagement disclosure checklist has been adopted from the research performed by Kaur & Lodhia, 2014. This index identifies 7 core aspects of stakeholder engagement (Kaur & Lodhia, 2014). These indicators are summarized in Table 2 below.

Table 2: Stakeholder engagement: Disclosure checklist adopted from research performed by Kaur & Lodhia, 2014

No	Indicator	Explanation	Sub-component of each indicator	Additional References
1	Stakeholder Identification	This will indicate whether the companies identify and define key stakeholders.	Definition of "stakeholder", stakeholder list, key attributes of stakeholder groups	GRI, 2013; AA1000; King 3
2	Basis for stakeholder identification and selection	This indicator examines disclosures on the process and method of identification and selection of stakeholders for integrated reporting.	Method of identification, relationship to company, level of interest	GRI, 2013 ; AA1000
3	Approaches/media used for stakeholder engagement	This indicator seeks disclosures on the range of media/methods being used by companies to involve stakeholders such as surveys, community forums, focus groups, advisory panels and meetings.	Media used for engagement, degree of stakeholder involvement, frequency of stakeholder engagement	(GRI, 2013)
4	Key concerns and issues identified through stakeholder engagement	This indicator categorizes disclosures on the nature of key concerns and issues raised through stakeholder engagement; how these concerns and issues were addressed; and whether or not stakeholder comments, concerns and questions were quoted in integrated reports.	Stakeholder comments/concerns/questions quoted, concerns and issues addressed	GRI, 2013 ; AA1000
5	Evidence of stakeholder engagement	This indicator identifies evidence of stakeholder engagement in the form of case studies describing the purpose of stakeholder engagement, how stakeholders were engaged, and the number of participants involved and the outcomes of stakeholder engagement. This indicator includes other evidence such as photographs and assurance of stakeholder engagement.	Case studies on stakeholder engagement, photographs/picture	GRI, 2013; AA1000; King 3
6	Future targets for stakeholder engagement	This indicator evaluates whether or not targets are set for stakeholder engagement and thereafter measure and report their performance against set targets.	Future target setting Report on last year’s targets	AA1000
7	Opportunities for feedback	This indicator is measured by determining whether the companies have a process for stakeholders to provide feedback. It also focuses on different feedback opportunities provided to stakeholders such as a feedback form, contact details, encouragement for feedback and an explanation on feedback use.	Feedback welcomed, feedback form provided, contact details/email/web site, explanation on use of feedback	AA1000

Chapter 3: Research Methodology

This chapter explains the chosen research method. Section 3.1 discusses the research instrument and how the instrument was used to address the research questions in section 1.3. Section 3.2 explains the research approach used and sections 3.3 - 3.6 discuss both the population and sampling methods, as well as how the data will be collected and managed. Due to the exploratory nature of this study, the manner in which validity and reliability is ensured is dealt with in section 3.7.

3.1 Research Instrument

This section deals with the development and application of the disclosure checklist (Table 1& 2). The materiality disclosure checklist (Table 1) and the stakeholder engagement disclosure checklist (Table 2) are the research instruments used to collect data for this research. This research aims to explore the extent of disclosures of both the materiality determination process and the extent of disclosure of stakeholder engagement. The stakeholder engagement disclosure checklist (Table 2), has been adopted from the research performed by Kaur and Lodhia in Australia. The materiality disclosure checklist has been constructed by the researcher and is based on fundamental frameworks such as GRI and AccountAbility as well as prior literature.

Matters considered most important determine the content of integrated reports (Steenkamp, 2018). The materiality determination process reflects management's decision-making process in determining which matters are material and therefore subsequently included in the reports. The materiality determination process is based on a combination of stakeholder engagement, understanding of environmental limits and strategic alignment (AICPA, 2013, p.5). Therefore, there is a theoretical link between the determination of materiality and stakeholder engagement. Stakeholder engagement is a tool used in the materiality determination process to identify, evaluate and prioritize material matters (Steenkamp, 2018).

This research aims to explore whether there is a correlation or relationship between stakeholder engagement disclosures and materiality determination disclosures identified using the respective disclosure checklists

3.2 Research approach

Leedy and Omrod (2010) describe content analysis as a comprehensive and methodical assessment of a particular body of material for the purpose of identifying and categorizing the underlying material into patterns, themes or biases. The content analysis is also used to develop a deeper understanding of what the relevant communication means through a thorough analysis of the contents (Leedy & Ormrod, 2010).

Content analysis is concerned with the underlying meaning, intentions, consequence and context (Raemaekers et al., 2016). It can be used to analyze theoretical issues with the intention of improving the understanding of various types of data, allowing inferences to be made from the underlying data to provide context, knowledge and new insights and serve as a practical guide in which to action this information (Leedy & Ormrod, 2010).

Content analysis is an accepted method of textual investigation (Silverman, 1993). The main strength of content analysis is that: “It provides a means for quantifying the contents of a text, and it does so by using a method that is clear and, in principle, repeatable by other researchers” (Denscombe, 1998).

The intention of this research is not to quantify the quality of the disclosures in the integrated reports, sustainability reports nor the information presented on websites. It is also not the intention to extrapolate findings. Instead, the research is exploratory in nature, highlighting presence or absence of stakeholder engagement and materiality disclosures of JSE listed Companies (Raemaekers et al., 2016)

3.3 Population size and sample

The population chosen for the purpose of this study is the JSE top 40 companies for 2016. Integrated reports and sustainability reports will be reviewed. This is in keeping with the focus on integrated reports as the primary means of communicating with stakeholders (IIRC, 2011). Sustainability reports were also reviewed as it conveys disclosures on an organization's impact on the environment, society and the economy (GRI, 2013). This is in line with the stakeholder logic, which iterates the idea of social responsibility practices.

Abeysekera (2014) argues annual reports can be regarded, as a means to exchange selective information and to actively create disclosure to manage impressions of various interest groups and to passively manage the legitimacy needs of these interest groups. It can be argued that integrated reports are prepared on these premises, because IR aims to address the shortcoming of current financial reporting to enhance stakeholder accountability in integrated reports (Steenkamp, 2018).

Websites of JSE listed companies were also analyzed. Given the ever-increasing number of Internet users, companies have turned to it from more traditional mass media as their preferred communication channel (Snider, Hill, & Martin, 2003). The websites were analyzed for further information disclosed with regards to stakeholder engagement and materiality determination process.

The top 40 listed companies (by market capitalization) were analyzed because these companies have the highest public accountability. This sample was used because of the exploratory nature of this study. The integrated reports, sustainability reports and websites were analyzed in detail to reveal unique insights into the research question (Solomon and Maroun, 2012, Raemaekers et al., 2016).

Data was extracted from 120 sources of information being the integrated report, the sustainability report and website of 40 JSE listed companies. The data was collected from public available websites of each company.

Only the 2016 integrated reports and sustainability reports were analyzed for the purpose of this research. The reason for this is that organizations are unlikely to achieve perfection in the first year of integrated reporting. However, as reporting processes for the production of the supporting information are designed and improved and as the executive team begins to benefit from a more informed implementation of the governing structure's decisions, reporting will improve (Mervyn King's Foreword, IRCSA 2011).

Therefore, 2016 was chosen as companies have adopted an integrated approach and have allowed companies to improve their integrating reporting processes from first year of implementation, 2010, up until 2016. This has allowed companies to internalize the integrated reporting requirements and it is not their first attempt at integrated reporting. The intention of this research is to give an overview of where we are at the moment in terms of disclosing stakeholder engagement policies and procedures and materiality determination processes. This has also allowed companies to fully adopt and implement integrated thinking through preparing integrated reporting.

3.4 Collection of data

Following the approach used by Kaur & Lodhia, (2014), a stakeholder engagement disclosure checklist was used to analyze the integrated reports and websites. According to King III, the board should disclose in the integrated report, the nature of the companies' dealings with stakeholders and the outcomes of these dealings (IOD, 2009). This is pivotal for the performance of this research. The content analysis of reports aims at identification of JSE listed companies that are engaging with their stakeholders in the development of the integrated reports and, investigation of the extent of stakeholder engagement in integrated reporting disclosures (Kaur & Lodhia, 2014).

