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Is it a sententious claim? An examination of the quality of occupational health, safety and well-being disclosures in global reporting initiative reports across industries and countries

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ABSTRACT

The study attempts to reveal differences in the quality of information disclosed on occupational health, safety (OHS) and well-being in 250 sustainability reports within and between large companies in different industries and countries (i.e., market economies). Using a mixed research design, our results indicate that industry affiliation and type of market economy have no significant influence on the quality of disclosure on OHS and well-being aspects. Instead, companies tend to disclose information on legal requirements and OHS standards to secure their social legitimacy. However, in the finance, insurance, and real estate industry groups, membership in the Dow Jones Sustainability Index emerged as an influencing factor on the quality of disclosures on employees' well-being. In general, companies merely disclose sententious information about OHS and well-being in disclosures of management approaches in the Global Reporting Initiative, and otherwise rarely attempt to translate their claims into outcomes. Contributions to institutional theories and practices are discussed.

1. Introduction

More and more large firms are reporting on their sustainability outcomes. The reasons for this trend include the emergence of the concept of the Triple Bottom Line, a voluntary adoption of corporate sustainability strategies by large firms, and stakeholders' closer attention to unethical corporate behavior. Furthermore, the development of a number of frameworks such as the Global Reporting Initiative (GRI) and the Dow Jones Sustainability Index (DJSI) for measuring the impact of organizations on sustainability outcomes may have an impact. Disclosure on occupational health, safety (OHS) and well-being is important for social sustainability because researchers have shown in recent years that work practices such as work intensification, longer working hours for full-time employees, and increasing job insecurity are harming OHS and well-being. These practices also affect families and family life (Pfeffer, 2018). The stakeholder harm of work index (Mariappanadar, 2014) can be used to identify the costs associated with the negative impact of human resource practices. Such an index and quality disclosures on OHS and well-being in GRI and DJSI reports deliver insights that permit the identification of healthy and unhealthy work systems. Furthermore, the information in published sustainability reports is *material* in the sense that stakeholders can use performance on nonfinancial measures to assess future value and to make further decisions.

Despite the widespread adoption of sustainability reporting, previous studies have used only a composite score of all OHS indicators in the GRI guidelines to reveal trends in sustainability disclosures (see Evangelinos et al., 2018). Furthermore, the few studies that deal with OHS or well-being aspects examined the level or word count (i.e., low/high frequency and low/high percentage) used in content analysis (e.g., Koskela, 2014). Word-level coding with the help of software is positive, but isolated words in analysis lose their meanings and thus have a limited use compared to sentence based coherent whole meanings in exploring the quality of GRI disclosure (Unerman, 2000). Hence, in this study we chose to use sentences and paragraphs as the unit of analysis to yield the best quality description relating to OHS disclosure as indicated by Campbell and Rahman (2010). Furthermore, currently no study has explored the difference between industry and market economies' groupings in the quality of disclosure on OHS and well-being using

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accuracy, clarity and the reliability criteria of quality of disclosure as indicated in the GRI guidelines (GRI, 2013b). Hence, this study attempts to address this gap in the institutional theory literature.

An industry-specific, cross- industry and market economies based understanding of differences in the quality of disclosures on OHS and well-being by firms are critical because the industry in which firms operate and their primary stakeholders have an important role in setting material expectations for disclosure (Brammer & Millington, 2003; Wang, Sharma, & Davey, 2016). Taking an institutional theory perspective, DiMaggio and Powell (1983) and Suddaby (2010) argued for the importance of understanding institutional pressures and organizational responses to stakeholder material expectations on OHS and well-being. Furthermore, Jackson and Apostolakou (2010) have indicated from a neo-institutional perspective that a comparison between the two distinct models of business organization, liberal market economies (LMEs) and coordinated market economies (CMEs), will facilitate our understanding of systematic differences in organizational responses and of the quality of disclosures on OHS and well-being.

We used institutional theory to explore differences in organizational responses (i.e., strategic choices) based on the quality of disclosures on OHS and well-being within and between industries and market economies. However, our study does not focus on institutional pressures from the institutional theory. We especially use instrumental stakeholder theory (Jones, Harrison, & Felps, 2018), social legitimacy theory (Lanis & Richardson, 2012) and disclosure theory (Schiehll & Kolahgar, 2020) from the institutional theory response perspective to examine differences in the quality of information disclosed on OHS and well-being in sustainability reports from companies between varied industries, and market economies.

The disclosure of OHS as an organizational response relates to information on potential health risks due to noise, dust etc., and appropriate actions taken to mitigate these risks. Further, the disclosure of well-being is about "resources" provided by the firm (e.g., counseling, wellness programs, health insurance) to help employees to cope with the "challenges" of life events (e.g., trauma, increased stress, chronic illnesses). This definition of well-being is based on the dynamic equilibrium theory and is different to that of the commonly used evaluative (e.g., life satisfaction), hedonic (e.g., feelings of happiness, sadness, anger), and eudemonic well-being (e.g., sense of purpose and meaning in life). The dynamic equilibrium theory of well-being, which is relevant for the study, suggests that it is a state of balance or equilibrium achieved using an individual employee's resource pool to cope with the challenges of life events (Dodge, Daly, Huyton, & Sanders, 2012).

The results of our study contribute to the stakeholder instrumental theory, the social legitimacy theory, and disclosure theory from both the industry and market economies' perspectives. First, we address GRI's materiality principle and examine whether the reporting on OHS and well-being are significant for both the organization and for stakeholders and whether there are significant differences between industries along with the market economies. This will provide greater transparency for both the positive and negative impacts of an organization's human/social sustainability initiatives on stakeholders (e.g., employees, trade unions, and society) and on organizations. Secondly, we identify differences in the quality of disclosures on OHS and well-being in GRI reports within and between firms in different types of industries and varied market economies. This information will enable firms operating in LMEs and CMEs) to customize sustainable human resource management (HRM) strategies for OHS and well-being to enhance benefits for employees and other stakeholders and organizations. Thirdly, we consider the membership of the DJSI in an effort to understand the importance of the index in assessing and reporting/disclosure quality in different industries. This will illustrate the importance of differentiation through the quality of corporate social responsibility (CSR) disclosure and the social legitimacy or reputation international firms thus gain as a strategic resource. Finally, we propose a new method to rate the disclosure quality of reports on OHS and well-being issues. This method facilitates the evaluation of comprehensive reporting and consequently enables stakeholders to assess firms' actions.

This paper is structured as follows. In the next section, we address the theoretical background and explain the GRI as a framework for sustainability disclosure and the DJSI as a framework for sustainability assessment. The stakeholder, social legitimacy and disclosure theories with the broad institutional theory are explored to understand organizational responses to the occupational health and well-being indicators disclosed in published sustainability reports. Next, we describe how the hypotheses have been developed and delineate our empirical procedures. Subsequently, we present our results and discuss them and their implications. In closing, we discuss the limitations of our undertaking and draw conclusions from it.

2. Background

2.1. GRI for sustainability disclosure

Over the last 20 years, several frameworks have been developed to enable firms to report on their sustainability outcomes. The GRI is one of the most used, with 75 % of the world's 250 largest organizations reporting on this basis (KPMG, 2020). This framework contains indicators of a variety of aspects of sustainability necessary to achieve corporate sustainability. Within the social aspect, OHS is identified as a specific human/social sustainability outcome. Similarly, the DJSI includes employee well-being as part of its framework, in addition to occupational health. Some firms publishing GRI reports have also become members of the DJSI and voluntarily incorporate employee well-being as an additional indicator in their published GRI reports, although this is not required by GRI guidelines. Overall, both the GRI guidelines and the DJSI membership address economic, environmental, and social issues, but they differ in the formats of their disclosures and in the depth of the sustainability indicators (Christofi, Christofi, & Sisaye, 2012). For instance, the GRI social dimension contains performance indicators on the impact of organizations on human rights, society, and product responsibility. Similarly, it covers labor practices and workplace standards and issues such as occupational health/safety, training/education, diversity/equal opportunity, and equal pay (GRI, 2013a). The DJSI social performance indicators require information regarding social reporting, labor practices, indicators, human rights, human capital development, talent attraction and retention, and corporate citizenship and philanthropy (RobecoSAM, n.d.).

