



Theoretical frameworks applied in integrated reporting and sustainability reporting research



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Background: Over the last few decades, with the emergence of integrated reporting (IR) and sustainability reporting (SR) as new reporting methods, corporate reporting practices attracted substantial interest as a topic of research. Throughout the literature, many theories have been adopted to explain IR and SR practices and there is currently an increased focus on non-financial reporting.

Aim: The purpose of this study is to identify and analyse the theories used in the growing body of IR and SR research, to gather insight into current trends in the use and dominance of these theories in the related literature.

Setting: Research articles in the Scopus database for the period spanning from 2010 to 2019 were included in the study.

Method: Using a systematic review methodology, 574 articles on IR and SR published in the Scopus database for the period spanning from 2010 to 2019, were systematically searched for the presence of theories that may be used to explain these practices.

Results: The results show that the most dominant theories in the last decade are the legitimacy, stakeholder, institutional, agency and signalling theories.

Conclusion: Supported by extensive numerical data, this research provides insights into the theoretical perspectives used in the study of IR and SR and contributes to the existing discourse surrounding applicable theoretical frameworks for studying corporate reporting practices. These insights can be used to study IR and SR as the world grapples with changes in the reporting and business environment.

Keywords: integrated reporting; sustainability reporting; legitimacy theory; stakeholder theory; institutional theory; agency theory; signalling theory; theoretical perspectives.

Introduction

As the world moved into 2020, there was a gradual understanding that life, as we knew it, was changing forever. The coronavirus disease 2019 (COVID-19) pandemic has changed the lives of individuals and how organisations operate, and there has been an increased call for non-financial reporting by organisations, due to the significant social impact of the pandemic, and the the origin of the disease apparently linked to climate change (Lodhia, Sharma & Low 2021). Before the pandemic, the nature of sustainability-related disclosures communicating the economic, environmental and social impact of an organisation's activities to its stakeholders had already been evolving (Hahn & Kühnen 2013). Sustainability reporting (SR), which focuses on the impact of organisations on the environment and society, has become increasingly complex due to more significant informational needs by a growing range of stakeholders (De Villiers, Rinaldi & Unerman 2014). Stand-alone sustainability reports received increasing criticism for their inability to effectively meet report users' informational needs (Kannenberg & Schreck 2019). As a result, there were calls to combine sustainability disclosures and financial disclosures in a single report, leading to the emergence of integrated reporting (IR) (De Villiers et al. 2014). An integrated report communicates an organisation's strategy, governance, performance and prospects concisely, relative to its external environment (including society and the natural environment), with the primary audience being the providers of financial capital (International Integrated Reporting Council [IIRC] 2021). Despite key differences in IR and SR objectives, the Global Reporting Initiative (GRI) considers SR an integral aspect of IR and the link between corporate reporting and SR (GRI 2013). In addition to the COVID-19 pandemic, 2020 saw moves in the global reporting arena towards increased reporting on non-financial matters, and the creation of bodies such as the Value Reporting Foundation (VRF), and then in 2021 the International Sustainability Standards

Board was formed, under the International Financial Reporting Standards Foundation, into which the VRF and the Climate Disclosures Standards Board (CDSB) were consolidated (IFRS Foundation 2021; Impact Management Project, World Economic Forum & Deloitte 2020). As researchers examine the impacts of these changes on the reporting practices of organisations, it is helpful to consider how the theories that have been used in the past to explain IR and SR behaviour, apply in the current context. Because of the related nature of the two forms of reporting, they are considered alongside each other in this study.

A vast number of theoretical perspectives used independently and in combination have been employed in the literature to understand and explain organisations' reporting practices (Haji et al. 2016). Many of these theories are complementary and may overlap in their explanations for organisational reporting practices (Fuhrmann 2020). Benefits have been observed in both a mandatory and voluntary regime for IR and SR (Loprevite, Ricca & Rupo 2018). Integrated reporting and SR are mandatory in some countries, such as IR for South African listed companies (Johannesburg Securities Exchange Limited 2018). However, at present, IR and SR disclosures are primarily voluntary in most countries (Hahn & Kühnen 2013; Velte & Stawinoga 2017), and many of the theories used to explain IR and SR have been applied to explain voluntary disclosures in general (Fuhrmann 2020).

Past research suggested that the legitimacy, stakeholder and institutional theories (Dagilien 2018), or signalling theory, used in conjunction with the legitimacy theory (Cho et al. 2015), are the most commonly employed theoretical perspectives in the SR literature. The legitimacy theory (Kannenberg & Schreck 2019) and the institutional theory (Velte & Stawinoga 2017) are the most commonly utilised theoretical approaches for investigating the determinants and implications of IR. There appears to be no consensus about which theory or theories dominated either the SR or IR literature. Furthermore, there seem to be no recent studies that offer a broad review of the different theoretical perspectives utilised in the study of either SR or IR. The existing studies provided limited insights and have observed and summarised the different theoretical approaches researchers use in the IR and SR literature by focusing only on specific IR and SR discourse topics, and examining a limited number of theories (Kannenberg & Schreck 2019). Thus, the sample of studies included in these reviews is limited and does not provide a broad view of theories used in SR or IR.

This study aims to address the identified gap in the literature by using a broad approach to identifying which theories are used in papers addressing IR and SR in the literature during the last decade, using a systematic review design and comparing and contrasting these two forms of reporting at a granular level. It also provides a starting point to study the changing reporting behaviour of organisations due to COVID-19, as called for by Lodhia et al. (2021), and other

changes in the reporting landscape, most notably the attempts to converge the reporting requirements for organisations. The objective of this study is to investigate any notable trends in the utilisation and prevalence of different theoretical perspectives and the reasons for these trends. This objective will be achieved by conducting a comprehensive and systematic review of all existing IR and SR literature in the Scopus database from 2010 to 2019. Although SR has been practised widely since the GRI released their first set of guidelines in 2000 (GRI 2022), IR is a relatively newer form of reporting (Vaz, Fernandez-Feijoo & Ruiz 2016). The period to be examined was when both forms of reporting were prevalent. The results will be analysed to garner insight into the frequency of the use of the identified theories in the literature and any annual trends in using them over the last 10 years.

It is expected to find that the most prevalent theories currently utilised in the literature to explain IR and SR will continue to be the stakeholder, legitimacy, institutional, agency and signalling theories. Other less common theories will also be identified and highlighted.

By investigating the application patterns of different theories developed over 10 years, the paper will provide unique insight into the theoretical perspectives from which IR and SR were explained in the existing literature. This paper contributes to the existing discourse surrounding applicable theoretical frameworks employed in the study of corporate reporting practices. The findings will provide researchers with a resource for considering what theoretical frameworks are relevant in explaining reporting behaviour currently. The most common theories may continue to apply in the years to come, but lesser-used theories presented here may prove more useful in explaining the changes observed.

Literature review

There is no single theory that may explain either IR or SR, and several theoretical perspectives have emerged over the years regarding the study of both. Identifying the most appropriate theory to adopt for a research project is thus largely dependent on the particular context of the research at hand and can be quite a complex endeavour to undertake. With the dramatic changes in the current reporting environment, this becomes increasingly challenging.

In the realm of SR, when the focus of this kind of reporting was on social and environmental disclosures, the stakeholder theory and the legitimacy theory were relied on heavily as explanatory theoretical perspectives (Deegan 2019). More recently, however, the institutional theory has emerged as an increasingly popular theory in SR and IR research (Dagilien 2018).