The approach used by Kaur & Lodhia (2014) was used to create a disclosure checklist for the materiality determination and stakeholder engagement process. The core elements are summarized in Table 1 (section 2.2.1) and Table 2 (section 2.2.2). A content analysis approach will also be used to investigate the extent of disclosure of the materiality determination process. Content analysis was selected as the research methodology to analyze the integrated reports because the technique allows extraction of information not explicitly presented in a quantified and structured format but is implicit in the text (Raemaekers et al., 2016). The content analysis method that was used in this research is conceptual analysis, which involved choosing certain concepts for examination and analysis and then quantifying and tallying their presence in the integrated reports. The content analysis and coding process allowed the researcher to complete a disclosure checklist as discussed in more detail in section 3.1

Each company's integrated report, sustainability report and website was analyzed using the disclosure checklist (Table 1 and Table 2). To complete the disclosure checklist, the lead researcher followed a systematic content analysis approach. Each report was reviewed briefly to obtain a sense of the content and structure of the report (Raemaekers et al., 2016). The report was then analyzed in detail by section to identify indicators per the disclosure checklist. The indicators represent the disclosures made by the companies in terms of stakeholder engagement process and materiality determination process.

The stakeholder engagement disclosures and the materiality disclosures were identified and highlighted in each report. The disclosures were then analyzed and categorized into the relevant indicator in the disclosure checklists. The researcher inspected each report for the relevant disclosure described in the disclosure checklists. The disclosure checklists provided explanations and sub-components of each indicator. Each report was analyzed in isolation (See Appendix A). A disclosure checklist was completed for each company and for each report in that company (See Appendix A).This enabled the researcher to categorize the relevant disclosures into the required indicators. A score of '0' or '1' was used to indicate the presence or absence of the disclosure indicator. This process was completed for each company.

The scores of each company were then aggregated and the results are discussed in section

4. No effort was made to assess the quality of the disclosure. This process was done twice, once for the disclosures of stakeholder engagement and again for the disclosures of materiality determination.

3.5 Data management

Each of the reports was read several times during the data collection process. Since the reports were in an electronic format, any preliminary identification was indicated by highlighting the relevant text (Raemaekers et al., 2016). The analysis of the data entails a process of reading and re-reading to identify certain words or phrases that represent a disclosure within the disclosure checklist, which were recorded on an excel spreadsheet, with a tab for each company being analyzed.

The integrated report for each company, which forms part of the population, was extracted from the company's official website and saved in a designated folder for ease of reference and identifiability. An Excel workbook will be used to capture the data extracted from the qualifying reports with a worksheet for each company under examination (see Appendix A).

Each worksheet had three separate disclosure checklists. A disclosure checklist was kept for the integrated report, sustainability report and website for each company. Appendix A contains an example of the disclosure checklists kept for each company. The excel workbook will differentiate between disclosures found in integrated report, sustainability report and the disclosures found on websites of the companies. This allows for further analysis of where the disclosure of information is found.

3.6 Data Analysis

A disclosure checklist was completed for each report in each company. A comparison was made between the indicators to identify which indicators appear most often in the reports (mode). An analysis will also be made on where in the indicators are found, if they are found in the integrated reports, the sustainability reports or if they are found on the companies' websites.

A Spearman's Rank Order Correlation was used to calculate the strength of the relationship between sets of data. A Spearman's Rank Order Correlation is a non-parametric alternative to Pearson's product- moment correlation and makes no assumption regarding the distributions of variables (Raemaekers et al., 2016). This statistical technique is useful for smaller samples and is useful for data that is not normally distributed. Spearman's Rank Order Correlation is appropriate as it keeps with the aim of the study, which is exploratory in nature. The purpose is not to examine causal relationship between materiality and stakeholder engagement. The purpose is to identify if there is a correlation between the disclosures of stakeholder engagement and materiality determination process. Different authors suggest different interpretations of the correlation coefficient. Guidelines as suggested by Cohen (1988) were used for this analysis as follows: r=.10 to .29 or r=-.10 to - .29 represents a small significance; r=.30 to .49 or r=-.30 to -.49 represents a medium significance and r=.50 to 1.00 or r=-.50 to -1.00 represents a large significance (Cohen, 1988).

Cohen's Kappa is a robust statistic useful for either inter- rater or intra-rater reliability testing. (Viera & Garrett, 2005) Similar to correlation coefficients, it can range from -1 to +1, where 0 represents the amount of agreement that can be expected from random chance, and 1 represents perfect agreement between the raters. Cohen suggested the Kappa result be interpreted as follows: values ≤ 0 as indicating no agreement and 0 01–0 20 as none to slight, 0 21–0 40 as fair, 0 41– 0 60 as moderate, 0 61–0 80 as substantial, and 0 81– 1 00 as almost perfect agreement (Viera & Garrett, 2005).

Kappa was used to determine the level of agreement between two measures. This measure takes into consideration the amount of agreement that could be due to chance, i.e., it corrects for the agreement due to chance. The results from the spearman rank order correlation were corroborated with the results of Cohen's kappa.

3.7 Validity and reliability

The relatively small sample size is not, in itself, a threat to validity and reliability. Text analysis in itself is an extremely labor-intensive process, where smaller sample sizes are acceptable because the outcome is not intended to be generalized: rather, each source of data is interrogated to extract the information contained therein, giving insights into the research question (Merkl-Davies et al, 2011; Creswell 2009).

The stakeholder engagement index was adopted from a prior study performed by Kaur & Lodhia, (2014). Kaur & Lodhia, (2014) constructed the stakeholder engagement index, which comprised of seven stakeholder engagement indicators. This index is comprehensive as it is based on the major frameworks identified such as GRI and AA1000, which are widely accepted practice based standards and these provide useful insights into stakeholder engagement (Kaur & Lodhia, 2014 . Reliability is ensured as both instruments (illustrated in Table 1 and Table 2) are grounded in reporting frameworks such as the GRI and the IIRC as well as prior academic.

To minimize researcher bias, the reports were only analyzed for the presence or absence of specific disclosures (Raemaekers et al., 2016). A stakeholder engagement and a materiality index have been developed on the basis of the literature review. It is used to examine the extent of disclosures on stakeholder engagement and materiality in the integrated reports and in their websites (see section 2.2). In order to ensure reliability and to reduce the risk of being subjective, a pilot analysis was performed on one of the companies.

The researcher performed the analysis for both stakeholder engagement and materiality indicators. This was then re-performed after sufficient period of time to determine whether consistency had been achieved. Only when consistency was achieved, the researcher then proceeded with rest of the analysis.

Chapter 4: Results

4.1 An analysis of the results from the disclosure checklist

The data was collected from the integrated reports, sustainability reports and websites 40 JSE listed companies using the disclosure checklists (Table 1&2). The disclosure checklist was used to identify the presence or absence of each indicator in the integrated report, sustainability report and website. In this research, 40 companies were analyzed from three different sources namely: the integrated report, sustainability reports and websites.