The GRI guidelines provide detailed information to reporting firms on materiality, which is about the importance of OHS and well-being to stakeholders and organizations. Furthermore, the GRI gives guidelines for the disclosures of management approaches (DMAs), social performance indicators (SPIs), and audits/assessments to achieve that are material to stakeholders and organizations. The adoption of the GRI guidelines for DMAs, SPIs, and audits/assessments by firms has been considered for use as organizational responses for improving material outcomes for stakeholders and organizations (Branco, Delgado, Ferreira Gomes, & Cristina Pereira Eugénio, 2014; García-Sánchez, Rodríguez-Ariza, & Frías-Aceituno, 2013; Kolk & Perego, 2010). Disclosures of management approaches encompass narrative information on how an organization identifies, analyzes, and responds to the material aspects of indicators, such as OHS and well-being. SPIs include information about the positive and negative impacts of DMAs (i.e., programs, initiatives, etc.) on indicators. Audits and assessments of OHS and well-being improvements provide information about the achievement of SPIs against set targets.

2.2. DJSI for sustainability assessment

The DJSI represents numerous indices that can be used to evaluate the sustainability performance of public companies. The DJSI and RobecoSAM (Sustainable Asset Management) are strategic partners, and

the DJSI is managed cooperatively by RobecoSAM. The DJSI is concerned with assessing the effect of economic, social, and environmental performance on an organization's "financial materiality." RobecoSAM regards any intangible factor that can impact an organization's core business as financially material. Aspects of the core business include growth, profitability, capital efficiency and risk exposure. From an investor's viewpoint, factors such as the organization's ability to innovate, attract and retain talent, and anticipate regulatory change can have a significant impact on an organization's competitive position. Robeco's Sustainability Investing Analysts use the Corporate Sustainability Assessment (CSA) to conduct a financial materiality analysis. This analysis is done across 60 industries. It seeks to identify those sustainability factors that drive business value and to identify those factors that have the greatest impact on the long-term valuation assumptions used in financial analysis. A materiality matrix for each organization is developed from this analysis. This matrix is used as the basis for determining the applicability and weights of the various sustainability criteria to stakeholders and to the organizations in the GRI reports (RobecoSAM, n. d.).

2.3. Institutional theory and sustainability disclosure

An industry is a homogeneous group of firms with similar products or services or organizational practices (Messner, 2016). According to institutional theory (DiMaggio & Powell, 1983), the industrial environment in which firms operate will influence their policies, including their financial, environmental and social policies. With regard to sustainability reporting, organizational response or practices could align because of institutional isomorphism by coercion, mimetic processes, and normative pressure (DiMaggio & Powell, 1983). By using these three isomorphic mechanism models, it is possible for firms to shape their CSR reporting practices over time (Shabana, Buchholtz, & Carroll, 2017).

Reporting on social and environmental outcomes provides firms with a means of demonstrating their social legitimacy to stakeholders within a socially constructed system of norms, values, beliefs, and culture (Suchman, 1995, Dowling & Pfeffer, 1975). GRI reports can demonstrate that firms have fulfilled their social contract by satisfying stakeholders' need for material information and reducing information asymmetries (Hahn & Kühnen, 2013). For instance, an organization is more likely to be viewed as socially responsible if it states that it treats its employees and workers in its supply chain ethically (Aust, Matthews, & Muller-Camen, 2020). Overall, in return for reporting, organizations can expect various benefits such as improved reputations and credibility among stakeholders (Farooq & De Villiers, 2019), reduced costs of raising capital, and less public pressure to incorporate sustainability in business strategy (Dienes, Sassen, & Fischer, 2016).

The world's business systems with varied logics of economic actions are found to be a good proxy for understanding the different pressures imposed by stakeholders on companies to adopt CSR policies, practices, and disclosure (Jackson & Apostolakou, 2010). Hall and Soskice (2001) in their seminal contribution indicate that there are two main varieties of capitalism (VOC) among the advanced industrialized economies which are LMEs and CMEs. The business systems of firms headquartered in LMEs are characterized by equity financing, dispersed ownership, active markets for corporate control, weak inter-firm cooperation and flexible labour markets. In contrast, the characteristics of firms from CMEs include long-term debt finance, ownership by large block-holders, weak markets for corporate control, strong inter-firm cooperation, and rather rigid labour markets. Witt and Jackson (2016) found support for these two market economies classifications and extended it to additional mixed market economies. However, in this study we chose to use LMEs and CMEs as groupings for the market economies based on the empirical support for these dichotomies for the world's business systems that contribute to a difference in the quality of disclosures (Witt et al., 2018). Furthermore, firms in different industries rely on different stakeholders for their success, and therefore, they focus on those stakeholders with whom they deal directly (Cooper, Crowther, Davies, & Davis, 2001). For instance, the financial services industry focuses on customers and communities; the oil and gas industry is more concerned with environmental performance. In contrast, pharmaceutical companies focus on health professionals rather than the consumers of their products (Wang et al., 2016), who are considered primary stakeholders. There is also a link between stakeholder expectations and organizational responses in reporting transparency in employee or investor-oriented industries (Fernandez-Feijoo, Romero, & Ruiz, 2014).

3. Hypotheses development

The GRI guidelines (GRI, 2013b) formed the basis for developing study hypotheses to examine the quality of reporting in terms of accuracy, clarity, comparability, and reliability of information. The information disclosed involves DMAs, SPIs, and audits/assessments on the material aspects of OHS and well-being. In turn, the quality of the disclosures of the dimensions of OHS and well-being provides insights into the extent to which organizational responses facilitate the achievement of human/social sustainability outcomes.

3.1. Importance of materiality on OHS and well-being

The GRI provides a framework for standardized reporting of firms' sustainability outcomes, thus facilitating comparison of information in reports (Boiral, 2013). Firms are required to include in their reports specific GRI indicators crucial to the organizations achieving their goals and also for stakeholders to indicate those activities that impact on economic, social and environmental outcomes. Firms also must rank topics of their GRI reporting in terms of their relative importance to the *materiality* of sustainability performance for stakeholders and for the organization. Materiality refers to matters critical for organizational performance, achievement of organizational goals, and for positive impacts on stakeholders. According to the GRI G4 guidelines (GRI, 2013b), materiality is defined as aspects that reflect an organization's significant economic, environmental, and social impacts that substantively influence stakeholders' assessments and decisions. Material topics such as OHS and well-being are relevant if they are considered important to reflecting these impacts or influencing the decision making of stakeholders and members of the organization.

The purpose of materiality assessment in sustainability reporting is to identify, select, and prioritize the issues that have the most significance to organizations and to their stakeholders. There is evidence in the GRI, CSR, and IR reporting literature that an organization's reporting on the material aspects of sustainability achieves greater accountability for the content reported by the organization while creating greater transparency for the stakeholders (e.g., Calabrese, Costa, & Rosati, 2015). Therefore, reporting larger amounts of information enables stakeholders, especially investors, to evaluate a firm's potential short- and long-term financial, social, and environmental performance and impact. In the literature, the importance of materiality analysis reported in GRI reports is explained using stakeholder theory. That is, the reported materiality analysis in GRI reports highlights a firm's strategic response to stakeholder desires, either in a preventive or a proactive way (Torelli, Balluchi, & Furlotti, 2020). Thus, sustainability reporting with materiality becomes a source to communicate and to satisfy the information requirements of different stakeholder groups for the firm.

Jones et al. (2018) expanded stakeholder theory with instrumental stakeholder theory to explain materiality by combining agency and stakeholder theories to indicate how the trusting and cooperative relationships between stakeholders and management can help solve problems related to opportunism. Materiality analysis in GRI reports highlight the essential process for ranking issues that are important for stakeholders and which are used by management in strategic planning (Font, Guix, & Bonilla-Priego, 2016). However, Calabrese et al. (2015)

have indicated that one of the most serious issues in GRI and CSR reporting is the lack of completeness in addressing all the aspects that are material from a stakeholder perspective.