While using a single theory is often the norm, some researchers adopt more than one theoretical perspective to explain organisations' social and environmental disclosure practices. Due to the overlapping and often complementary

nature of certain theoretical perspectives, a more extensive understanding of organisational practices may be achieved through a multi-theoretical lens (Fernando & Lawrence 2014).

Theories used to explain integrated reporting and sustainability reporting

The most dominant theoretical perspectives utilised to explain SR and IR practices in the literature follow. Specifically, the legitimacy, stakeholder, institutional, agency and signalling theories are outlined in this section.

Legitimacy theory

The legitimacy theory is one of the more popular theories that has been used to explain social responsibility and sustainability disclosures by organisations (Dagilien 2018). The legitimacy theory builds on principles of the theory of political economy, which acknowledges the power dynamics within society and the various conflicts that emerge between different societal groups. The view extended by this theory is that society, politics and economics are interconnected. It is impossible to make a meaningful assessment of economic issues without considering the impact of the broader political, social and institutional factors influencing such issues (Deegan 2002).

The legitimacy theory is concerned with the interactions between an organisation and society at large (Fernando & Lawrence 2014). The legitimacy theory posits the existence of a 'social contract' (Deegan 2002) between an organisation and society. It suggests that in order for an organisation to continue its activities, which invariably rely on community resources utilisation, it must be deemed by society as having a legitimate position (Amran & Haniffa 2011). An organisation may be perceived as having a legitimate position when its actions align with the value system of the broader social system of which the organisation forms part (Dube & Maroun 2017).

An organisation's legitimacy and its continued existence are threatened if it is seen to be operating in a way inconsistent with societal values (Spence, Husillos & Correa-ruiz 2010). In this way, the legitimacy theory overlaps with the resource dependence theory in that legitimacy may be considered a resource upon which an organisation depends for survival. In terms of the resource dependence theory, organisations will pursue strategies to ensure the continued supply of resources fundamental to their continued existence (Chen & Roberts 2010).

Organisations attain legitimacy by demonstrating to society that they are, in fact, operating within the acceptable bounds of society, and one way to accomplish this is to publish integrated or sustainability reports (Kuzey & Uyar 2017). In this vein, the practice of integrated or SR can be seen as a strategic endeavour undertaken by organisations to obtain this essential resource of legitimacy and ensure the continuity of their operations (Amran & Haniffa 2011).

Stakeholder theory

The stakeholder theory has, in the past, been described as the dominant and most useful theory for explaining SR practice (Daher & Bashatweh 2018). The stakeholder theory, like the legitimacy theory, draws on the political economy theory in its assessment of an organisation in the context of the broader environment in which it operates. Consequently, it would be incorrect to view the stakeholder theory as entirely distinct from the legitimacy theory because stakeholders effectively grant organisations this highly sought after legitimacy (Chen & Roberts 2010).

The stakeholder theory suggests that organisations are morally obligated to consider and appropriately balance the interests of all stakeholders (Freeman 1984; Wangombe 2013) and acknowledge the profound influence that different individuals and groups may have on the success and longevity of an organisation's operations (Chatelain-Ponroy & Morin-Delerm 2012). In other words, in order for an organisation to survive, it must adeptly manage the relationships with its various stakeholders who have different and often contrasting expectations of an organisation (Chen & Roberts 2010).

The stakeholder theory branches out in the ethical and managerial aspects (Amran & Haniffa 2011). The ethical branch proposes that all stakeholders have the right to equal and fair treatment by an organisation. According to this branch, all stakeholders may hold organisations accountable, regardless of their level of power or influence over the organisation (Fernando & Lawrence 2014). In contrast to this, the managerial branch of stakeholder theory suggests that different stakeholder groups should be managed differently, depending on their varying expectations of the organisation (Amran & Haniffa 2011). In terms of this branch of the stakeholder theory, organisations focus on meeting the expectations of the stakeholders who have the most influence over the organisation's ability to keep going (Fernando & Lawrence 2014). In social and environmental accounting, specifically regarding SR and IR practices, more evidence has been found to support the managerial branch of the stakeholder theory (Fernando & Lawrence 2014).

As with the legitimacy theory, the stakeholder theory proposes that a 'social contract' exists between an organisation and society whereby its stakeholders may permit an organisation to consume community resources if it upholds its promise to create wealth for its various stakeholder groups (Garcia-Sánchez, Rodriquez-Ariza & Frías-Aceituno 2013). Therefore, SR and IR serve as a powerful means by which an organisation manages its various stakeholders' informational needs (Kuzey & Uyar 2017). By disclosing information about the economic, social and environmental impact of their activities, in the form of sustainability and integrated reports, organisations may demonstrate how they are creating value for their various stakeholder groups and, in this manner, obtain their continued support (Vaz et al. 2016).

Institutional theory

As with the legitimacy and stakeholder theories, the institutional theory has its foundations in the theory of political economy (Deegan 2002). Similar to the legitimacy and stakeholder theories, the institutional theory acknowledges the impact of the external environment, such as the political, social and economic systems, on an organisation's behaviour (Vaz et al. 2016). The institutional theory suggests that organisations will alter their practices to attain legitimacy in the context of the broader environment in which they operate (Amran & Haniffa 2011), and the concept of 'legitimacy' proposed by the legitimacy theory is fundamental to understanding and applying the institutional theory. Under the institutional theory, organisations operating in countries or regions subject to similar institutional influences are expected to adopt similar behaviour to gain legitimacy (Velte & Stawinoga 2017). This tendency toward behavioural congruence is known as isomorphism (Deegan 2002).

According to the institutional theory, organisations' adoption of IR or SR practices can be explained by three types of institutionalisation mechanisms: mimetic, normative, and coercive isomorphism (Vaz et al. 2016). Each of these institutionalisation mechanisms will now be discussed in further detail.

Mimetic isomorphism is the tendency of an organisation to imitate the behaviour of other model organisations that it deems more successful (Vaz et al. 2016). Thus, where well-established organisations in an industry are seen to have adopted certain practices, for example, the publication of integrated or sustainability reports, other organisations in that industry tend to follow suit (Martínez-ferrero & Garcia-Sánchez 2017).

Normative isomorphism explains how organisations adopt certain institutional practices to conform to group norms or meet professional expectations. An example of a normative influence would be the culture and working practices within an organisation (Amran & Haniffa 2011).

Lastly, in coercive isomorphism, organisations change their behaviour to comply with the rules and regulations imposed upon them by external forces (Amran & Haniffa 2011). For example, in South Africa, the publication of an integrated report is a requirement for listing on the Johannesburg Stock Exchange (Vaz et al. 2016). In this way, the mechanism of coercive isomorphism can be seen to overlap with the stakeholder theory, in that organisations may utilise sustainability and integrated reports in order to meet the expectations of their most influential stakeholders (Amran & Haniffa 2011).

The practices institutionalised by organisations resulting from these processes of isomorphism are closely linked to society's expectations of those organisations (Velte & Stawinoga 2017). The institutional theory can thus explain how organisations adopt practices such as the publication of integrated or sustainability reports through isomorphism

and the overarching need to conform to societal norms and values (Velte & Stawinoga 2017). As alluded to previously, the legitimacy theory forms an integral part of the application of the institutional theory. By embracing these institutional structures, an organisation can maintain its legitimacy in its key stakeholders' eyes, thus enabling its continued existence, access to resources, and stability as an entity (Velte & Stawinoga 2017).