Materiality

Table 3.1 – Analysis of materiality indicators

No.	Indicator	Integrated report	Sustainability Report	Website
M1	Materiality definition	58%	25%	8%
M2	Materiality Determination Process	38%	30%	28%
M3	Identification of relevant matters, aspects or topics	58%	40%	13%
M4	Evaluating importance of the relevant matters	30%	23%	8%
M5	Inclusion of stakeholder engagement in materiality determination	60%	30%	15%
M6	Use of Materiality Matrix to prioritize topics	3%	10%	8%

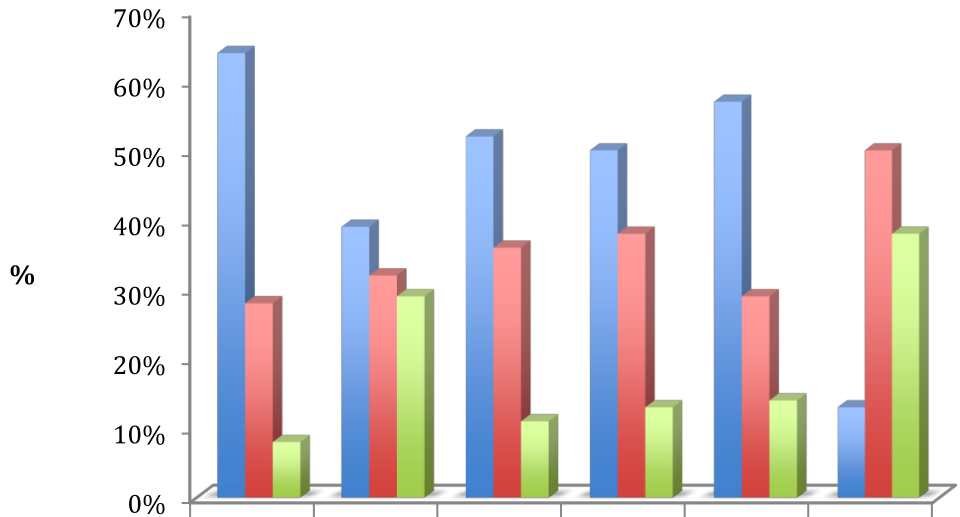
Table 3.1 reveals that 58% of the selected JSE listed companies identified and disclosed the relevant matters, aspects or topics in their integrated report however; when it comes to disclosing how they evaluated the importance of the relevant matters, only 30% disclosed this

indicator in their integrated reports. 60% of the companies disclosed that they engage with stakeholders in their materiality determination process however only 25% of companies provided evidence of stakeholder engagement in their integrated reports (Table 3.2). The lack of evidence of stakeholder engagement is supported further by the fact that only 3% of companies made use of the materiality matrix.

These results are consistent with the findings of Wee et al. (2016) where their results showed that the majority of companies (89%) explained how they identified relevant matters as material and many subsequently provided information about the items they identified as material (75%), equivalent to M3. Information on the evaluation process used and the prioritizing of material items, equivalent to M4, was provided by less than a quarter of companies (23% and 19% respectively). Further, although companies explain the process they undertook to determine material items and provide a list of material matters in their public reports, they often do not describe the processes of evaluating and prioritizing items (Steenkamp, 2018).

The most disclosed indicator in the websites is M2, which is "Materiality Determination Process". The materiality determination process is often depicted on lists, figures and tables (Wee et al., 2016). The use of Materiality Matrix to prioritize topics is not often used this is reflected in the data collected as only 3% of companies disclose a materiality matric in the integrated report, 10% in the sustainability report and 8% on websites. There are very few graphical representations (materiality matrices) used to present stakeholders' perceptions of issues identified by companies.

Figure 2 - Frequency of materiality indicators in each source



	M1	M2	M3	M4	M5	M6
Integrated report (%)	64%	39%	52%	50%	57%	13%
Sustainability report (%)	28%	32%	36%	38%	29%	50%
Website (%)	8%	29%	11%	13%	14%	38%

Materiality indicators

Figure 2 summarizes the data based on the number of indicators found in each source. This reveals that most of the indicators are disclosed in the integrated reports. . The indicators, which represent materiality determination process disclosures, have the highest presence in the integrated reports, with the exception of M6.

Table From the data presented in Table 3.1 and Figure 2, it becomes clear that the highest percentage of indicators are found in the integrated reports, which is consistent with the academic literature. This confirms that integrated reports are considered the primary means of communicating with stakeholders (IIRC, 2011). IIRC recommend that financial and non-financial information should not be provided in isolation (McNally, Cerbone, & Maroun, 2017). Instead, these metrics should be incorporated in a single report, which reflects an integrated approach to managing different types of capital to generate sustainable returns (McNally et al., 2017)

Figure 3 – Analysis of each source (Materiality)

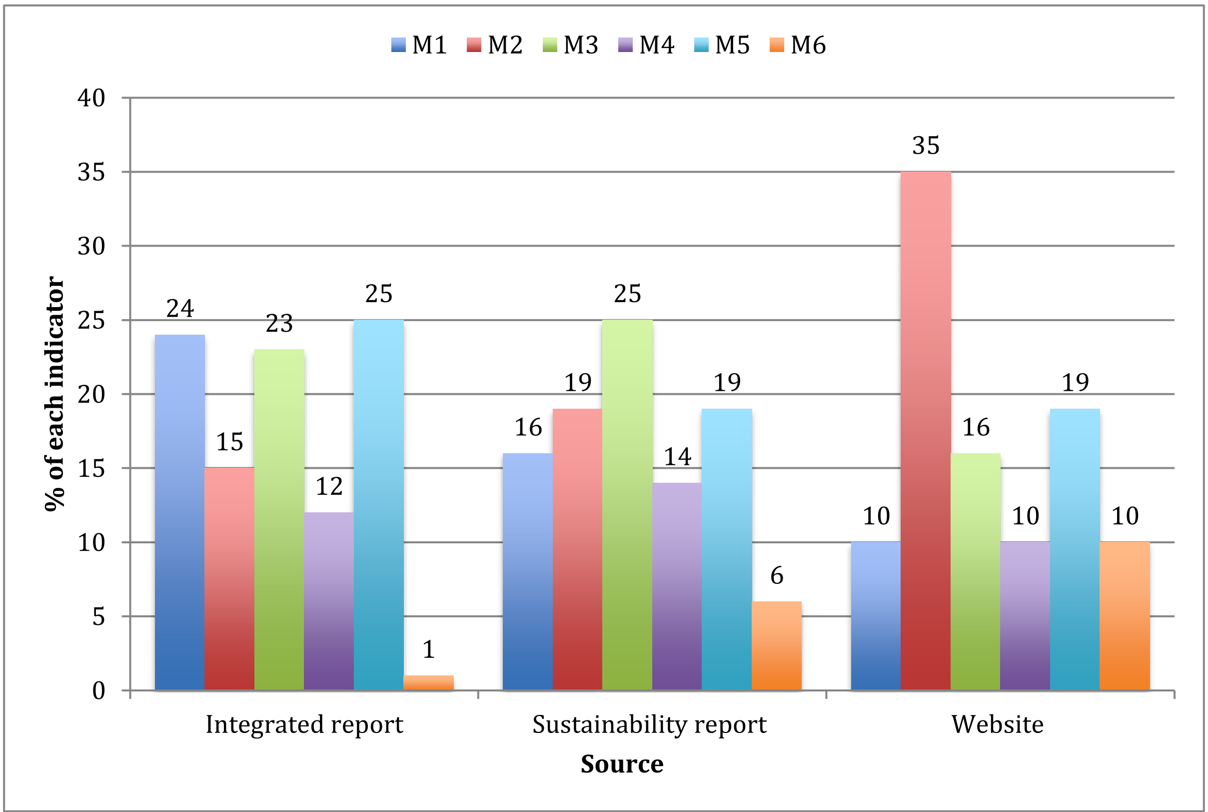


Figure 3 highlights the percentage of each indicator in the respective source. This figure indicates that 25% of the integrated report disclosures consist of M5 disclosures and 24% of the integrated report disclosures consist of M1 disclosures. The data indicates that inclusion of stakeholder engagement in materiality determination and the disclosure of materiality definition were the most frequent disclosures in the integrated report.

Inclusion of stakeholder engagement in materiality determination (M5) is key indicator for the purpose of this research as this indicator is the link between materiality and stakeholder engagement. Stakeholder engagement has been identified as a core principle in the determination of material issues for reporting. The results of these figures discussed demonstrate that defining materiality (M1), identifying relevant matters (M3) and the inclusion of stakeholders (M5) are key components of the materiality determination process and form the majority of the disclosures in the respective reports.