The stakeholder theory suggests firms in different industries and market economies will report OHS and well-being issues in GRI reports in different ways because of the desires of their stakeholders. (Christensen & Gordon, 1999; Witt et al., 2018). For example, organizations in the finance sector have been found to report little or no information on occupational health (Koskela, 2014, Hinson, Boateng, & Madichie, 2010). Organizations in the electricity and gas industry reported high levels of information on occupational health (Kawashita et al., 2005), and organizations in the mining, oil, and gas industries most often disclosed information on OHS (Roca & Searcy, 2012). Case studies of organizations revealed that reporting on employees' well-being was at a much lower level of information than information about safety issues (Koskela, 2014). Furthermore, the literature has explored the differences between what is considered material by stakeholders and by management (see Torelli et al., 2020).

Extending our understanding of the institutional pressure imposed by different VOCs, such as CMEs and LMEs, based on the neo-institutional theory and comparative institutional analysis, we explored the role of institutional factors on the quality of OHS and well-being disclosure across different market economies. For example, Jackson & Apostolakou, 2010) revealed in their study, based on the interaction effect of institutionalized forms and sectorial level, that CSR initiatives are implemented by companies as a way of managing their social reputation to legitimise their business practices so as to address the stakeholder expectations. A study on the international oil and gas industry found that those firms that provided more data in their sustainability reports tended to have better reputations than those that provided less information irrespective of the type of market economies those firms represent (Hughey & Sulkowski, 2012). Similarly, another study examining the motivations and barriers for sustainability reporting in the airline industry found brand value, employees' CSR awareness, and communication with stakeholders were primary motivators for sustainability reporting (Kuo, Kremer, Phuong, & Hsu, 2016).

Although reports of information on OHS and well-being obviously exist in the literature, there is limited research specifically on the quality of disclosure based on the highlighted materiality of OHS and well-being in GRI reporting by firms among industry and market economies groupings (i.e., LMEs and CMEs). Therefore, we tried in this study to explore the differences in the importance of materiality on OHS and well-being for stakeholders and for organizations among industry and market economies groupings. Our motivation to undertake this came from the stakeholder theory emphasis because the importance of OHS and well-being will vary between stakeholders and organizations depending on the industry and market economies contexts (e.g., stakeholder engagement). The following hypotheses indicate our intention.

Hypothesis 1A. In the materiality analysis disclosed in GRI reports there will be significant differences in the reported importance of OHS and well-being to organizations and to stakeholders between various industry groupings.

To understand the interaction effects of market economies and industry groupings on the differences in the reported importance of OHS and well-being to organizations and to stakeholders, the following hypothesis is proposed.

Hypothesis 1B. In the materiality analysis disclosed in GRI reports there will be significant interaction effects of industry and market economy (i.e., LMEs and CMEs) groupings on the differences in the reported importance of OHS and well-being to organizations and to stakeholders.

3.2. Quality of disclosures on OHS and well-being

In the CSR and GRI reporting literature, management studies relating to sustainability disclosure and reporting are conceptually related to the field of CSR communication (see Crane & Glozer, 2016). The literature on CSR communication provides a relevant conceptual framework for making sense of the different approaches used by firms in meaningful engagement with stakeholders to gain legitimacy. For example, scholars have drawn upon institutional theory to provide sociological interpretations of CSR communications in disclosure and reporting to highlight a firm's aspirational reality rather than to describe the achievement against stakeholder expectations (e.g., Lammers, 2011; Christensen, Morsing, & Thyssen, 2013). However, in the social accounting literature, legitimacy theory is a dominant theoretical lens in exploring CSR communication in disclosures and reporting (e.g., Lanis & Richardson, 2012). Legitimacy theory in CSR communication has been conceptualized to highlight the alignment or congruence between a firm's activities and societal expectations. Hence, the communication or the quality of disclosure is likely to vary depending on the firm's activities and societal expectations operating in different industries and market economies. For example, firms in utilities and manufacturing industries belong to what are regarded as "dirty" industries. Consequently, they come under more social pressure than "clean" industries, such as consulting and finance, to disclose their organizational responses or strategic choices to reduce pollution and waste (Wang et al., 2016).

In this study the quality of organizational responses to OHS and well-being was explored based on the legitimacy theory to examine the quality of disclosure (i.e., communication) in DMAs, SPIs, and audits/assessments in GRI reports. These subjects were chosen for the study based on the specific disclosure requirements of the GRI G4 guidelines for sustainability reporting and used as dimensions to study the quality of disclosures about organizational responses to aspects of OHS and well-being. Furthermore, the CSR and GRI reporting literature indicated that DMAs, SPIs, and audits/assessments, because of what they portray about the dimensions of organizational responses, are important to improving the quality of sustainability reporting to meet stakeholders' informational needs to gain social legitimacy (Branco et al., 2014; García-Sánchez et al., 2013; Kolk & Perego, 2010).

The organizational responses disclosed or communicated as indicators of OHS reporting vary between organizations in an industry (Perrini, 2005, Vuontisjärvi, 2006, Székely & Knirsch, 2005). The most common organizational response disclosed for indicators was for occupational accidents; however, a variety of organizational responses for indicators include occupational health and well-being training and certification (Koskela, 2014). However, there is lack of research and data in GRI reports on these organizational response communication dimensions for OHS and well-being among industry and market economies groupings. Furthermore, in this study we attempt to extend the understanding of the role of LMEs and CMEs groupings that contribute to the difference in the quality of disclosures. Hence, according to social legitimacy theory, our study attempts to explore the differences in the quality of the disclosure dimensions of DMAs, SPIs, and audits/assessments for OHS and well-being between industry groups because the alignment of a firm's activities and social expectations will vary between industries. Furthermore, based on the neo-institutional theory and comparative institutional analysis we attempted to explore the interaction effects of industry and market economies groupings on the differences in the quality of the disclosure dimensions of DMAs, SPIs, and audits/assessments for each of the aspects of OHS and well-being contained in GRI reports. The following hypotheses are proposed to achieve these intentions:

Hypothesis 2A. Significant differences will exist between industry groupings in the quality of the disclosure dimensions of DMAs, SPIs, and audits/assessments for each of the aspects of OHS and well-being contained in GRI reports.

Hypothesis 2B. There will be significant interaction effects of industry and market economies (i.e., LMEs and CMEs) groupings on the differences in the quality of the disclosure dimensions of DMAs, SPIs, and audits/assessments for each of the aspects of OHS and well-being contained in GRI reports.

3.3. Quality of disclosures by DJSI members

Disclosure theory indicates that credible and voluntary disclosure of environment, social and governance information is an important mechanism by which DJSI member firms provide firm-specific private information to stock markets to mitigate financial risks for improved future performance (Schiehll & Kolahgar, 2020). The continuous monitoring of media, stakeholder commentaries, and publicly available information on a firm's sustainability performance disclosure—which includes OHS and well-being as a social dimension for CSA—have increased firms' efforts to demonstrate their commitment to act responsibly to mitigate financial risks (Ali, Frynas, & Mahmood, 2017; Ehnert, Parsa, Roper, Wagner, & Muller-Camen, 2016).

The CSA is considered important for DJSI membership because any specific allegations about OHS and well-being could harm a firm's reputation and result in adverse financial consequences because of lost customers, litigation, or fines (Oh, Park, & Ghauri, 2013). Furthermore, because not all organizations can be members of the DJSI (e.g., DJSI World — top 10 % of the largest 2500 companies across 60 industries in the S&P Global Broad Market Index) (RobecoSAM, n.d.), membership also signals leadership in sustainability. Consequently, not every GRI member can be a DJSI member, but every DJSI member could become a GRI member (Christofi et al., 2012). To our knowledge, no study exists that focuses on the differences in reporting practices between DJSI members and nonmembers among organizations that report according to the GRI guidelines. Because gaining membership in DJSI is based on CSA for industry-specific criteria, hence based on the disclosure theory we are keen to explore whether the quality of GRI disclosures on OHS and well-being differ between DJSI members and nonmembers within each of the industry groupings. Hence, no attempt is made in this study to test a hypothesis on the difference between DJSI members and nonmembers from the international economies groupings.

Hypothesis 3. Significant differences will exist in the quality of disclosures in DMAs, SPIs, and audits/assessments for OHS and well-being among DJSI members and nonmembers within each of the industries.