Agency theory

The agency theory is based on the principal-agent relationship between the 'insiders' and 'outsiders' of an organisation (Jensen & Mecking 1976; Kuzey & Uyar 2017). Per this theory, there is a separation of ownership and control within an organisation, whereby managers act for owners. The stakeholder-agency theory extends the agency theory to include not only the owners of an organisation but all of its stakeholders – particularly those who control the resources necessary for the organisation's survival (Frías-Aceituno, Rodríguez-Ariza & Garcia-Sánchez 2014).

An agency problem occurs when the managers of an organisation fail to act in the best interests of its owners, resulting in conflicts of interest (Vitolla, Raimo & Rubino 2019). As a consequence of this agency problem, agency costs arise, which are information asymmetry costs resulting from the principal-agent relationship (Kuzey & Uyar 2017).

Agency costs include those costs associated with monitoring, bonding and residual losses. Monitoring expenditures are costs incurred by the principal to prevent the agent's actions, which could cause the principal harm. Bonding costs are costs incurred by the agent to provide the principal with the assurance that the agent is not behaving in a way that does not align with the principal's interests. Lastly, residual losses are costs incurred due to misalignment between the interests of principal and agent despite monitoring and bonding efforts. The larger the extent of the information asymmetry that exists, the higher the agency costs (Raimo, Vitolla & Rubino 2020; Vitolla et al. 2019).

The rationale for adopting IR and SR practices by organisations can thus be explained by the need to reduce the cost of this information asymmetry (Vitolla et al. 2019). Organisations that disclose financial and non-financial information about their activities can reduce the cost of acquiring funding from investors and other providers of capital by giving these parties access to the information that will facilitate an informed assessment of the organisations' investment opportunities (Iredele 2019). Thus, by preparing quality integrated and sustainability reports, organisations can reduce the information asymmetry between principals and agents and so lower their agency costs (Frías-Aceituno et al. 2014).

Signalling theory

Like the agency theory, the signalling theory acknowledges the information asymmetry between an organisation's

insiders and outsiders (Albertini 2018). In this situation, one party tries to reduce the asymmetrical distribution of information by credibly conveying important information about itself to the other party (Daher & Bashatweh 2018). Thus, signalling responds directly to information asymmetry (Nurkumalasari, Restuningdiah & Sidharta 2019). Disclosing inside information about an organisation to the broader public may attract investments in the market, consequently reducing the cost of raising capital for the organisation and enhancing its reputation (Frías-Aceituno et al. 2014).

Thus, the signalling theory suggests that organisations produce sustainability and integrated reports to send signals to the market about their social, economic, and environmental performance (Daher & Bashatweh 2018). The disclosure of reliable information in integrated and sustainability reports signals to the organisation's stakeholders that it effectively manages its key business risks (Albertini 2018). In this vein, organisations may take advantage of the inherent information asymmetry in the market by utilising disclosure methods, such as integrated and sustainability reports, to emphasise their good performance (Daher & Bashatweh 2018). Integrated and sustainability reports are, in fact, a powerful tool for organisations seeking to signal their higher quality to the market (Girella, Rossi & Zambon 2019).

Other theories

Although not as common as the theories discussed previously, there are a number of other theories used to explain IR and SR. A selection of these theories is discussed briefly.

The theory of proprietary costs suggests that organisations may limit the voluntary disclosure of certain information to reduce the costs associated with information disclosure (Girella et al. 2019). These costs, known as proprietary costs, include both the internal costs associated with the preparation and disclosure of voluntary information, as well as the external costs which may be incurred as a result of an organisation's competitors using to their advantage information voluntarily disclosed by the organisation (Cotter, Lokman & Najah 2011). This theory thus offers insight into an organisation's incentives for disclosing, or not disclosing, specific information in the integrated report (Girella et al. 2019).

The diffusion of innovation (DOI) theory is an emerging theory in the IR literature. This theory is used most frequently as a theoretical framework in studies that aim to investigate the adoption of IR practices and those aiming to explain the spread, or diffusion, of IR amongst organisations. As a relatively new corporate reporting practice, the DOI theory provides valuable insights into the factors that impact IR's adoption (Robertson & Samy 2020).

The voluntary disclosure theory suggests that, when an organisation is given a choice to disclose information, it will only disclose information favourable to itself to signal its superiority (Daher & Bashatweh 2018). Thus, organisations

with superior sustainability performance are more willing to disclose this information to the market in the hopes of driving up the organisation's market value (Hummel & Schlick 2016).

The political economy theory suggests that the political, economic and social activities of a business cannot be viewed in isolation of each other. Thus, organisations disclose financial and non-financial information to meet their broader stakeholders' informational needs, thereby ensuring continued support (Cotter et al. 2011).

The accountability theory suggests that an organisation has a duty to inform its stakeholders about its activities, regardless of whether they may be detrimental to the organisation (Comyns et al. 2013). Thus, this theory implies that organisations should produce sustainability reports to provide their stakeholders with reliable information regarding the organisation's activities, despite the potential for this disclosure to have a negative impact on the organisation (Comyns et al. 2013).

The resource dependence theory posits that organisations pursue strategies to ensure the continued supply of resources fundamental to the organisation's continued existence (Chen & Roberts 2010). This theory suggests that organisations produce sustainability reports to manage their relationships with key stakeholders, as these stakeholders are essential for allocating resources to the organisation (Al-Shaer 2020).

Previous studies

In the following section previous studies that have examined the different theoretical perspectives relating to SR and IR are discussed. While many papers investigated IR and SR and utilised different theoretical perspectives, few focused on the empirical aspect of the utilisation of these theories throughout literature.

Wangombe (2013) analysed the different theoretical perspectives used in the study on Corporate Environmental Reporting (CER). The purpose of Wangombe's paper was to identify the overlapping areas between the various theoretical perspectives used to explain CER to support the case for a multi-theoretical approach to CER research.

In achieving the research objective, Wangombe analysed the frequency of the legitimacy, stakeholder, institutional and shareholder theories in the existing literature on CER. The study found that, amongst the four theories, the most commonly used theory is the legitimacy theory, followed by the stakeholder theory, institutional theory, and shareholder theory (Wangombe 2013).

Camilleri (2018) and Omran and Ramdhony (2015) looked at the different theoretical perspectives relating to IR and SR practices in their respective research papers. They each provide in-depth discussions of the agency, stewardship, institutional, legitimacy, stakeholder, signalling, and social contract theories. However, this research is more discursive,

focusing on explaining these theories in the context of IR and SR, rather than providing insight into the pervasiveness of these different theories in the literature.

The prior research has been narrowed in scope or is discursive in nature. Therefore, further research is required to provide deeper insight into the utilisation and prevalence of the theories used in IR and SR papers in the literature. At this hinge-point, it is also relevant to reflect on past practices to better understand and explain the future of IR and SR reporting practices.

Methodology

This study aimed to identify which theories were used in papers discussing IR and SR in literature during the previous decade. Furthermore, it investigated any notable trends in the utilisation and prevalence of different theoretical perspectives in the study of IR and SR.

The research design was a systematic review, using data collected from prior literature. It employed a search function to search through and identify the presence of theories relating to IR and SR in a sample of academic literature. Elements of this methodology were based on a similar study conducted by Wangombe (2013).