This data indicates that in relation to sub-question a), JSE listed companies are primarily disclosing the definition of materiality (M1), the identified relevant matters (M3) and the fact that they have included stakeholder in determining what is material (M5). Based on the number of disclosures, the data illustrates that companies are disclosing key aspects of the materiality determination process in their reporting. Although companies are claiming, through their disclosures, that they engage with stakeholders, this will be investigated further when considering the stakeholder engagement indicators.

Stakeholder reporting

Table 3.2 – Analysis of stakeholder reporting indicators

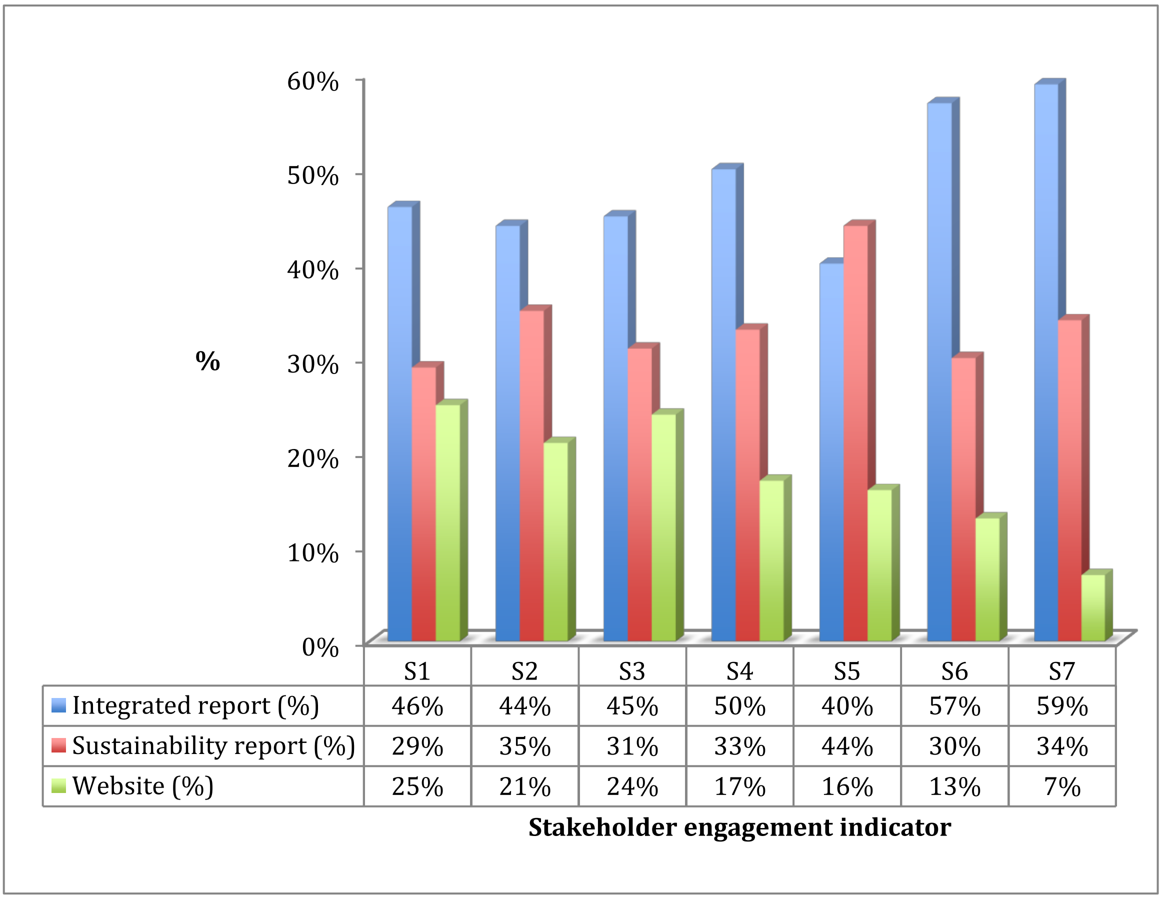
No.	Indicator	Integrated report	Sustainability Report	Website
S1	Stakeholder identification	78%	50%	43%
S2	Basis for stakeholder identification and selection	38%	30%	18%
S3	Approaches/media used for stakeholder engagement	55%	38%	30%
S4	Key concerns and issues identified through stakeholder engagement	58%	38%	20%
S5	Evidence of stakeholder engagement	25%	28%	10%
S6	Future targets for stakeholder engagement	43%	23%	10%
S7	Opportunities for feedback	43%	25%	5%

Table 3.2 reveals the percentage of companies that had the respective indicator present in their respective source. From this table, it can be seen that most of the companies disclose the indicators in the integrated reports. Table 3 reveals that 78% of the companies identify and disclose their stakeholders in the integrated report however only 38% of companies disclose in the integrated reports how they identify their key stakeholders. This indicates that companies disclosed their definition of "stakeholder" and their stakeholder list. 58% of companies disclosed the key concerns and issues identified through stakeholder engagement however on inspection of the integrated reports, through the content analysis, only 25% of companies provided evidence of stakeholder engagements in the integrated reports.

Although stakeholder engagement and dialogue is a critical aspect of sustainability accounting and reporting, there is a lack of evidence as to whether such engagement and dialogue is actually happening currently (Gao & Zhang 2001; Unerman 2007). It found that engagement and dialogue with stakeholders are increasingly recognized as crucial elements of sustainability reporting, although conceding that there is a shortage of evidence within social and environmental reports that such engagement and dialogue is actually taking place (Manetti, 2011). This is evidenced by the fact that only 25% of companies provided evidence of stakeholder engagements in the integrated reports.

S4 is an important indicator for the purpose of this research. This indicator identifies the stakeholders' key concerns and issues disclosed by companies. These disclosures indicate the concerns and issues important to stakeholders and therefore would have the ability to affect stakeholders' decisions. Global Reporting Initiative (2013) states that the interest and expectations of stakeholders specifically invested in the success of the organization should be taken into account in defining material aspects (Ferrero-Ferrero et al., 2018)

Figure 4 – Frequency of stakeholder engagement indicators in each source



	S1	S2	S3	S4	S5	S6	S7
Integrated report (%)	46%	44%	45%	50%	40%	57%	59%
Sustainability report (%)	29%	35%	31%	33%	44%	30%	34%
Website (%)	25%	21%	24%	17%	16%	13%	7%

Figure 4 reveals that most of the indicators are disclosed in the integrated reports. The indicators, which represent stakeholder-reporting disclosures, have the highest presence in the integrated reports, with the exception of S5. This is consistent with the principle of integrated reporting. The integrated reports are considered the primary means of communicating with stakeholders (IIRC, 2011). IIRC recommend that financial and non-financial information should not be provided in isolation (McNally, Cerbone, & Maroun, 2017). Instead, these metrics should be incorporated in a single report, which reflects an integrated approach to managing different types of capital to generate sustainable returns (McNally et al., 2017).