4. Method

4.1. Sample selection

Most of the companies selected for this study are large international corporations. They were selected on the basis of the 2016 list of Forbes' 2000 World's Biggest Public Companies list 2016. The Forbes list ranking is based on sales, profits, assets, and market value, and thus our sample contains well known international corporations such as the German car manufacturer Volkswagen, the US pharmaceutical firm Johnson and Johnson, the Japanese public utility Nippon Telegraph & Tel and the Russian mining firm Rosneft. 96 percent of companies in our study sample are MNCs operating in several countries. The remaining sample include mainly transport and public utilities that only operate in their home country such as China Resources Power, Norfolk Southern and American Electric.

The selection of reports was a three-step process. First, we chose only firms that had published standalone sustainability reports—or sustainability reports that either incorporated annual reports or were sections of annual reports—that were based on, or in accordance with, GRI G4 guidelines; in all cases, a report also had to be in English in a PDF format. Secondly, to ensure that the selected reports addressed OHS and well-being, they had to include OHS in the table of contents under Labour Aspect (LA) 6 and LA7. LA6 comprises the "type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender" (GRI, 2013a, p. 153). Indicators of LA7 refer to "workers with high incidence or high risk of diseases related to their occupation" (GRI, 2013a, p. 155). Finally, to promote homogeneity and comparability of the quality of disclosures on OHS and well-being, we used the SIC system to identify large firms in the following four industries: transportation and public utilities (TPU); manufacturing; finance, insurance and real estate (FIRE); and mining.

The reports were collected between the end of June and the beginning of September 2016 for the calendar or fiscal years 2014 and 2015. The selected reports, along with associated annual report material, were downloaded from the GRI database or from the respective company webpage. Of the total of 250 reports, 204 were standalone sustainability reports and 46 were integrated reports or annual reports with a sustainability section. As for industries, the reports represented 115 firms operating in manufacturing (46 %); 53 in TPU (21 %); 51 in FIRE (21 %); and 31 in mining (12 %). We classified the sample into LMEs and CMEs based on the headquarter country location of chosen companies which is similar to other studies in the literature (i.e., Hall & Soskice, 2001; Jackson & Apostolakou, 2010; Witt & Jackson, 2016; Witt et al., 2018). Our sample includes 125 companies (50 %) in each of the LMEs and CMEs groupings.

4.2. Data collection

We used a mixed-method approach for content analysis of the quality of the GRI indicators' disclosures on OHS and well-being. This included a qualitative approach capable of capturing the breadth of information relating to the OHS and well-being aspects of GRI reports. The quantitative approach facilitates the rating of the quality of information captured in the qualitative data collection stage. The quantitative ratings of the quality of disclosure information provide data for testing our hypotheses. Our approach goes beyond other techniques such as volume or frequency of disclosure (Toms, 2002) and the category-based analysis (Vuontisjärvi, 2006) used in analyses of GRI and CSR reports. Hence, the mixed-method approach we used for content analysis was also used to code data; the steps in this procedure are discussed next.

First, we collected our qualitative data from paragraphs, sentences, tables, and graphs in the reports with detailed information on OHS and well-being and captured it under DMAs, SPIs, and audits/assessments as variables. This process was completed by manually scanning for detailed qualitative information on OHS and well-being and allocated to the organizational response dimensions of DMAs, SPIs, and audits or assessments. We also conducted a "health", "safety" and "well-being" keyword search of the published PDF document to capture all relevant information in each of the GRI reports. Finally, all information secured from the reports was entered into the proper columns of an Excel spreadsheet, along with the corresponding page number in the report.

Secondly, we used a quantitative approach to content analysis to manually check the GRI reports to allocate a rating of 1 for inclusion and 0 for non-inclusion of a materiality matrix in the reports. Similarly, we manually checked for DJSI membership (1 for membership, 0 if not). Next, each report was rated as either high (3), medium (2), or low (1) based on the importance of the material aspect of OHS and well-being to the organization and to stakeholders separately as included in the materiality matrix of GRI reports. "Health" and "well-being" were rated separately in importance.

Third, we used GRI guidelines (GRI, 2013b) to rate reporting quality in terms of accuracy (i.e., detailed information for stakeholders), clarity (i.e., reasonable understanding for stakeholders) and reliability (i.e., subject to external audit of information disclosed). These quality criteria are used to quantitatively evaluate the quality of information on OHS and well-being in the organizational response dimensions of DMAs, SPIs, and audits/assessments. This is done by initially evaluating each of the

quality criteria of accuracy, clarity and reliability by using Brammer and Pavelin (2008) modified 3-point rating scale—high quality (3), moderate quality (2), and low quality (1) which was used for the rating of corporate environmental disclosures. Subsequently, the quantitative data was obtained by calculating the average of the total of all the individual quality criterion scores for each of the dimensions of OHS and well-being. This is similar to the technique used by Daub (2007) to evaluate quantitatively the communicative quality of GRI reports.

Low quality highlights inadequate information disclosed on accuracy, clarity and reliability on the dimensions of OHS and well-being. The following is an example of low quality (1) on a disclosure of management approach (DMA) to improve OHS as disclosed by Grupo Financiero Banorte (2016, p. 33):

> The Comprehensive Health System covers medical service to employees as well as their dependents; Occupational Medicine is focused on protecting the health of personnel through the prevention of occupational accidents and illnesses, as well as the elimination of risk factors.

Moderate quality (2) is about contents that were evaluated solely based on intrinsic form information disclosed on accuracy, clarity and reliability on the dimensions of OHS and well-being rather than on narrative contents. For example, a rating of 2 was assigned to the following disclosure in a social performance indicator (SPI) by the Swiss mining MNC Glencore International (2016, p. 38) on impacts on OHS:

> Our focus on workplace injuries in 2015 continued to produce significant improvements in our lost time injury frequency rate (LTIFR), and a reduction in our total recordable injury frequency rate (TRIFR). Our long-term target is a 50 % reduction in TRIFR by the end of 2020, against an initial baseline figure of 5.82 established in 2014.

High quality (3) indicates that the narrative contents on the DMAs, SPIs, and audits/assessments dimensions of organizational responses to OHS and well-being in the GRI reports satisfies the requirements for accuracy, clarity and reliability to promote objectivity and interpretability for stakeholders (Daub, 2007; Lee, Strong, Kahn, & Wang, 2002). The following example of high quality on the audits or assessments dimension of OHS and well-being improvements is from UK headquartered international operating telecommunication company Vodafone (2016, p. 57):

> Every year, we carry out a Global People Survey across our entire workforce worldwide. The survey is conducted online using a respected third-party provider and is completely anonymous and confidential. We secure very high participation rates each year: in 2015−16, 84 % of our more than 107,000 employees responded. The Global People Survey helps us to assess the mood, concerns and aspirations of our employees as a whole on safety and well-being. The global leadership team examines the findings in great detail to identify areas for action to address shortcomings identified by our people. The same scrutiny, analysis and discussion take place for individual teams by their line manager.

To establish interrater reliability, the information on the three dimensions of organizational responses to OHS and well-being for each of the GRI reports captured on the Excel spreadsheet were independently rated twice. These ratings were compiled by different authors who used the 3-point quality rating scale. Afterward, the allocated quality ratings for each of the dimensions of disclosures on OHS and well-being that were determined by the two different raters were compared. Any discrepancies were resolved by discussions. Finally, a dataset was developed based on the interrater reliability of ratings on the DMAs, SPIs, and audits/assessments.

4.3. Data analysis

The dataset that emerged from this collection and coding effort was analyzed by using multivariate analysis of variance (MANOVA) to reveal the quantitative differences in the means of the quality of disclosure on the importance of OHS and well-being to organizations and to stakeholders between industry groupings. Subsequently, DMAs, SPIs, and audits/assessments as three dimensions of organizational responses to OHS and well-being were analyzed between industry groups and finally between members and nonmembers of DJSI within each of the industries. We followed the procedures suggested by Grice and Iwasaki (2007) to satisfy the three assumptions of MANOVA. The assumption of the independence of observation was satisfied by the separate work of the two unrelated coders. We used Kolmorogov-Smirnov tests to evaluate univariate normality for the dependent variables. We found that most of the study variables were normally distributed. Lastly, Box's M tests of the equality of the covariance matrices found them not significant, which highlights that the covariance matrices for the group population can be assumed equal.