The research period was limited to 10 years, from January 2010 to December 2019. This period was chosen due to the IR concept's relative newness. The IIRC was formed in 2010 (Accounting for Sustainability Project 2014), and the first International <IR> Framework was released in 2013 (IIRC 2013). As a result, IR literature was sparse before the selected research period, but began to be seen increasingly from 2010 and gained momentum following the release of the Framework. Research in 2020 begins to examine a new phase in global reporting. The findings for the period under examination will be helpful for future research in a changing environment. This study looked at both IR and SR literature, and the chosen research period was needed to offer sufficient availability of articles about both research areas in the existing literature.

Sample selection

A structured electronic search for relevant articles was conducted in the Scopus database to identify the use of specific theories in the study of IR and SR. Scopus was chosen due to the quality of the filtering criteria applied in selecting journals to be included in the Scopus database (Rinaldi, Unerman & De Villiers 2018). Given the interdisciplinary nature of IR and SR research, the vast breadth of disciplines in the Scopus database further contributed to the decision to utilise Scopus in the current study. The search comprised the following keywords: 'integrated reporting' and 'sustainability reporting'.

The title, keywords and abstract of these articles were then analysed to identify studies that dealt with IR, SR or both.

The rationale for this method was that the authors of articles are expected to highlight the paper's key focus in its title, keywords, and abstract (Rinaldi et al. 2018). Thus, articles in which the author had deemed the focus to be IR or SR should have this reflected in the title, keywords or abstract.

The search was restricted to articles and peer-reviewed conference papers, as the most common document types, as per the search done. Other document types such as book chapters, reviews and books were excluded from this search. The search was not confined to accounting specific journals, as the IR and SR literature relevant to this study appeared under a number of different subject areas in the Scopus database. This was due to the aforementioned multidisciplinary nature of IR and SR as research areas.

Theory identification

Articles identified as relevant were inspected for references to theories. The find function was used to systematically search through each article for the appearance of the word fragment 'theor*'. Using this word fragment ensured that the words 'theory', 'theories', and 'theoretical' were identified during the search.

Articles identified as having referred to a theory or theories to explain IR or SR were further analysed to observe the specific theory utilised. This involved observing the specific theory to which the word 'theory', 'theories', or 'theoretical' related as identified by the search process.

The paragraph containing the identified theory was also read to contextualise the study's theory. This ensured that the theory or theories identified in each study in the sample explained IR or SR practices.

The data collected were summarised in a spreadsheet, noting the paper's name, the journal, the year of publication, and the theory or theories identified, if any. Analysis of these findings provided insight into the frequency of use of the identified theories in literature and trends in papers published in the Scopus database over the 10-year research period.

Research using the keyword 'integrated reporting' in the Scopus database returned 417 results during the 10 years under consideration. This sample was reduced by journal articles and conference to which access could not be obtained through the institutional licence, as well as articles not in English. This sample was then further reduced to studies that were determined to not pertain to IR after an analysis of their title, keywords and abstract, or to a limited aspect of IR. These steps resulted in a final sample of 182 papers on IR. Of the total IR papers, four were conference papers, and the remainder were journal articles.

An initial search using the keywords 'sustainability reporting' in the Scopus database returned a different set of 417 results. The sample was adjusted in the same way as the IR sample resulting in a reduced sample of 392 papers on the subject of

SR, of which 380 were journal articles, and the remainder were conference papers. In certain instances, the same article relates to both reporting practices, and such an article would be included in the sample for both IR and SR.

An initial analysis of the 569 papers in the combined IR and SR samples, excluding duplicate articles, revealed that, of the total identified papers, 253 papers did not utilise any theories to explain IR or SR. An analysis of the papers containing theories revealed that the theories listed alphabetically in Table 1 below were utilised in the literature during the period examined to explain IR and SR.

The resulting data were analysed to determine trends across the period examined. The findings for IR and SR were further compared and contrasted. The Pearson's correlation coefficient (Ly, Marsman & Wagenmakers 2018) was calculated to determine the statistical significance of changes observed. All assumptions for these statistical methods were met.

Limitations

It is important to note several limitations associated with the methodology presented above. The restriction of the search to articles and conference papers and the use of only one database, Scopus, were other study limitations. Any insights in academic research that were not encapsulated by articles and conference papers in Scopus would have been omitted from the study. The limitation of the filtering method utilised to identify relevant articles was that some papers would not have been identified because it was possible that the paper's key focus was not reflected in its title, keywords or abstract,

TABLE 1: Theories identified to explain integrated reporting and sustainability reporting between 2010 and 2019.

Integrated reporting	Sustainability reporting
Agency*	Agency*
Behavioural decision	Accountability
Capital needs	Behavioural theory of the firm
Cost of capital	Communitarian
Diffusion of innovation	Contingency
Impression management*	Corporate marketing
Information processing	Decision-usefulness
Institutional*	Impression management*
Legitimacy*	Innovation
Political cost*	Institutional*
Political economy*	Legitimacy*
Positive accounting	Political cost*
Proprietary costs*	Political economy*
Resource dependence*	Proprietary costs*
Shareholder*	Reputation
Signalling*	Resource dependence*
Stakeholder*	Shareholder*
Stakeholder-agency*	Signalling*
Stewardship*	Slack resources
Voluntary disclosure*	Stakeholder*
	Stakeholder-agency*
	Stewardship*
	Voluntary disclosure*

Theories used in both Integrated reporting and sustainability reporting are indicated with *.

the language was not English, or the papers were not available through the institutional licence. Furthermore, several different terms have been used interchangeably for SR in the literature. Although these limitations may have had the effect of reducing the completeness of the sample of articles selected for this study (Rinaldi et al. 2018), the results from those papers included, may be used to draw conclusions from the prevalent theories. Furthermore, given that the search for theories was performed manually, without the aid of computer software, and based solely on the word fragments discussed above, there was a potential bias and the risk of human error, which would have negatively affected the quality of the data collected. To mitigate this risk the sample papers were read more than once, in order to accurately capture the theories used.

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Results and discussion

This research aimed to identify and analyse the different theoretical perspectives used in papers addressing IR and SR between 2010 and 2019. Furthermore, it investigated the trends in the utilisation and prevalence of different theoretical perspectives and the reasons for these trends. The following section presents the research findings and a discussion of these findings.

As is evident from this analysis, there is a substantial overlap between the theories used to explain IR and SR. This overlap is, in part, because, as mentioned above, IR and SR practices are, for the most part, still voluntary. Thus, the theoretical explanations utilised to explain these two phenomena largely draw from the existing body of theory regarding voluntary disclosure practices. Furthermore, as SR is an integral part of the IR practice, it is unsurprising that many of the same theories are used to explain IR and SR.

Integrated reporting

The following discussion relates to the sample of 182 articles found to pertain to IR. The total sample was separated into those articles that mentioned a theory and those that did not. Of the sample of articles collected on IR, 92 papers made no mention of any theories for explaining IR, while 90 papers did. Of the four conference papers included in the sample only three included a theory. This demonstrates the difference in focus between journal articles and conference papers.

Table 2 shows the number of IR articles over the last 10 years. The data has been broken down into papers that mentioned theories and those which did not.