The weakness in traditional sustainability reports was that it presented environmental, social and governance disclosures separately from financial information and did not always explain the interconnection between strategy, risks and the multiple forms of capital under an organization's control (de Villiers et al., 2017). In this context, integrated reporting represented an evolution of the provision of social environmental and financial information in a format where the different kinds of disclosures are interconnected (De Villiers et al., 2017; Solomon and Maroun, 2012). Integrated reporting aims to provide better quality information that explains the interconnection between social, environmental, and economic dimensions of an organization, to improve the quality of information provided to stakeholders and to promote sustainable business practices (de Villiers et al., 2017). For engagement to be meaningful, companies must ensure that interactions are taking place at every stage of the sustainability process, from stakeholder identification, through to the engagement process and to issue identification and prioritization as well as and, feedback and assurance

Figure 5– Percentage of each indicator in the integrated report

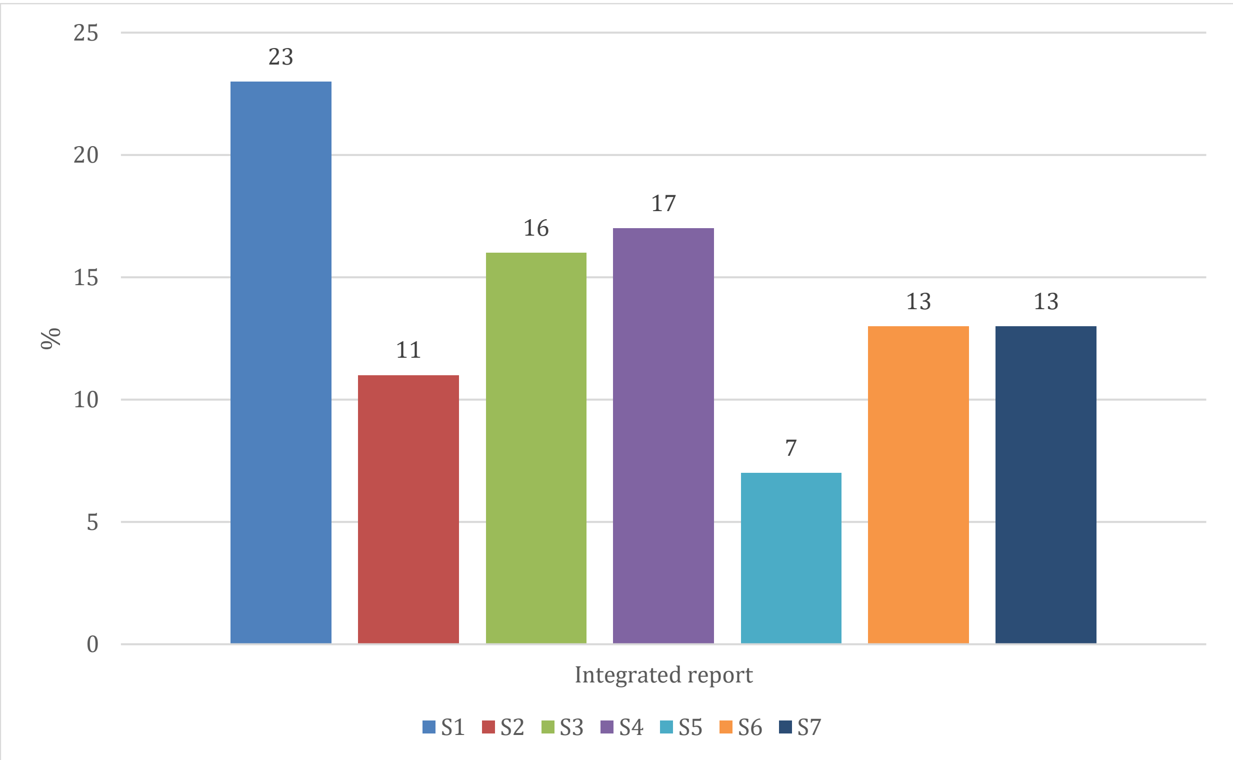


Figure 5 indicates the percentage of each stakeholder-reporting indicator in the integrated report. Stakeholder identification (S1) represents 23% of the disclosures in the integrated report. This indicator is the most frequent indicator in the integrated reports. This practice of identifying stakeholders is endorsed by King IV, which requires companies to manage stakeholder relationships by identifying material stakeholders (Institute of Directors, 2016).

Approaches used for stakeholder engagement (S3) and key concerns and issues identified through stakeholder engagement (S4), together represent 33% of the disclosures in the integrated report. King IV requires that key focus areas identified during the reporting period be disclosed in relation to stakeholder relationships (Institute of Directors, 2016). Figure 2 reveals that 17% of JSE listed companies, clearly discloses key concerns and issues raised through stakeholder engagement.

Figure 6 - Percentage of each indicator in the sustainability report

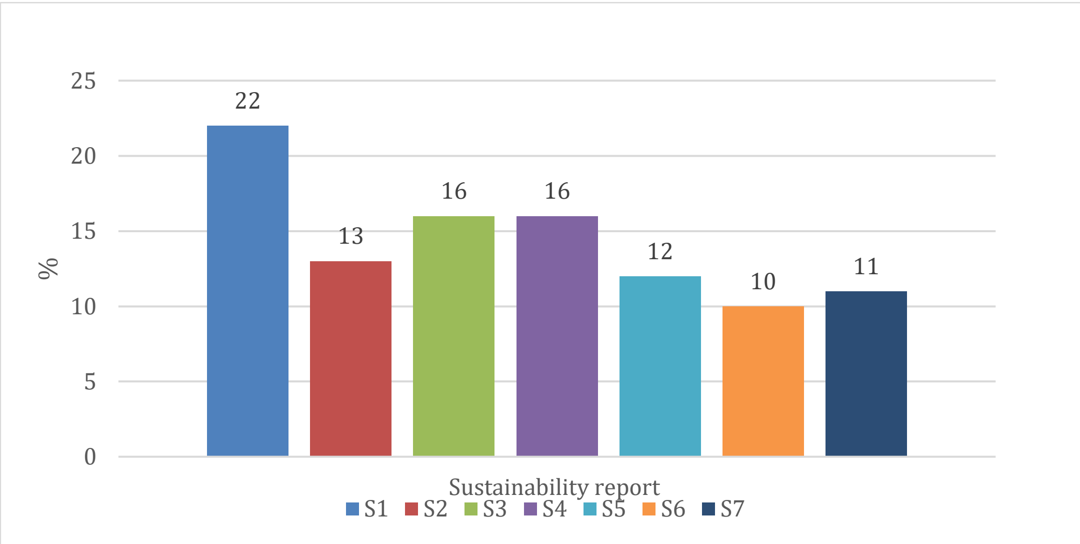


Figure 6 indicates the percentage of each stakeholder-reporting indicator in the sustainability reports. These findings are consistent with those identified in Figure 2.

Figure 7 - Percentage of each indicator in the website

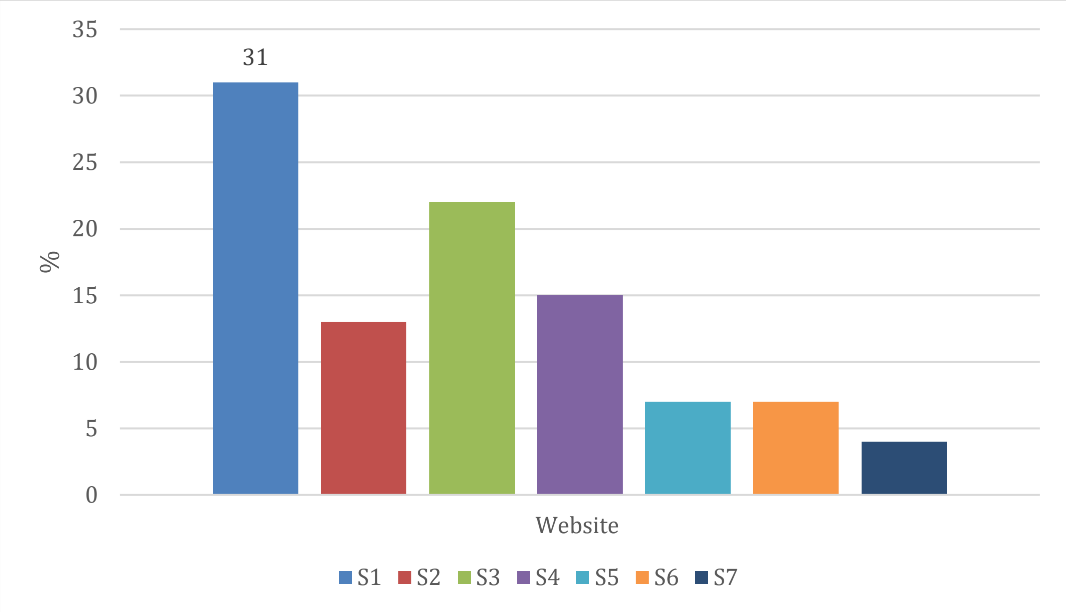


Figure 7 indicates the percentage of each stakeholder-reporting indicator in the websites. The most frequent in the website disclosures is S1. S4 is the disclosures made by companies that identify key concerns and issues through stakeholder engagement. Only 17%, 16% and 15% of this indicator was found in the integrated report, sustainability report and website respectively. This indicator is important to this research as this indicator provides the link to the materiality determination process. It is understood that stakeholder engagement and materiality are closely related (Ferrero-Ferrero et al., 2018). Stakeholder engagement contributes to the identification of material aspects, making it possible to find out the reasonable expectations and interests of stakeholders (Global Reporting Initiative, 2013), and materiality improves the stakeholder–organization relationship by addressing those issues that are relevant to the organization and its stakeholders (Calabrese et al., 2016) consistently with the stakeholder theory (Ferrero-Ferrero et al., 2018)

JSE listed companies are required by King III (applicable to 2016 financial year), to disclose in the integrated report, the nature of the companies' dealings with stakeholders and the outcomes of these dealings (IOD, 2009). The results indicate to what to extent JSE listed companies are disclosing their stakeholder engagement process (research sub-question a).