5. Results

Table 1 shows the bivariate correlations for all the dependent variables used in the study. The bivariate correlations revealed a positive significant relationship between the importance of OHS and well-being to organizations and to stakeholders. The quality ratings for DMA—health is linked to the quality ratings for DMA—well-being as well as to the quality ratings for audits/assessments of well-being improvements. Table 2 indicates the mean and standard deviations (SD) for each of the industry and market economies groupings on the organizational response dimensions to OHS and well-being. The data on the reported importance of OHS and well-being to organizations and also to stakeholders as two dependent variables were analyzed in terms of four different industry groups and two market economies groups.

We used multivariate analysis of covariance (MANOCOVA) for this analysis. In MANOCOVA, materiality analysis reported in GRI reports is a covariate. This analysis yielded statistically significant multivariate main effects of differences in the disclosed importance of OHS and well-being to organizations and to stakeholders in GRI reports between different industry groups (*Wilks' Lambda* = .922; F (6, 488) = 3.373, p = 0.001, *partial* η^2 = .040). Hence, Hypothesis 1A was accepted. Furthermore, the covariate (materiality analysis provided in the GRI reports) was also significant (*Wilks' Lambda* = .596; F (2, 244) = 82.738, p = 0.001, *partial* η^2 = .404).

A univariate test (F (3, 245) = 6.61, $p < .001$) revealed that the main effect of multivariate analysis for the disclosed importance of OHS and well-being to organizations was because of a significantly higher mean among firms in the TPU industry group ($M = 1.68$; SD = 0.83) compared with the FIRE ($M = 1.29$; SD = 0.58) industry group ($MD = 0.39$, $SE = .19$, $p < .001$) and the mining ($M = 1.45$; SD = 0.77) industry group ($MD = 0.23$, $SE = .22$, $p < .025$). Similarly, the manufacturing industry group ($M = 2.51$; SD = 0.67) has a significant higher mean (see Table 3) than the FIRE ($M = 1.72$; SD = 0.67), and the mining industry ($M = 2.30$; SD = 0.82) in disclosing the importance of OHS and well-being to organizations.

A similar univariate test for the disclosed importance of OHS and well-being to organizations in GRI reports (F (3, 245) = 4.80, $p < .001$) revealed significant mean differences (see Table 3), with a higher mean for the TPU industry group ($M = 1.68$; SD = 0.76) compared with the MN ($M = 1.24$; SD = 0.47) industry group ($MD = 0.44$, $SE = .18$, $p < .001$). Furthermore, the manufacturing industry group ($M = 1.54$; SD = 0.75) had a higher mean on the reported importance of OHS and well-being to stakeholders compared with the MN ($M = 1.24$; SD = 0.47) industry group ($MD = 0.30$, $SE = .14$, $p < .001$).

The multivariate main effects of differences in the disclosed importance of OHS and well-being to organizations and to stakeholders in GRI

Table 1
Intercorrelations among quality of disclosure variables.

Quality of disclosure variables	*M*	*SD*	1	2	3	4	5	6	7	8
1. Importance of OHS and well-being to organizations	1.02	1.25								
2. Importance of OHS and well-being to stakeholders	0.91	1.15	0.29**							
3. Quality ratings for DMA - health	1.38	0.54	0.03	0.06						
4. Quality ratings for SPI - health	1.06	0.32	0.09	0.08	0.07					
5. Quality ratings of audits and assessments of health improvements	1.55	0.82	0.09	0.09	0.03	0.07				
6. Quality ratings for DMA - well-being	1.48	0.62	0.02	0.04	0.18**	0.03	−0.11			
7. Quality ratings for SPI - well-being	1.02	0.15	−0.07	−0.06	0.03	−0.03	−0.07	0.01		
8. Quality ratings of audit and assessments of well-being improvements	1.26	0.65	−0.06	−0.04	0.17**	0.00	−0.12	0.06	−0.02	

N = 250; **$p < 0.01$.

Table 2
Means and SDs for SIC industry and market economies groupings on variables for the quality of disclosure of OHS and well-being.

Quality of disclosure variables	SIC group	*All*		*MAR*		*MAN-R*		*DM*		*DN-M*		*LMEs*		*CMEs*	
		M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Quality ratings for DMA - health	TPU	1.49	0.61	1.52	0.62	1.45	0.61	1.57	0.63	1.40	0.58	1.30	0.54	1.69	0.62
	MA	1.34	0.51	1.38	0.54	1.28	0.45	1.36	0.52	1.31	0.51	1.29	0.49	1.40	0.53
	FIRE	1.33	0.48	1.39	0.49	1.20	0.41	1.37	0.49	1.29	0.46	1.32	0.48	1.34	0.48
	MN	1.45	0.62	1.33	0.48	1.70	0.82	1.53	0.74	1.38	0.50	1.41	0.62	1.50	0.65
Quality ratings for SPI - health	TPU	1.06	0.31	1.03	0.17	1.10	0.45	1.00	0.00	1.12	0.44	1.01	0.01	1.12	0.43
	MA	1.10	0.41	1.14	0.45	1.05	0.30	1.12	0.45	1.08	0.34	1.06	0.31	1.15	0.50
	FIRE	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.06	0.24	102	0.02
	MN	1.03	0.18	1.05	0.22	1.00	0.00	1.07	0.26	1.00	0.00	1.06	0.24	1.02	0.01
Quality ratings of audit and assessment of health improvements	TPU	1.55	0.85	1.61	0.90	1.45	0.76	1.68	0.94	1.40	0.71	1.63	0.84	1.46	0.86
	MA	1.57	0.80	1.61	0.83	1.51	0.74	1.55	0.79	1.61	0.81	1.80	0.80	1.55	0.80
	FIRE	1.37	0.75	1.47	0.84	1.13	0.35	1.33	0.76	1.43	0.75	1.37	0.76	1.37	0.75
	MN	1.74	0.93	1.90	0.94	1.40	0.84	1.87	0.99	1.63	0.89	1.71	0.92	1.79	0.98
Quality ratings for DMA - well-being	TPU	1.68	0.70	1.73	0.67	1.60	0.75	1.71	0.71	1.64	0.70	1.59	0.57	1.77	0.82
	MA	1.43	0.59	1.35	0.51	1.58	0.70	1.53	0.61	1.31	0.55	1.37	0.49	1.51	0.70
	FIRE	1.43	0.54	1.47	0.56	1.33	0.49	1.50	0.57	1.33	0.48	1.47	0.61	1.41	0.50
	MN	1.39	0.62	1.38	0.59	1.40	0.70	1.47	0.64	1.31	0.60	1.35	0.61	1.43	0.65
Quality ratings for SPI - well-being	TPU	1.02	0.14	1.00	0.00	1.05	0.22	1.00	0.00	1.04	0.20	1.00	0.00	1.04	0.20
	MA	1.01	0.09	1.01	0.12	1.00	0.00	1.02	0.12	1.00	0.00	1.02	0.13	1.00	0.00
	FIRE	1.04	0.20	1.00	0.00	1.13	0.35	1.03	0.18	1.05	0.22	1.00	0.00	1.06	0.25
	MN	1.06	0.25	1.05	0.22	1.10	0.32	1.00	0.00	1.13	0.34	1.06	0.24	1.07	0.27
	TPU	1.28	0.63	1.27	0.57	1.30	0.73	1.29	0.60	1.28	0.68	1.63	0.84	1.46	0.86
	MA	1.25	0.66	1.22	0.63	1.30	0.71	1.24	0.66	1.27	0.67	1.60	0.80	1.55	0.80
	FIRE	1.35	0.72	1.31	0.67	1.47	0.83	1.57	0.86	1.05	0.22	1.37	0.76	1.37	0.75
	MN	1.13	0.50	1.19	0.60	1.00	0.00	1.27	0.70	1.63	0.89	1.71	0.92	1.79	0.98

MAR – Materiality analysis reported; *MAN-R* - Materiality analysis nonreported; *DM* – DJSI membership; *DN-M* – DJSI non-membership; LMEs -Liberal market economies; CMEs – Coordinated market economies.
TPU – Transportation and public utilities (*All* - N = 53; *MAR* – N = 33; *MAN-R* – N = 20; *DM* – N = 28; *DN-M* – N = 25; LMEs = 27; CMEs = 26).
MA – Manufacturing (*All* - N = 115; *MAR* – N = 72; *MAN-R* – N = 43; *DM* – N = 66; *DN-M* – N = 49; LMEs = 62; CMEs = 53).
FIRE – Finance, insurance and real estate (*All* - N = 51; *MAR* – N = 36; *MAN-R* – N = 15; *DM* – N = 30; *DN-M* – N = 21; LMEs = 19; CMEs = 32).
MN – Mining (*All* - N = 31; *MAR* – N = 21; *MAN-R* – N = 10; *DM* – N = 15; *DN-M* – N = 16; LMEs = 17; CMEs = 14).