In 2010, there were no papers published in the Scopus database relating to IR. This lack of papers is likely because of

the widespread adoption of IR as a means of corporate reporting and the awareness that it was influenced mainly by the promotion of IR by the IIRC (Rinaldi et al. 2018). The IIRC was only formed in 2010, and from 2010 to 2012, IR had yet to generate substantial interest as a research area. From 2013 onwards, however, following the release of the first International <IR> Framework (IIRC 2013), the number of papers published on IR began to increase each year considerably, indicating the growing interest surrounding the topic of IR.

A more significant percentage of papers published did not employ a theoretical perspective during most years. In the initial years of IR research, from 2012 to 2015, research employing a theoretical perspective appeared to be favoured while, later on, a more significant percentage of papers per year did not mention a theory. However, from 2016 onwards, a relatively more significant percentage of published papers began utilising theoretical perspectives once more, apparently. A possible reason for this trend is that, in recent years, a more considerable amount of IR research focused on empirical research that relies on utilising a theoretical perspective to interpret the research findings (Wangombe 2013).

TABLE 2: Integrated reporting papers with and without theories in each year.

Year of publication	No theory	Theory	Total	% No theory	% Theory
2010	0	0	0	-	-
2011	1	0	1	100	0
2012	0	1	1	0	100
2013	1	4	5	20	80
2014	7	4	11	64	36
2015	12	6	18	67	33
2016	9	10	19	47	53
2017	16	15	31	52	48
2018	21	17	38	55	45
2019	25	33	58	43	57

Table 3 reflects the theories used to explain IR and the cumulative number of times each theory has appeared throughout literature during the period under review. Table 3 also shows each theory as a percentage of the total theories utilised per year to identify trends in the application of different theories over the 10 years.

It is worth noting that of the 90 IR papers mentioning a theory, 36 papers utilise more than one theoretical perspective, resulting in the total reflected in Table 3 being higher than the total of the sample. This finding aligns with earlier studies, suggesting that a multi-theoretical perspective is often the most useful for explaining and understanding organisational practices, such as reporting (Fernando & Lawrence 2014).

The most commonly used theory for explaining IR is the stakeholder theory, followed closely by the legitimacy theory. Of the 90 papers, 39 papers use the stakeholder theory, while 34 use the legitimacy theory, with an overlap of 16 papers that mention both theories. The dominance of these theories is aside from an anomaly in 2012, when the only paper on IR published in that year utilised the institutional theory.

To determine whether there is a significant relationship between the use of the legitimacy theory and the stakeholder theory in the IR literature, the correlation coefficient between the two variables was calculated. Pearson's correlation coefficient was determined to be 0.876 (p -value: 0.00087617), indicating a strong positive linear relationship between the application of the stakeholder theory and that of the legitimacy theory. This finding confirms the complementary nature of IR's explanations according to the stakeholder and legitimacy theories.

Early on in the development of IR, Eccles and Saltzman (2011) quoted the stakeholder theory to support the case for IR. This emphasis may, to an extent, explain the proliferation of the

TABLE 3: Occurrence of each theory in integrated reporting literature in total, and as a percentage of the total per year.

Theory	Total	2010	2011	2012 (%)	2013 (%)	2014 (%)	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)
Stakeholder	39	-	-	-	40	20	50	25	13	23	28
Legitimacy	34	-	-	-	-	20	17	31	29	23	18
Institutional	23	-	-	100	20	10	17	19	13	14	13
Agency	20	-	-	-	40	10	-	6	13	11	15
Signalling	10	-	-	-	-	10	-	-	13	9	5
Proprietary costs	4	-	-	-	-	10	-	-	-	6	2
Diffusion of innovation	4	-	-	-	-	-	17	-	4	-	3
Stakeholder-agency	3	-	-	-	-	10	-	-	-	6	-
Political cost	3	-	-	-	-	10	-	-	-	3	2
Stewardship	3	-	-	-	-	-	-	6	4	3	-
Impression management	3	-	-	-	-	-	-	6	-	-	3
Resource dependency	3	-	-	-	-	-	-	-	4	-	3
Voluntary disclosure	3	-	-	-	-	-	-	-	4	-	3
Behavioural decision	1	-	-	-	-	-	-	-	4	-	-
Capital needs	1	-	-	-	-	-	-	-	-	-	2
Cost of capital	1	-	-	-	-	-	-	-	-	-	2
Information processing	1	-	-	-	-	-	-	-	-	-	2
Political economy	1	-	-	-	-	-	-	6	-	-	-
Positive accounting	1	-	-	-	-	-	-	-	-	3	-
Total	158	-	-	-	-	-	-	-	-	-	-

stakeholder theory in the IR literature. However, given the complementary nature of the stakeholder and legitimacy theories, the results do not warrant the conclusion that the stakeholder theory is the best or most prominent theory for explaining IR. The arguably insignificant difference in the number of times the stakeholder theory appeared in the literature compared to the legitimacy theory further emphasises this conclusion. Rather, it appears that a combination of both theories provides the preferred theoretical explanation for IR.

Although the stakeholder theory is the most frequently utilised theory for explaining IR, it fell below the legitimacy theory in 2016 and 2017 for the first time in the entire research period. This drop may be explained by the publication of John Flower's widely cited paper, 'The International Integrated Reporting Council: A story of failure' in 2015. In his paper Flower criticises the IIRC's Framework for prioritising investors' reporting needs over those of the broader stakeholders in the reporting entity (Flower 2015). Flower's paper consequently undermines the ability of the stakeholder theory to successfully explain IR due to the IIRC's seemingly shareholder-centric framework. This opinion may have given rise to the apparent decline in the application of the stakeholder theory in the IR literature in the years following the paper's publication. However, this downward trend reversed in 2018, with a further increase in 2019. Going forward, the prominence of the stakeholder theory in the IR literature is likely to continue due to the revisions to the IIRC's Framework, published in 2021, which aims to encourage increased recognition of other stakeholder groups (IIRC 2021). These revisions thus serve to reconfirm the adequacy of the stakeholder theory in the study of IR.

Although not as dominant, the institutional theory has held a consistent place in the literature every year since 2012. The institutional theory was used in conjunction with another theory in 52% of the papers. There is no clear trend in the theories that are used together, with those overlapping the stakeholder theory in 58% of these papers, the agency theory in 42%, and the legitimacy theory in only 33% of papers. This appears to indicate that the institutional theory generally stands alone, and when it is paired with another theory, it doesn't have a natural counterpart. To determine whether the prevalence of the institutional theory has increased or decreased over time, the correlation coefficient between the year and the percentage utilisation of institutional theory was determined. Pearson's correlation coefficient was determined to be -0.099, indicating a weak, negative linear relationship between the two variables. The p -value of 0.785309183 also indicates insufficient evidence to conclude that there is a significant correlation between the passage of time and the utilisation of the institutional theory. Thus, it is impossible to conclude with confidence that the utilisation of the institutional theory in the IR literature has either increased or decreased over the last 10 years. However, as IR becomes institutionalised, the institutional theory may provide greater insights into adopting IR practices (Robertson & Samy 2020)

and may become increasingly utilised in IR research in the years to come.

The agency theory and the signalling theory are also commonly used to explain IR in the literature, with the theory of proprietary costs and theory less frequently used.

Sustainability reporting

The following discussion relates to the sample of 392 articles about SR. Further analysis revealed that, of the total sample, only 229 papers utilise a theory to explain SR. Table 4 shows the SR articles over the last 10 years, broken down into articles that mentioned theories and those which did not.