These results reveal what JSE listed companies are currently disclosing in their integrated reports, sustainability reports and websites. The results indicate that although companies prepare multiple reports and documents, majority of the disclosures are found in the integrated report. This is to be expected as the integrated report serves as the primary report to stakeholders (IIRC, 2011).

The results indicate that majority (78%, see Table 3.1) of JSE listed companies are disclosing their key stakeholders in the integrated reports. Identifying key stakeholders is a fundamental step in the stakeholder engagement process. Once key stakeholders are identified, the engagement process can begin. Stakeholder engagement is a fundamental step of the reporting process because of its role in defining materiality and relevance of the information communicated.

These results indicate that majority (58%- see Table 3.1) of JSE listed companies disclosed the key concerns and issues identified throughout stakeholder engagement. This is consistent with prior literature which emphasizes that stakeholder engagement is an important tool for identifying and understanding material concerns, issues, perceptions, needs and expectations of stakeholders in relation to sustainability issues (Kaur & Lodhia, 2014)

The results indicate to what to extent JSE listed companies are disclosing their materiality determination process (research sub- question b). The results indicate that only 38% of companies are disclosing their materiality determination process. The majority of JSE listed companies do provide other disclosures such as materiality definition and the identified relevant matters. However, when it comes to disclosing the process followed to determine materiality, the disclosures are lacking.

4.2 Spearman's Correlation Coefficient and Cohen's Kappa

Spearman's correlation was used to determine whether there exists a relationship among the variables. Kappa was used to determine the level of agreement between two measures. This measure takes into consideration the amount of agreement that could be due to chance.

The Spearman's correlation coefficients revealed some statistically significant relationships in the variables analyzed. There was a significant relationships identified in the sustainability reports. The highest correlation was noted between the S1 and M2 in the sustainability report. The level of agreement between the stakeholder identification and materiality determination process in the sustainability report is substantial ($k=.600$, $p<.01$) and is significant at the .1% level of significance. This result corroborates the large correlation ($\rho=.655$) between the two variables as demonstrated in the Spearman's correlation table above.

Table 4 provides an analysis of the correlations between the indicators in the difference sources.

Table 4: Analysis by source

4.1 Spearman's correlation coefficients in the integrated reports:

	S1	S2	S3	S4	S5	S6	S7
M1	.263	.248	.239	.284	.029	.330*	.330*
M2	.294	.253	-.026	.248	.268	.170	.379*
M3	.506**	.353*	.239	.386*	.263	.432**	.330*
M4	.353*	.169	.044	.232	.252	.210	.210
M5	.416**	.422**	.185	.330*	.236	.392*	.392*
M6	.086	.207	-.177	.138	-.092	.186	.186

4.2 Spearman's correlation coefficients in the sustainability reports:

	S1	S2	S3	S4	S5	S6	S7
M1	.462**	.252	.507**	.388*	.420**	.104	.333*
M2	.655**	.524**	.507**	.620**	.452**	.431**	.378*
M3	.612**	.579**	.527**	.632**	.640**	.416**	.471**
M4	.419**	.431**	.448**	.448**	.473**	.140	.242
M5	.546**	.405**	.507**	.507**	.574**	.300	.378*
M6	.333*	.145	.258	.258	.168	.020	.192

4.3 Spearman's correlation coefficients in the website reports:

	S1	S2	S3	S4	S5	S6	S7
M1	.139	.119	.021	.095	-.095	.221	-.065
M2	.037	.158	-.037	-.028	-.019	-.019	-.141
M3	.287	.025	.082	.000	-.126	.126	-.087
M4	.139	-.131	.021	-.142	-.095	-.095	-.065
M5	.347*	.175	.183	-.035	-.140	.093	-.096
M6	.139	-.131	.021	-.142	-.095	-.095	-.065

*. Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).

Table 4.3 reveals that there are no statistical significant relationships between the materiality indicators and the stakeholder reporting indicators in websites with the exception S1 with M5. Given the ever-increasing number of Internet users, companies have turned to it from more traditional mass media as their preferred communication channel (Snider, Hill, & Martin, 2003). Companies are providing additional documents and information on their websites however as seen from the results in Table 3.2 and Figure 5, integrated reports and sustainability reports contain higher number of disclosures then websites. Companies tend to provide additional disclosures on their websites, but the results indicate that the integrated report and sustainability reports contain disclosures that are more detailed. The Spearman's correlation coefficients also revealed that there is no correlation between the stakeholder engagement indicators and M6, Use of Materiality Matrix to prioritize topics with the exception of S1 in the sustainability report.

Table 5 provides an analysis of the correlations between the materiality disclosures and stakeholder engagement disclosures per indicator. Table 5 is useful for analyzing the correlations by indicator. Table 5 also includes the level of correlation between the disclosures.

Table 5: Analysis by Indicator

5.1 Analysis of S1

	S1: Integrated report				**S1: Sustainability report**				**S1: Website**			
	Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa	
M1	.263	Small	k=.237	Small	.462**	Moderate	k=.400	Small to moderate	.139	Lack of correlation	k=.083	Very small
M2	.294	Small	k=.209	Small	.655**	Significant	k=.600	Moderate	.037	Lack of correlation	k=.035	Very small
M3	.506**	Significant	k=.455	Moderate	.612**	Significant	k=.600	Moderate	.287	Small	k=.211	Small
M4	.353*	Moderate	k=.221	Small	.419**	Moderate	k=.350	Small to moderate	.139	Lack of correlation	k=.083	Very small
M5	.416**	Moderate	k=.382	Small	.546**	Significant	k=.500	Moderate	.347*	Moderate	k=.274	Small
M6	.086	Lack of correlation	k=.015	Very small	.333*	Moderate	k=.200	Small	.139	Lack of correlation	k=.083	Very small

In the integrated report, significant relationships were identified with M3, M4 and M5. In the sustainability report there were significant relationships with all the materiality indicators and in the website, there was a significant relationship with M5.

The highest correlation in in the integrated report was noted between S1 and M3. The level of agreement between the Stakeholder identification and Identification of relevant matters, aspects or topics in the integrated report is moderate ($k=.455$, $p<.01$) and is significant at the 1% level of significance. This result corroborates the moderate correlation ($\rho=.506$) between the two variables as demonstrated in the Spearman's correlation table above. M3 indicates how companies identify aspects and any other relevant topics, and their boundaries. It indicates how companies identify relevant matters based on the ability to affect value creation (GRI, 2013). The results of the Spearman correlation coefficient and Cohen's Kappa indicate the there is a moderate correlation between how companies disclose how they identify their stakeholders and their relevant matters.

In the sustainability report, S1 had significant correlations with all the materiality indicators. This indicates that there is a moderate to significant correlation between stakeholder identification and the materiality disclosures as indicated in the materiality disclosure checklist.