Table 3
Pairwise comparison of industry and international economies groupings on the difference in disclosed importance of OHS and well-being to organizations and stakeholders.

Industry/ international economies group	Comparison group	Importance to organizations		Importance to stakeholders	
		MD	*SE*	MD	*SE*
TPU	MA	0.06	0.16	0.08	0.15
	FIRE	0.68*	0.19	0.59*	0.18
	MN	0.35	0.22	0.49*	0.21
MA	TPU	−0.06	0.16	−0.08	0.15
	FIRE	0.62*	0.16	0.51*	0.15
	MN	0.27	0.20	0.43*	0.19
FIRE	TPU	−0.68*	0.19	−0.59*	0.18
	MA	−0.62*	0.16	−0.51*	0.15
	MN	−0.19	0.22	−0.24	0.21
MN	TPU	−0.49*	0.22	−0.35	0.21
	MA	−0.43*	0.20	−0.27	0.19
	FIRE	0.19	0.22	0.24	0.21
LMEs	CMEs	0.11	.09	0.18*	.09

MD = Mean difference; $p < .05$.

reports between companies from LMEs and CMEs were not significantly different (*Wilks' Lambda* = .982; F (2, 240) = 2.227, *ns*, *partial* η^2 = .018). However, the interactions among the industry and market economies groups have contributed to the significant differences in the disclosed importance of OHS and well-being to organizations and to stakeholders in GRI reports (*Wilks' Lambda* = .939; F (6, 480) = 2.556, p = 0.01, *partial* η^2 = .031). The reason for the significant interaction effect of the disclosed importance of OHS and well-being is because of the higher mean among companies in in the TPU industry from the CMEs (*M* = 1.73; *SD* = 0.87) compared with the similar industry group (*M* = 1.48; *SD* = 0.64) from the LMEs group (*MD* = 0.18; *SE* = 0.09, *p* = .05) Thus, Hypothesis 1B was accepted. Furthermore, the covariate (materiality analysis provided in the GRI reports) was also significant (*Wilks' Lambda* = .680; F (2, 240) = 56.441, p = 0.001, *partial* η^2 = .320).

We used MANOVA to test for differences between industry groups on DMAs, SPIs, and audits/assessments as dependent variables. The results revealed no significant differences between industry groupings on the dimensions of organizational responses to aspects of OHS and well-being (*Wilks' Lambda* = .907; F (18, 682) = 1.331, *ns*, *partial* η^2 = .032). Thus, Hypothesis 2A that "dirty" industries such as mining and manufacturing

will report a higher quality of disclosures on OHS and well-being compared with other industries was rejected. Similarly, the multivariate main effect of differences in the quality of DMAs, SPIs, and audits/assessments disclosure in the GRI reports between companies from LMEs and CMEs groups were not significant (*Wilks' Lambda* = .975; F (6, 237) = 1.015, *ns*, *partial* η^2 = .025). Also, interaction effects of industry and market economy groups on the differences in the quality of DMAs, SPIs, and audits/assessments disclosure were not significant (*Wilks' Lambda* = .952; F (18, 670) = 0,660, *ns*, *partial* η^2 = .016). Hence, Hypothesis 2B was also rejected.

An industry-specific analysis was conducted using MANOVA to explore the differences in organizational responses from the quality of information disclosed on DMA, SPIs, and audits/assessments for OHS and well-being as dependent variables between firms that are members and nonmembers of DJSI (Table 4). The results revealed no significant differences on the quality of disclosures on DMA, SPIs, and audits/assessments between DJSI member and nonmember firms for the TPU industry group (*Wilks' Lambda* = .770; F (8, 44) = 1.643, *ns*, *partial* η^2 = .230), the manufacturing industry group (*Wilks' Lambda* = .907; F (8, 106) = 1.352, *ns*, *partial* η^2 = .093) and the mining industry group (*Wilks' Lambda* = .772; F (8, 22) = .812, *ns*, *partial* η^2 = .228). However, there was a significant difference in the quality of disclosure on DMAs, SPIs and audits/assessments for OHS and well-being between firms with membership and non-membership in DJSI within the FIRE industry group (*Wilks' Lambda* = .749; F (7, 43) = 2.060, $p < .05$, *partial* η^2 = .251). A further univariate test revealed that the main effect was because of a significant mean difference (*MD* = .519, *SE* = .192, $p < .05$) in the quality of disclosures on audits/assessments on the employee well-being aspect among DJSI member and nonmember firms in the FIRE industry group (F (1, 49) = 7.306, $p < .01$). Furthermore, it is evident that the mean value (*M* = 1.57) is higher among firms with DJSI membership than among nonmember firms in this industry group (see Table 2). Hence, Hypothesis 3 was partially accepted.

6. Discussion and implications

6.1. GRI guidelines based ratings for quality of disclosure

This exploratory study seeks to understand the quality of reporting (accuracy, clarity, comparability and reliability) of OHS and well-being indicators in GRI reports. Koskela (2014). There is a limited amount of research in the literature on GRI reporting which focuses on OHS and well-being, and of those, most examined the levels of reporting and not the quality of contents. For example, content analysis as a method for OHS and well-being reports focused mostly on the volume of information such as the number of lines or frequency of words used in reports (see Toms, 2002), weights on items for disclosed information (Cormier, Magnan, & Van Velthoven, 2005) and category- based analysis (i.e., principles, process, and performance indicators) (Vuontisjärvi, 2006).

These methods of content analysis have a limited scope in revealing comprehensive information on GRI and CSR reporting based on the sociological interpretation of the communication of CSR information from the institutional theory (Christensen et al., 2013; Lammers, 2011). That is, comprehensive communication about the CSR reports should not only provide statements of commitments but also explain how the reported commitments translate into outcomes (van Staden & Hooks, 2007). Furthermore, comprehensive reporting is one of the important conditions that must be met to demonstrate a company's accountability to stakeholders on sustainability issues (Adams, 2004). Bouten, Everaert, Van Liedekerke, De Moor, and Christiaens (2011) in their study of the comprehensiveness of CSR reporting used qualitative and quantitative methods in content analysis. In the quantitative part of their study, they used the frequency of disclosed information under each of the categories of the CSR reports as captured by the qualitative communication part of the content analysis, while we also rated the communication of information provided on DMAs, SPIs, and audits/assessments on a 3-point quality rating scale and then conducted a quantitative analysis.

To our knowledge, this is the first study to use the criteria of accuracy, clarity, comparability, and reliability which are based on the guidelines for quality of communication on OHS and well-being indicators in GRI reports. Hence, our study has contributed by enriching our knowledge on the sociological interpretation of communication of CSR information from the institutional theory to explore the quality of GRI reporting guidelines for the rating of information in DMAs, SPIs, and audits/assessments of OHS and well-being indicators. This approach extends the CSR communication literature with a comprehensive reporting method based on the quality of GRI reporting guidelines, instead of relying on the commonly used frequency and weights-based ratings in content analysis. Future research can compare the effectiveness of the proposed method of rating the quality of disclosures to that of the levels of reporting to reveal the comprehensiveness of GRI or CSR reporting to translate sustainability commitment to outcomes to gain legitimacy.