As with IR, there is an upwards trend in the number of articles published regarding SR over the last 10 years. This analysis also shows that most published papers on SR use a theory during 6 of the 10 years, and that there is a clear upwards trend. However, similarly to the IR findings, the conference papers covering SR were again predominantly not found to use a theory, with only 2 of the 12 papers mentioning a theoretical framework. Sustainability reporting is an extensively studied area of research with many well-established theoretical perspectives employed in the study of SR for many years. This observed upwards trend might thus be due to a renewed interest by researchers seeking to discover new theoretical perspectives applicable to the study of SR.

Table 5 shows the theories used to explain SR and the cumulative number of times each theory appeared in the literature during the period under review. The table also shows each theory as a percentage of the total number of theories utilised per year in the SR literature for each year reviewed.

Of the 215 SR papers applying a theory, 138 papers (64%) use more than one theoretical perspective. As with IR, this analysis provides evidence of the usefulness of a multi-theoretical lens in studying corporate reporting practices.

Table 5 shows that, of the 229 articles referencing a theory, 143 mention the legitimacy theory, with 114 (80%) of these papers quoting the legitimacy theory together with another theory. As with the IR literature, many papers name the legitimacy theory in conjunction with the stakeholder theory, with 83

TABLE 4: Sustainability reporting papers with and without theories in each year.

Year of publication	No theory	Theory	Total	% No theory	% Theory
2010	8	4	12	67	33
2011	13	8	21	62	38
2012	15	9	24	63	38
2013	9	11	20	45	55
2014	17	19	36	47	53
2015	22	21	43	51	49
2016	14	22	36	39	61
2017	16	35	51	31	69
2018	26	46	72	36	64
2019	23	54	77	30	70

TABLE 5: Occurrence of each theory in sustainability reporting literature in total, and as a percentage of the total per year.

Theory	Total	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)	2015 (%)	2016 (%)	2017 (%)	2018 (%)	2019 (%)
Legitimacy	143	50	36	27	32	36	30	30	25	31	31
Stakeholder	119	-	27	13	16	26	26	27	30	27	23
Institutional	68	50	14	27	-	17	13	20	14	13	13
Agency	47	-	5	7	11	5	9	11	12	11	12
Signalling	36	-	-	-	21	5	6	5	9	7	11
Voluntary disclosure	12	-	5	7	5	2	-	2	1	-	5
Political economy	9	-	14	13	-	-	2	-	1	2	-
Accountability	7	-	-	-	5	2	6	-	-	1	1
Resource dependency	6	-	-	-	-	-	2	2	3	2	-
Impression management	3	-	-	-	-	-	-	-	1	1	1
Shareholder	3	-	-	-	-	-	2	-	-	1	1
Slack resources	3	-	-	-	-	-	-	-	1	1	1
Contingency theory	2	-	-	7	-	-	-	-	-	1	-
Decision-usefulness theory	2	-	-	-	5	-	2	-	-	-	-
Political cost theory	2	-	-	-	-	2	2	-	-	-	-
Stewardship theory	2	-	-	-	-	2	-	-	1	-	-
Behavioural theory of the firm	1	-	-	-	-	-	-	-	-	-	1
Communitarian theory	1	-	-	-	-	-	-	-	-	1	-
Corporate marketing theory	1	-	-	-	5	-	-	-	-	-	-
Theory of proprietary costs	1	-	-	-	-	2	-	-	-	-	-
Innovation theory	1	-	-	-	-	-	-	2	-	-	-
Reputation theory	1	-	-	-	-	-	-	-	-	-	1
Total	470	-	-	-	-	-	-	-	-	-	-

papers on SR using both theories to explain SR. Other theories frequently mentioned with the legitimacy theory, were the agency theory (27% of papers), the institutional theory (27% of papers) and the signalling theory (22% of papers).

Unlike IR, the stakeholder theory is mentioned less frequently than the legitimacy theory in the SR literature, with 119 papers utilising this theory to explain SR. Again, demonstrating the multi-theoretical lens that is frequently used, 94 of these papers (79%) touched on more than one theory. As previously mentioned, the most common overlap was with the legitimacy theory (88% of papers). However, the institutional theory was also applied in 31% of papers, as well as the agency theory in 27% of papers.

To determine whether the legitimacy theory's dominance has increased or decreased over time, the correlation coefficient between the year and the percentage utilisation of the legitimacy theory was determined. Pearson's correlation coefficient was determined to be -0.605, indicating a moderate, negative linear relationship between the two variables. However, the *p*-value of 0.063688 is not significant at the 5% significance level, indicating insufficient evidence to conclude that there is a significant correlation between the passage of time and the utilisation of the legitimacy theory. Thus, it is impossible to conclude with confidence that the percentage utilisation of the legitimacy theory has either increased or decreased over time. Instead, it appears that, while the legitimacy theory has remained the most dominant theoretical perspective, its usage has fluctuated, seemingly at random, over the last 10 years.

To determine whether a significant relationship exists between the use of the legitimacy theory and the stakeholder theory in the SR literature, the correlation coefficient between

the two variables was calculated. Pearson's correlation coefficient was determined to be 0.958, indicating a strong, almost perfect, positive linear relationship between the utilisation of the stakeholder theory and the utilisation of the legitimacy theory. The *p*-value of 0.00001278 also indicates that there is sufficient evidence to conclude a significant correlation. This finding, once again, reaffirms the notion that the legitimacy theory and the stakeholder theory cannot be viewed as two opposing theories but rather as complementary theoretical perspectives in the study of corporate reporting practices.

As indicated by the results, the dominance of the legitimacy theory in the SR literature is a departure from earlier literature that made extensive use of the stakeholder theory to explain social and environmental reporting (Spence et al. 2010). The increasing popularity of the legitimacy theory amongst researchers comes from a growing body of evidence suggesting that organisations produce corporate social disclosures to legitimise organisational activities (Van Der Laan 2009).

As with IR, after the legitimacy theory and the stakeholder theory, the institutional, agency and signalling theories are the most frequently employed theories for explaining SR. The preoccupation with these particular five theoretical perspectives throughout the literature may be because, together, these theories may provide different but complementary explanations for corporate reporting practices.

Furthermore, the results reveal that the voluntary disclosure theory, political economy theory, accountability theory and resource dependence theory appear to be somewhat popular in the SR discourse. These theories are outlined briefly:

This analysis reveals that usage has mostly fluctuated throughout the 10 years, with no clear trends emerging in the results for all identified theories in SR literature. The results also show that the stakeholder, legitimacy, institutional, and agency theories are the most consistently employed theories in the last 10 years. These theories each appear during at least 9 years out of the 10-year research period.

Conclusion

This study aimed to identify which theories are used in papers discussing IR and SR in the literature prior to the current changes observed in the non-financial reporting environment. Furthermore, the trends in the utilisation and prevalence of different theoretical perspectives in IR and SR were investigated.

Both SR and, more recently, IR garnered substantial interest as research areas over the last few decades. The choice of an appropriate theory to be employed in the study of either SR or IR is research-specific mainly, and no single theory may be espoused to explain either reporting practice wholly. As a result, different researchers adopted various theoretical perspectives over the years, independently and in combination, to explain and understand corporate reporting practices.