5.2 Analysis of S2

	S2: Integrated report				S2: Sustainability report				S2: Website			
	Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa	
M1	.248	Lack of correlation	k=.229	Small	.252	Lack of correlation	k=.250	Small	.119	Lack of correlation	k=.106	Very small
M2	.253	Lack of correlation	k=.253	Small	.524**	Significant	k=.524	Moderate	.158	Lack of correlation	k=.152	Very small
M3	.353*	Moderate	k=.325	Small	.579**	Significant	k=.565	Moderate	.025	Lack of correlation	k=.024	Very small
M4	.169	Lack of correlation	k=.167	Very small	.431**	Moderate	k=.423	Small to moderate	-.131	Lack of correlation	k=.117	Very small
M5	.422**	Moderate	k=.381	Small to moderate	.405**	Moderate	k=.405	Moderate	.175	Lack of correlation	k=.174	Small
M6	.207	Lack of correlation	k=.082	Very small	.145	Lack of correlation	k=.118	Small	-.131	Lack of correlation	k=.117	Very small

In the integrated report, significant relationships were identified with M3 and M5. In the sustainability report there were significant relationships with M2, M3, M4 and M5 and in the website, there was no significant relationships.

The highest correlation in in the integrated report was noted between S2 and M5. The level of agreement between the Basis for stakeholder identification and selection and Inclusion of stakeholder engagement in materiality determination in the integrated report is small to moderate ($k=.381$, $p<.01$) and is significant at the 1% level of significance. This result corroborates the small to moderate correlation ($\rho=.422$) between the two variables as demonstrated in the Spearman's correlation table above. S2 examines disclosures on the process and method of identification and selection of stakeholders for integrated reporting (GRI, 2013 ; AA1000) M5 evaluates the inclusion of stakeholder engagement in the process of determining materiality as a tool to prioritize the aspects and any other relevant topic as identified. The results of the Spearman correlation coefficient and Cohen's Kappa indicate the there is a moderate correlation between how companies disclose the basis for stakeholder identification and the inclusion of stakeholder engagement in the materiality determination process

The highest correlation in the sustainability report was noted between S2 and M3. M3 indicates how companies identify aspects and any other relevant topics, and their boundaries. It indicates how companies identify relevant matters based on the ability to affect value creation (GRI, 2013).

The results of the Spearman correlation coefficient and Cohen's Kappa indicate the there is a moderate to significant correlation between how companies disclose the basis for stakeholder identification and their relevant matters.

5.3 Analysis of S3

	S3: Integrated report				S3: Sustainability report				S3: Website			
	Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa	
M1	.239	Lack of correlation	k=.239	Small	.507**	Significant	k=.486	Moderate	.021	Lack of correlation	k=.015	Very small
M2	-.026	Lack of correlation	k=.024	Very small	.507**	Significant	k=.500	Moderate	-.037	Lack of correlation	k=-.0.37	Very small
M3	.239	Lack of correlation	k=.239	Small	.527**	Significant	k=.526	Moderate	.082	Lack of correlation	k=.071	Very small
M4	.044	Lack of correlation	k=.038	Very small	.448**	Moderate	k=.420	Moderate	-.021	Lack of correlation	k=-.015	Very small
M5	.185	Lack of correlation	k=.184	Small	.507**	Significant	k=.500	Moderate	.183	Lack of correlation	k=.167	Small
M6	-.177	Lack of correlation	k=.050	Very small	.258	Lack of correlation	k=.188	Small	-.021	Lack of correlation	k=-.021	Very small

In the integrated report, there are no significant relationships identified. In the sustainability report, there were significant relationships with M1, M2, M3, M4 and M5. In the website, there was no significant relationships.

The highest correlation in in the sustainability report was noted between S3 and M3. S3 indicator seeks disclosures on the range of media/methods being used by companies to involve stakeholders such as surveys, community forums, focus groups, advisory panels and meetings (Kaur & Lodhia, 2014). M3 indicates how companies identify aspects and any other relevant topics, and their boundaries. It indicates how companies identify relevant matters based on the ability to affect value creation (GRI, 2013). The results of the Spearman correlation coefficient and Cohen's Kappa indicate the there is a moderate to significant correlation between how companies disclose their engagement channels and their relevant matters.

5.4 Analysis of S4

	S4: Integrated report				S4: Sustainability report				S4: Website			
	Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa	
M1	.284	Lack of correlation	k=.284	Small	.388*	Moderate	k=.371	Small	.095	Lack of correlation	k=.082	Very small
M2	.248	Lack of correlation	k=.229	Small	.620**	Significant	k=.611	Substantial	-.028	Lack of correlation	k=-.027	Very small
M3	.386*	Moderate	k=.386	Small	.632**	Significant	k=.632	Substantial	.000	No Correlation	k=.000	None
M4	.232	Lack of correlation	k=.198	Very small	.448**	Moderate	k=.420	Moderate	-.142	Lack of correlation	k=-.122	Small
M5	.330*	Moderate	k=.330	Small	.507**	Significant	k=.500	Moderate	-.035	Lack of correlation	k=.034	Very small
M6	.138	Lack of correlation	k=.037	Very small	.258	Lack of correlation	k=.188	Small	-.142	Lack of correlation	k=-.122	Small

In the integrated report, there are significant relationships with M3 and M5. In the sustainability report, there were significant relationships with M1, M2, M3, M4 and M5. In the website, there was no significant relationships.

The highest correlation in in the sustainability report was noted between S4 and M2 as well as S4 and M3. The level of agreement between the S4 and M2 in the sustainability report is significant ($k=.611$, $p<.001$) and is significant at the .1% level of significance. This result corroborates the moderate to large correlation ($\rho=.620$) between the two variables as demonstrated in the Spearman's correlation table above. The level of agreement between the S4 and M3 in the sustainability report is significant ($k=.632$, $p<.001$) and is significant at the .1% level of significance. This result corroborates the moderate to large correlation ($\rho=.632$) between the two variables as demonstrated in the Spearman's correlation table above.

"Key concerns and issues identified through stakeholder engagement" (S4) and "Inclusion of stakeholder engagement in materiality determination" (M5) are key indicators for this research as these indicators provide the link between stakeholder engagement and the materiality determination process. The GRI guidelines identify a series of key reporting principles to generate a balanced and reasonable report on the social, environmental and economic performance of an organization (Ferrero-Ferrero et al., 2018).

One of these principles is "materiality", which is a central concept in the latest generation of GRI guidelines (G4) (Global Reporting Initiative, 2013). The GRI states that material topics for a reporting organization should include topics that have an impact on an organization's economic, environmental and social value, its stakeholders and society at large (Global Reporting Initiative, 2013). In this vein, materiality refers to those topics that are important for the organization or the stakeholders involved (Ferrero-Ferrero et al., 2018).

The results of the Spearman correlation coefficient and Cohen's Kappa indicate the there is a significant correlation between how companies disclose Key concerns and issues identified through stakeholder engagement and how they disclose their materiality determination process and how they disclose how they identify relevant aspects in their reporting.

5.5 Analysis of S5

	S5: Integrated report				S5: Sustainability report				S5: Website			
	Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa	
M1	.029	Small	k=.023	Very small	.420**	Moderate	k=.419	Small to moderate	-.095	Lack of correlation	k=.094	Very small
M2	.268	Small	k=.257	Small	.452**	Moderate	k=.451	Moderate	-.019	Lack of correlation	k=-.016	Very small
M3	.263	Small	k=.209	Very small	.640**	Significant	k=.615	Moderate to large	-.126	Lack of correlation	k=-.125	Very small
M4	.252	Small	k=.250	Small	.473**	Moderate	k=.468	Moderate	-.095	Lack of correlation	k=-.094	Very small
M5	.236	Small	k=.182	Very small	.574**	Moderate	k=.573	Moderate	-.140	Lack of correlation	k=-.136	Very small
M6	-.092	Lack of correlation	k=-.048	Very small	.168	Lack of correlation	k=-.141	Small	-.095	Lack of correlation	k=-.094	Very small

In the integrated report, there are no significant relationships identified. In the sustainability report, there were significant relationships with M1, M2, M3, M4 and M5. In the website, there was no significant relationships.