6.2. Materiality analysis: importance of OHS and well-being

6.2.1. Organization and stakeholder convergence in importance to OHS and well-being

Managers respond to social issues such as OHS and well-being to improve economic performance for organizations (i.e., shareholders) by satisfying the needs of stakeholders based on the instrumental stakeholder theory (Jones et al., 2018). Moreover, it is commonly believed that in a free-market economy firms exist primarily for profit to improve shareholder value, and it is more difficult to rationalize an act of CSR to benefit stakeholders (Elrick & Thies, 2018). In our study we revealed that there is a convergence of importance to OHS and well-being to organizations and stakeholders between firms operating in TPU, MA and FIRE industry groupings in alignment with the instrumental stakeholder theory. That is, firms in the TPU and MA industries have assigned higher importance to disclosing OHS and well-being information for both organizations and stakeholders than firms in the FIRE industry grouping. Hence, our study contributes to the instrumental stakeholder theory highlighting that the understanding of convergence in the importance of

Table 4
Pairwise comparison of DJSI membership and non-membership groups on the difference in the quality of disclosure of OHS and well-being.

Dependent variable	Comparison between DJSI members and non-members							
	TPU		MA		FIRE		MN	
	MD	*SE*	MD	*SE*	MD	*SE*	MD	*SE*
Quality ratings for DMA - health	0.17	0.17	0.06	0.10	0.08	0.14	0.16	0.23
Quality ratings for SPI - health	−0.12	0.08	0.04	0.08	0.01	0.01	0.07	0.06
Quality ratings of audit and assessment of health improvements	0.28	0.23	−0.07	0.15	−0.10	0.21	0.24	0.34
Quality ratings for DMA - well-being	0.07	0.19	0.22	0.11	0.17	0.13	0.15	0.22
Quality ratings for SPI - well-being	−0.04	0.04	0.02	0.02	−0.01	0.06	−0.13	0.09
Quality ratings of audit and assessment of well-being improvements	0.01	0.18	−0.02	0.13	0.52*	0.19	0.27	0.18

$p < .05$.

dealing with OHS and well-being issues for both organizations and stakeholders among firms in the TPU and MA industries. In the instrumental stakeholder theory, this convergence of importance is explained by the strategic posture dimension of corporate social reporting (Prado-Lorenzo, Gallego-Alvarez, & Garcia-Sanchez, 2009). The strategic posture dimension describes a firm's response to social and environmental demands to gain long-term shareholder value. An active posture highlights a position in which a firm's managers as agents of shareholders seek to influence their firms' relationships with key stakeholders to develop optimal levels of interdependence to achieve OHS and well-being demands.

In our study, the convergence of the importance of OHS and well-being to organizations and stakeholders in the TPU and MA industries is essential for the long-term economic survival of firms in these industries compared to firms in the FIRE industry. Prado-Lorenzo et al. (2009) found evidence of an active strategic posture between dominant stockholders and other stakeholders (i.e., government regulators and creditors) for OHS assessments that maximize long-term economic benefits. In addition, Boyce (2016) study of the U.S. logistics and transportation sector revealed that OHS and wellness deserves more attention to benefit stakeholders and organizations. However, the motivation of dispersed shareholders to act on occupational health issues is influenced by the desire for personal economic gains from increased short-term share value instead of taking into account the long-term survival of the firm. Hence, future research should explore whether the dominant stockholders or the dispersed shareholders in the TPU and MA industries have a significant role in the convergence of importance of OHS and well-being to organizations and to stakeholders. Similarly, future research should explore the key stakeholders (e.g., employees, supply chain, etc.) in the TPU and MA industries who have a significant role in shaping the importance of OHS and well-being to organizations and to stakeholders.

Including an additional layer of national institutional context of companies headquartered in LMEs and CMEs to that of the sectorial or industry level analysis of materiality of OHS for organizations and stakeholders contribute to the neo-institutional theory. We found no significant difference between companies operating from the LMEs or the CMEs on the importance of OHS to organizations and to stakeholders. This finding highlights the mirroring of business systems between these two types of market economies on social sustainability reporting. The findings contradict Witt et al. (2018) assertion that VOC used by companies operating in LMEs and CMEs will facilitate different outcomes for organizations and stakeholders. Hence, the study findings extend the neo-institutional theory that companies operating from countries in LMEs and CMEs tend to mirror each other's business systems in managing and reporting the importance of OHS to organizations and stakeholders to gain long term value for the company which future research can explore.

6.2.2. Stakeholder importance to OHS and well-being

We found that, compared to the mining (MN) industry, firms in the manufacturing and public transport and utilities (TPU) industries tend to place significantly higher importance (i.e., materiality) on aspects of OHS and well-being just to stakeholders in alignment with the stakeholder theory (Christensen et al., 2013). The study has contributed to the stakeholder and social legitimacy literature by revealing that firms in the manufacturing and TPU industries, unlike in the mining industry, tend to communicate credibly the importance of OHS and well-being information to stakeholders in GRI reports. This happens because stakeholders for firms in basic industries that include manufacturing and TPU report significantly more CSR information to stakeholders than firms in the mining industry who are inclined to value such information positively for social legitimacy (see Gamerschlag, Möller, & Verbeeten, 2011).

Thus, the manufacturing and TPU firms' leaders respond stronger because of their visibility, political risk, and intense competition compared to firms in the mining industry, which tend to operate in isolated locations. However, a previous study on the orientation of CSR reporting to stakeholders that included OHS and safety as indicators, contradicts our findings by indicating there was no significant difference between manufacturing, TPU, and service industries (Pérez & López, 2015). Furthermore, from the perspective of the interaction effects of industry sector and market economies, the study found that firms in the TPU industry from CMEs tend to report a higher importance of OHS to stakeholders than firms operating in a similar sector from LMEs. This finding aligns with Jackson and Apostolakou (2010) which confirmed that companies operating in the high-impact sector (i.e., transport) and having headquarters in countries with strong employment protection laws, such as the CMEs, will adopt management practices and report a higher importance of the social aspect of sustainability (i.e., OHS) to stakeholders. Hence, our study extends the cross-nationally comparative OHS reporting literature and clarifies the mixed findings by exploring the role of the moderation effects of country contexts on the orientation of OHS and well-being reporting to stakeholders based on the stakeholder theory.

Furthermore, it is a prerequisite for manufacturing, TPU, and mining industries to identify the relevant key stakeholders and understand the difference in stakeholder expectations to align GRI disclosure on OHS and well-being issues as a way gain legitimacy and reputation (Delmas, 2014). These stakeholders include employees, trade unions, customers, governments, and civil societies (van Berkel et al., 2014). Hence, future research should explore the undertaking of whether the key stakeholders' expectations of MNCs across countries has a role in the difference in disclosing the importance of OHS and well-being outcomes as a way to gain social legitimacy among manufacturing, TPU and mining industries.

6.3. Reported materiality and differences in organizational responses

First, it is noteworthy that this study is one of the earliest on the quality of disclosures (i.e., contents/information) on DMAs, SPIs, and audits/assessments as dimensions of organizational responses to OHS and well-being issues based on legitimacy theory (e.g., Lanis & Richardson, 2012). Legitimacy theory in CSR communication has been conceptualized to highlight the alignment or congruence between a firm's activities and societal expectations. For example, most studies on OHS have typically reported on occupational accidents (e.g., Koskela, 2014). Therefore, the study findings are discussed using published articles on the levels of reporting between industries which are used in those articles in an effort to analyze the quality of reporting on OHS and well-being.

Although, firms in the TPU and the manufacturing industries have disclosed the importance of OHS and well-being to organizations and to stakeholders, no significant difference occurs between the TPU, manufacturing groupings, or other industry groupings in the organizational responses (i.e., DMAs, SPIs, and audits/assessments) on reporting this important issue to organizations and to stakeholders. Similarly, despite that the study findings revealed the importance of OHS to stakeholders due to the interaction effects of TPU industry operating in the CMEs, there is no evidence of a difference in reported management approaches to DMAs, SPIs, and audits/assessments of OHS between companies operating from LMEs and CMEs. Hence, our findings align with the evidence in the literature (e.g., Evangelinos et al., 2018; Tsalis, Stylianou, & Nikolaou, 2018) to indicate that firms operating within an industry sector and/or from different market economies (LMEs and CMEs) disclose vague/sententious information about OHS and well-being in GRI reports and that firms rarely attempt to translate these sententious or self-righteous claims into sustainability outcomes. In addition, in line with Evangelinos et al. (2018) study findings, firms in all four industry groups and two market economies (LMEs and CMEs) tend to disclose OHS and well-being information that is used to satisfy legal requirements and meet OHS standards and hence, there is no

difference in the generally low quality of disclosures.