It was found that the most dominant IR and SR literature theories are the legitimacy, stakeholder, institutional, agency, and signalling theories. It is noteworthy that of these theories the legitimacy, stakeholder and institutional theories all have their roots in the political economy theory. The results reveal that while the stakeholder theory and the legitimacy theory remain the most frequently utilised theories for explaining IR, the institutional theory is also prevalent. Furthermore, it was found that the DOI theory and the theory of proprietary costs may also be utilised to explain IR. Regarding SR, the accountability theory, resource dependence theory, voluntary disclosure theory, and political economy theory have also been popular among researchers. The release of the International <IR> Framework (IIRC 2013) saw an increase in the amount of research on IR, and the critical work of Flower (2015) saw a shift away from the stakeholder theory during 2016 and 2017. Regarding SR there was no clear trend, apart from a general increase in the amount of research on the topic.

Further research may expand the literature sample included in the current study to include literature published on other databases. Further studies could also examine specific theories explaining IR and SR within different geographical regions, and later periods of time affected by the COVID-19 pandemic.

This study contributes a systematic review and comprehensive analysis of the theories utilised in IR and SR literature. Unlike the existing research, this study provides deeper insight into the trends emerging in the existing SR and IR literature and the reasons as to why different theories are prevalent at different times. This study contributes to

the prior research discussing the theoretical perspectives employed in SR and IR. It will be valuable in future IR and SR studies to enable researchers to identify the most relevant applicable theoretical frameworks utilised within the scope of their research. Furthermore, as researchers begin studying the effects of current events in earnest, the choice of theoretical frameworks may change from prior periods. The dominant theories may remain the most useful, but less prominent theories may come to the fore in this new era.

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Competing interests

The authors declare that no competing interest exists.

Authors' contributions

The research question was conceptualised by S.H. L.L. was the primary researcher, assisted and supervised by S.H.

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

Data availability

The data that support the findings of this study are available on request from the corresponding author, [S.H.].

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

References

- Accounting for Sustainability Project, 2014, *The Prince's accounting for sustainability project*, viewed 02 July 2014, from <http://www.accountingforsustainability.org/>.
- Albertini, E., 2018, 'Integrated reporting: An exploratory study of French companies integrated reporting: An exploratory study of French companies', *Journal of Management and Governance* 23(2), 513–535. <https://doi.org/10.1007/s10997-018-9428-6>
- Al-Shaer, H., 2020, 'Sustainability reporting quality and post-audit financial reporting quality: Empirical evidence from the UK', *Business Strategy and the Environment* 29(6), 2355–2373. <https://doi.org/10.1002/bse.2507>
- Amran, A. & Haniffa, R., 2011, 'Evidence in development of sustainability reporting: A case of a developing country', *Business Strategy and the Environment* 20(3), 141–156. <https://doi.org/10.1002/bse.672>
- Camilleri, M.A., 2018, 'Theoretical insights on integrated reporting. The inclusion of non-financial capitals in corporate disclosures', *Corporate Communications: An International Journal* 23(4), 567–581. <https://doi.org/10.1108/CCIJ-01-2018-0016>
- Chatelain-Ponroy, S. & Morin-Delerm, S., 2012, 'The sustainable development reporting: A new organizational practice in higher education institutions?' *28th EGOS Colloquium Design*, Helsinki, Finland, July 2012, p. 274.
- Chen, J.C. & Roberts, R.W., 2010, 'Toward a more coherent understanding of the organization– society relationship: A theoretical consideration for social and environmental accounting research', *Journal of Business Ethics* 97, 651–665. <https://doi.org/10.1007/s10551-010-0531-0>
- Cho, C.H., Laine, M., Roberts, R.W. & Rodrigue, M., 2015, 'Accounting, organizations and society organized hypocrisy, organizational façades, and sustainability reporting', *Accounting, Organizations and Society* 40, 78–94. <https://doi.org/10.1016/j.aos.2014.12.003>
- Comyns, B., Figge, F., Hahn, T. & Barkemeyer, R., 2013, 'Sustainability reporting: The role of "Search", "Experience" and "Credence" information', *Accounting Forum* 37, 231–243. <https://doi.org/10.1016/j.acfor.2013.04.006>
- Cotter, J., Lokman, N. & Najah, M.M., 2011, 'Voluntary disclosure research: Which theory is relevant?', *SSRN Electronic Journal* 6(2), 77–95. <https://doi.org/10.2139/ssrn.3470466>