The highest correlation was noted between the S5 and M3 in the sustainability report. The level of agreement between the S5 and M3 in the sustainability report is large ($k=.615$, $p<.001$) and is significant at the .1% level of significance. This result corroborates the large correlation ($\rho=.640$) between the two variables as demonstrated in the Spearman's correlation table above. The results of the Spearman correlation coefficient and Cohen's Kappa indicate the there is a significant correlation between evidence of stakeholder engagement identified in the sustainability report and how companies disclose how they identify relevant aspects in their reporting.

5.6 Analysis of S6

	S6: Integrated report				S6: Sustainability report				S6: Website			
	Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa	
M1	.330*	Moderate	k=.315	Small	.104	Lack of correlation	k=.103	Very small	.221	Small	k=.219	Small
M2	.170	Lack of correlation	k=.169	Very small	.431**	Moderate	k=.423	Small to moderate	-.019	Lack of correlation	k=-.016	Very small
M3	.432**	Moderate	k=.413	Small to moderate	.416**	Moderate	k=.382	Small	.126	Lack of correlation	k=.125	Very small
M4	.210	Small	k=.202	Small	.140	Lack of correlation	k=.140	Very small	-.095	Lack of correlation	k=-.094	Very small
M5	.392*	Moderate	k=.369	Small	.300	Moderate	k=.295	small	-.093	Lack of correlation	k=-.091	Very small
M6	.186	Lack of correlation	k=.0.67	Very small	.020	Lack of correlation	k=.018	Very small	-.095	Lack of correlation	k=-.094	Very small

In the integrated report, there are significant relationships with M1, M3 and M5. In the sustainability report, there were significant relationships with M1 and M2. In the website, there was no significant relationships.

The highest correlation was noted between the S6 and M3 in the sustainability report. The level of agreement between the Future targets for stakeholder engagement and M3 in the sustainability report is moderate ($k=.423$, $p<.01$) and is significant at the 1% level of significance. This result corroborates the moderate correlation ($\rho=.431$) between the two variables as demonstrated in the Spearman's correlation table above.

5.7 Analysis of S7

	S7: Integrated report				**S7: Sustainability report**				**S7: Website**			
	Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa		Spearman's Correlation		Cohen's Kappa	
M1	.330*	Moderate	k=.315	Small	.333*	Moderate	k=.333	Small	-.065	Lack of correlation	k=.064	Very small
M2	.379*	Moderate	k=.377	Small	.378*	Moderate	k=.375	Small	-.141	Lack of correlation	k=.092	Very small
M3	.330*	Moderate	k=.315	Small	.471**	Moderate to significant	k=.444	Moderate	-.087	Lack of correlation	k=.077	Very small
M4	.210	Lack of correlation/small	k=.202	Very small	.242	Lack of correlation	k=.242	Very small	-.065	Lack of correlation	k=.064	Very small
M5	.392*	Moderate	k=.369	Small to moderate	.378*	Moderate	k=.375	Small	-.096	Lack of correlation	k=.081	Very small
M6	.186	Lack of correlation	k=.067	Very small	.192	Lack of correlation	k=.167	Very small	-.065	Lack of correlation	k=.064	Very small

In the integrated report, there are significant relationships with M1, M2, M3 and M5. In the sustainability report, there were significant relationships with M1, M2 and M3. In the website, there was no significant relationships.

The highest correlation was noted between the S7 and M3 in the sustainability report. The level of agreement between the Opportunities for feedback and M3 in the sustainability report is moderate ($k=.444$, $p<.01$) and is significant at the 1% level of significance. This result corroborates the moderate correlation ($\rho=.471$) between the two variables as demonstrated in the Spearman's correlation table above

Chapter 5: Conclusions and Recommendations

5.1 Summary of findings

One of the main guiding principles proposed by the IIRC is materiality, which is key to both reaching conciseness and to identifying the relevant issues in the companies' value creation process (Fasan & Mio, 2017). Materiality is a tool used by preparers to identify relevant issues to be included in the integrated reports. In order to understand how information is determined to be material, it is necessary to explore how the materiality determination process is disclosed in the integrated reports. The materiality checklist was used to explore the extent of materiality disclosures in the integrated report, sustainability report and websites.

Stakeholder interests and expectations drive the content of integrated reports, therefore the success of integrated reports depends on how efficiently companies engage and communicate with their stakeholders. The principle of materiality in the context of integrated reporting foresees that stakeholder engagement will determine which information and data should be included in the report (Manetti, 2011).

Stakeholder engagement is a fundamental step of the reporting process because of its role in defining materiality and relevance of the information communicated. The literature therefore supports the research question in that it would be expected to find a correlation between materiality determination and stakeholder engagement.

However, based on the findings of this research, present reporting practice of disclosing materiality determination process and stakeholder engagement in the integrated report and website, as revealed by this research, does not reflect a correlation between materiality and stakeholder engagement. Owing to the pressure from peer-reporting practices and stakeholder expectations regarding corporate transparency, reporting managers face pressure from both top management and external stakeholders to prepare an integrated report (de Villiers et al., 2017). It can be argued that rather corporations are seen to be using integrated reporting as a legitimization device and for managing the stakeholders effectively (Manetti, 2011).

However, the present reporting practice of disclosing materiality determination process and stakeholder engagement in the sustainability report, as revealed by this research, reflects a small to moderate correlation between materiality and stakeholder engagement. In theory, stakeholder engagement and materiality are closely related (Ferrero-Ferrero et al., 2018). This research has given insight as to whether in practice; a relationship exists between the disclosures made by the top 40 JSE listed companies in relation to the materiality determination process and stakeholder engagement.

5.2 Research Limitations

The data used in this research relied on publicly available sources, such as company reports, articles and web sites. This study has not assessed the adequacy or quality of the disclosures. This study is also qualitative in nature and therefore a smaller sample has been used. The sample consists of JSE top 40 companies and was not randomly selected.

No effort was made to rank the disclosures according to their perceived usefulness to stakeholders (Raemaekers et al., 2016). A single period will be used for the analysis. Therefore a limitation is that a comparison cannot be made for prior years to the year of study. A limitation of using websites is that the information contained in the websites has not been verified.

5.3 Implications and areas for future research

There are a number of recommendations for future research on the extent of materiality and stakeholder engagement disclosures. As this study has a South Africa-specific focus, disclosure trends in other jurisdictions were not considered and can be considered for future research. A further recommendation for future research may be the extension of the sample, both in quantity and over a longer period of time to enable a complete and accurate assessment of not only the quantity but also the quality of the disclosures.

A further contribution to the current research would be a review of the effect King IV on the extent of disclosures. A comparison of the disclosures could be to determine the effects of King IV on materiality and stakeholder engagement disclosures. In addition, the extension of the sample within specific industries could future explore these disclosures. This research focused on the top 40 JSE listed companies. An area for further research would be to perform an analysis of how different industries would differ in their disclosures.

Appendix A

Company X

No.	Indicator	INTEGRATED REPORT	SUSTAINIBILITY REPORT	WEBSITE	TOTAL
1	Stakeholder identification				
2	Basis for stakeholder identification and selection				
3	Approaches/media used for stakeholder engagement				
4	Key concerns and issues identified through stakeholder engagement				
5	Evidence of stakeholder engagement				
6	Future targets for stakeholder engagement				
7	Opportunities for feedback				
	TOTAL				

No.	Indicator	INTEGRATED REPORT	SUSTAINIBILITY REPORT	WEBSITE	TOTAL
1	Materiality definition				
2	Materiality Determination Process				
3	Identification of relevant matters, aspects or topics				
4	Evaluating importance of the relevant matters				
5	Inclusion of stakeholder engagement in materiality determination				
6	Use of Materiality Matrix to prioritize topics				
	TOTAL				

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