- Dagilien, L., 2018, 'An institutional theory perspective on non-financial reporting: The developing Baltic context', *Journal of Financial Reporting and Accounting* 16(4), 490–521. <https://doi.org/10.1108/JFRA-06-2016-0054>
- Daher, A. & Bashatweh, M., 2018, 'Accounting theory and its impact on adoption of sustainability reporting dimensions – A field study', *International Journal of Accounting and Financial Reporting* 8(4), 82–99. <https://doi.org/10.5296/ijaf.v8i4.13736>
- Deegan, C., 2002, 'The legitimising effect of social and environmental disclosures: A theoretical foundation', *Accounting, Auditing & Accountability Journal* 15(3), 282–311. <https://doi.org/10.1108/09513570210435852>
- Deegan, C., 2019, 'Legitimacy theory: Despite its enduring popularity and contribution, time is right for a necessary makeover', *Accounting, Auditing & Accountability Journal* 32(8), 2307–2329. <https://doi.org/10.1108/AAA-08-2018-3638>
- De Villiers, C., Rinaldi, L. & Unerman, J., 2014, 'Integrated reporting: Insights, gaps and an agenda for future research', *Accounting, Auditing & Accountability Journal* 27(7), 1042–1067. <https://doi.org/10.1108/AAA-06-2014-1736>
- Dube, S. & Maroun, W., 2017, 'Corporate social responsibility reporting by South African mining companies: Evidence of legitimacy theory', *South African Journal of Business Management* 48(1), 23–34. <https://doi.org/10.4102/sajbm.v48i1.17>
- Eccles, R.G. & Saltzman, D., 2011, 'Achieving Sustainability Through Integrated Reporting', *Stanford Social Innovation Review* 9(3), 56–61. <https://doi.org/10.48558/7XS8-MX90>
- Fernando, S. & Lawrence, S., 2014, 'A theoretical framework for CSR practices: Integrating legitimacy theory, stakeholder theory and institutional theory', *The Journal of Theoretical Accounting* 10(1), 149–178.
- Flower, J., 2015, 'The international integrated reporting council: A story of failure', *Critical Perspectives on Accounting* 27, 1–17. <https://doi.org/10.1016/j.cpa.2014.07.002>
- Freeman, R.E., 1984, *Strategic management: A stakeholder approach*, Cambridge University Press, Cambridge, MA.
- Friás-Aceituno, J.V., Rodríguez-Ariza, L. & García-Sánchez, I.M., 2014, 'Explanatory factors of integrated sustainability and financial reporting', *Business Strategy and the Environment* 23(1), 56–72. <https://doi.org/10.1002/bse.1765>
- Fuhrmann, S., 2020, 'A multi-theoretical approach on drivers of integrated reporting – Uniting firm-level and country-level associations', *Meditari Accountancy Research* 28(1), 168–205. <https://doi.org/10.1108/MEDAR-12-2018-0412>
- García-Sánchez, I.-M., Rodríguez-Ariza, L. & Frias-Aceituno, J.-V., 2013, 'The cultural system and integrated reporting', *International Business Review* 22, 828–838. <https://doi.org/10.1016/j.ibusrev.2013.01.007>
- Girella, L., Rossi, P. & Zambon, S., 2019, 'Exploring the firm and country determinants of the voluntary adoption of integrated reporting', *Business Strategy and the Environment* 28(7), 1323–1340. <https://doi.org/10.1002/bse.2318>
- Global Reporting Initiative (GRI), 2013, *GRI and IIRC deepen cooperation to shape the future of corporate reporting*, Global Reporting Initiative, viewed 12 March 2018, from Global Reporting Initiative (GRI), 2022, *About GRI/Mission-history*. <https://www.integratedreporting.org/news/gri-and-iirc-deepen-cooperation-to-shape-the-future-of-corporate-reporting/>
- Hahn, R. & Kühnen, M., 2013, 'Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research', *Journal of Cleaner Production* 59, 5–21, GRI, Amsterdam, <https://doi.org/10.1016/j.jclepro.2013.07.005>
- Haji, A.A., Anifowose, M., Ahmed Haji, A., Anifowose, M., Haji, A.A. & Anifowose, M., 2016, 'The trend of integrated reporting practice in South Africa: Ceremonial or substantive?', *Sustainability Accounting, Management and Policy Journal* 7(2), 190–224. <https://doi.org/10.1108/SAMPJ-11-2015-0106>
- Hummel, K. & Schlick, C., 2016, 'The relationship between sustainability performance and sustainability disclosure – Reconciling voluntary disclosure theory and legitimacy theory', *Journal of Accounting and Public Policy* 35(5), 455–476. <https://doi.org/10.1016/j.jaccpubpol.2016.06.001>
- IFRS Foundation, 2021, *IFRS foundation trustees' feedback statement on the consultation paper on sustainability reporting*, IFRS Foundation, London, <https://www.ifrs.org/content/dam/ifrs/project/sustainability-reporting/sustainability-consultation-paper-feedback-statement.pdf>
- Impact Management Project, World Economic Forum & Deloitte, 2020, *Statement of intent to work together towards comprehensive corporate reporting*, UK, <https://impactmanagementproject.com/structured-network/statement-of-intent-to-work-together-towards-comprehensive-corporate-reporting/>
- International Integrated Reporting Council (IIRC), 2013, *The International <IR> framework*, viewed on 6 July 2022 July from <https://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>
- International Integrated Reporting Council (IIRC), 2021, *International <IR> framework*, viewed from <https://integratedreporting.org/wp-content/uploads/2021/01/InternationalIntegratedReportingFramework.pdf>
- Iredede, O.O., 2019, 'Examining the association between quality of integrated reports and corporate characteristics', *Heliyon* 5(7), 1–8. <https://doi.org/10.1016/j.heliyon.2019.e01932>
- Jensen, M. & Mecking, M., 1976, 'Theory of the firm: Managerial behavior, agency costs and ownership structure', *Journal of Financial Economics* 3(4), 305–360. <https://doi.org/10.1177/0018726718812602>
- Johannesburg Securities Exchange Limited, 2018, *JSE Listing Requirements*, LexisNexis, Johannesburg, South Africa.
- Kannenberg, L. & Schreck, P., 2019, 'Integrated reporting: Boon or bane? A review of empirical research on its determinants and implications', *Journal of Business Economics* 89(5), 515–567. <https://doi.org/10.1007/s11573-018-0922-8>
- Kuzey, C. & Uyar, A., 2017, 'Determinants of sustainability reporting and its impact on firm value: Evidence from the emerging market of Turkey', *Journal of Cleaner Production* 143, 27–39. <https://doi.org/10.1016/j.jclepro.2016.12.153>
- Lodhia, S., Sharma, U. & Low, M., 2021, 'Creating value: Sustainability and accounting for non-financial matters in the pre- and post-corona environment', *Meditari Accountancy Research* 29(2), 185–196. <https://doi.org/10.1108/MEDAR-03-2021-1249>
- Loprevite, S., Ricca, B. & Rupo, D., 2018, 'Performance sustainability and integrated reporting: Empirical evidence from mandatory and voluntary adoption contexts', *Sustainability*, 10(5), 6–9. <https://doi.org/10.3390/su10051351>
- Ly, A., Marsman, M. & Wagenmakers, E.J., 2018, 'Analytic posteriors for Pearson's correlation coefficient', *Statistica Neerlandica* 72(1), 4–13. <https://doi.org/10.1111/stan.12111>
- Martínez-Ferrero, J. & García-Sánchez, I.-M., 2017, 'Coercive, normative and mimetic isomorphism as determinants of the voluntary assurance of sustainability reports', *International Business Review* 26(1), 102–118. <https://doi.org/10.1016/j.ibusrev.2016.05.009>
- Nurkumalasari, I.S., Restuningdiah, N. & Sidharta, E.A., 2019, 'Integrated reporting disclosure and its impact on firm value: Evidence in Asia', *International Journal of Business, Economics and Law* 18(5), 99–108.
- Omran, M.A. & Ramdhony, D., 2015, 'Theoretical perspectives on corporate social responsibility disclosure: A critical review', *International Journal of Accounting and Financial Reporting* 5(2), 38–55. <https://doi.org/10.5296/ijaf.v5i2.8035>
- Raimo, N., Vitolla, F. & Rubino, M., 2020, 'The role of ownership structure in integrated reporting policies', *Business Strategy and the Environment* 29(6), 2238–2250. <https://doi.org/10.1002/bse.2498>
- Rinaldi, L., Unerman, J. & De Villiers, C., 2018, 'Evaluating the integrated reporting journey: Insights, gaps and agendas for future research', *Accounting, Auditing & Accountability Journal* 31(5), 1294–1318. <https://doi.org/10.1108/AAA-04-2018-3446>
- Robertson, F.A. & Samy, M., 2020, 'Rationales for integrated reporting adoption and factors impacting on the extent of adoption: A UK perspective', *Sustainability Accounting, Management and Policy Journal* 11(2), 351–382. <https://doi.org/10.1108/SAMPJ-02-2019-0042>
- Spence, C., Husillos, J. & Correa-ruiz, C., 2010, 'Critical perspectives on accounting cargo cult science and the death of politics: A critical review of social and environmental accounting research', *Critical Perspectives on Accounting* 21, 76–89. <https://doi.org/10.1016/j.cpa.2008.09.008>
- Van der Laan, S., 2009, 'The role of theory in explaining motivation for corporate social disclosures: Voluntary disclosures vs "solicited" disclosures', *Australasian Accounting Business and Finance Journal* 3(4), 15–29.
- Vaz, N., Fernandez-Feijoo, B. & Ruiz, S., 2016, 'Integrated reporting: An international overview', *Business Ethics: A European Review* 25(4), 577–591. <https://doi.org/10.1111/beer.12125>
- Velte, P. & Stawinoga, M., 2017, 'Integrated reporting: The current state of empirical research, limitations and future research implications', *Journal of Management Control* 28(3), 275–320. <https://doi.org/10.1007/s00187-016-0235-4>
- Vitolla, F., Raimo, N. & Rubino, M., 2019, 'Board characteristics and integrated reporting quality: An agency theory perspective', *Corporate Social Responsibility and Environmental Management* 27(2), 1152–1163. <https://doi.org/10.1002/csr.1879>
- Wangombe, D.K., 2013, 'Multi-theoretical perspective of corporate environmental reporting: A literature review', *Review of Integrative Business & Economics Research* 2(2), 655–671.