This study extends the social legitimacy theory literature by highlighting that the sample of firms chosen in the study from LMEs and CMEs in alignment with Searcy, Dixon, and Neumann (2016) findings, instead of empowering stakeholders with quality CSR communication disclosure in GRI reports, tend to exacerbate information asymmetry on OHS and well-being indicators to gain social legitimacy. Information asymmetry in social legitimacy is evidenced in a study which found that consumers as a stakeholder do not receive adequate information on the working conditions of firms that negatively impact on employee OHS and well-being (Dixon, Nordvall, Cukier, & Neumann, 2017). This working condition as a social sustainability issue should be alarming senior management in terms of underlying organizational inefficiencies and the potential skepticism or mistrust around OHS performance. Hence, firms across industries and market economies (i.e., LMEs and CMEs) tend to disclose 'aspirational talks' about OHS and well-being in GRI reports with self-righteous claims to have meaningful engagement with stakeholders to gain legitimacy (Christensen et al., 2013).

In contrast, the findings of no significant difference between industry groups on the dimensions of organizational responses contradicts previous studies in which the public utility industry reported a high level of information (Kawashita et al., 2005); a low level of information in the finance industry (Hinson et al., 2010) on OHS and well-being. And more accurate and transparent information on OHS issues from firms in high profile industries compared with low profile industries (Tsalis et al., 2018). Furthermore, the no significant difference finding between firms operating from LMEs and CMEs in organizational responses on DMAs, SPIs, and audits/assessments of OHS contradicts previous findings that firms operating from LMEs adopt and report extensive CSR practices compared to firms from CMEs (Jackson & Apostolakou, 2010). Therefore, future research should first explore firms' motivation or lack of motivation in terms of the quality disclosures on DMAs, SPIs, and audits/assessments as a way to translate into action the sententious claims made about the importance of OHS and well-being to organizations and to stakeholders. Secondly, researchers should explore whether the similarity in organizational response to OHS and well-being issues is because firms choose to adhere to legal requirements and industry standards across LMEs and CMEs.

Despite quality disclosures on OHS and well-being in GRI and DJSI reports, in the sustainable HRM literature, there is evidence that the harmful impact of work on health (Mariappanadar, 2016) is being used to identify healthy and unhealthy work systems. The unhealthful impact of work is about how certain work practices restrict employees from achieving positive health and well-being outcomes. Positive health advocates a proactive approach to identifying the leading indicators of work-related psychological disorders and chronic disease to enhance prospects of well-being (Mariappanadar, 2020). The harm of work on health is used as a leading indicator for employee well-being outcomes instead of occupational stress, which is predominately used as an agent that causes disorders or illnesses and, according to the literature, reduces employees' work performance (see Sinelnikov, Inouye, & Kerper, 2015). Hence, the practical implication of our findings is to use the harm of work to health as a leading indicator for OHS and well-being. For example, this requires management and human resource professionals to design job/work assignments with prosocial characteristics, employee compensation and rewards with stakeholder altruistic characteristics, performance appraisals with social consciousness characteristics to contain the harmful health aspects of work at a minimum (see Mariappanadar, 2019). Achieving this goal would reduce the negative impacts of work on OHS and well-being. This sustainability initiative for OHS and well-being excellence would facilitate the differentiation of a firm from others in its industry and across market economies to confer a competitive advantage.

6.4. Differences in organizational responses by DJSI members

Membership in the DJSI confers a leadership status in sustainability for a firm within an industry because of the member's presumed reputation for CSR (Forcadell & Aracil, 2017). Hence, firms that are not DJSI members also attempt to disclose employees' well-being information in their GRI reports, despite the lack under GRI guidelines of a requirement to do so, to advance their aspirations to gain DJSI membership. Our findings contribute to extending our understanding of the disclosure theory to indicate that DJSI member firms provide firm-specific private information to the stock market to mitigate the financial risks for improved competitive advantage (Schiehll & Kolahgar, 2020). Firstly, we found differences in the FIRE industry in the quality of disclosures on audits/assessments of information on employee's well-being between firms that have DJSI membership and those that do not.

In the FIRE industry, the higher quality of information disclosed on employees' well-being by firms with DJSI membership compared with firms that do not is because products in this industry can be easily replicated and are hard to differentiate (O'Loughlin & Szmigin, 2005). Therefore, according to the disclosure theory a reputation based on a CSR report is a strategically important resource for firms in this industry grouping to create barriers to imitation and subsequently to gain competitive advantage (Forcadell & Aracil, 2017). Furthermore, DJSI member firms may be using Corporate Sustainability Assessment (CSA) information on employee well-being by RobecoSAM in their GRI reports. This form of multiple usage of quality information from one source to another is common in GRI reporting. For example, firms in dirty industries such as mining, chemical and manufacturing tend to use OHS information for GRI reporting that was originally developed to satisfy legal requirements (see Wang et al., 2016). Hence, to initially extend the disclosure theory literature on GRI reporting, future research should explore the multiple usage of CSA on employees' well-being for DJSI membership and also the use of similar information in GRI reports to mitigate financial risks for competitive advantage. Secondly, by empirically establishing a link between usage of information on CSA for employee' well-being that is also used for DJSI membership and disclosures in GRI reports will enable GRI to revise its future guidelines for the standardization of audits/assessments to facilitate reports with high quality disclosure information by non-DJSI membership firms to gain competitive advantage.

7. Limitations

Our study has four limitations. First, we did not evaluate the overall quality of disclosures in GRI reporting. Instead, we focused only on OHS and well-being. Secondly, as indicated earlier, this is an exploratory study on rating the quality of disclosures on OHS and well-being based on GRI's quality of reporting guidelines; this is different from the use of levels (i.e., volume) of reporting to explore the quality of disclosures. Hence, our findings are discussed by extrapolating evidence from the literature on quality of disclosure that is based on the levels of reporting, and this is a limitation. However, this limitation has been used as an opportunity to highlight the innovative contributions of our findings on CSR and GRI reporting. Third, understanding organizational responses to the importance of OHS and well-being issues to organizations and to stakeholders based on the quality of disclosures on DMAs, SPIs, and audits/assessments can be time-lagged (see Bouten et al., 2011). This presents opportunities for future research to explore longitudinal studies to capture the time-lagged effects on DMAs, SPIs, and audits/assessments on OHS and well-being. Fourth, the findings on industry differences should be considered cautiously because of the small number of firms included, especially in the mining industry group. Finally, the cross-nationally comparative findings are based on the two dominant classifications of market economies, LMEs and CMEs, and hence future studies should consider using other types of market economies which are suggested by Witt et al. (2018).

8. Conclusion

In this study we attempted to reveal differences in the quality of disclosure on OHS and well-being in GRI reports within and between firms from the TPU, manufacturing, FIRE, and mining industries using instrumental stakeholder, stakeholder, and disclosure perspectives of the institutional theory. We also attempted to explore the differences in the quality of disclosure on OHS and well-being in GRI reports between firms operating from different VOC. Our study enriches the CSR communication perspective of the institutional theory literature by proposing a new method to evaluate the quality of disclosures by using GRI reporting guidelines instead of the commonly used frequency- and weight-based ratings in content analysis. Our method will improve the capture of quality information disclosed in GRI reports as a way to understand comprehensive reporting. Comprehensive reporting from the CSR communication perspective demonstrates a firm's reported commitments to stakeholders that can be translated into sustainability outcomes.

We revealed a convergence in the importance of dealing with OHS and well-being issues for both organizations and for stakeholders among firms in the TPU and manufacturing industries. This highlights a position of optimal levels of interdependence between organizations and stakeholders to achieve OHS and well-being demands based on the instrumental stakeholder perspective of the institutional theory. We also revealed that firms in the manufacturing industry, compared with the FIRE industry, tend in the GRI reports to communicate credibly the importance of OHS and well-being information to stakeholders from the stakeholder theory perspective. Additionally, we found that firms operating in the TPU industry sector from the CMEs tend to report a higher importance of OHS to stakeholders than firms from a similar industry sector from the LMEs.

It is interesting that firms in the TPU industry and the manufacturing industry have disclosed the importance of OHS and well-being to organizations and to stakeholders. However, our study reveals that no significant difference exists between TPU, manufacturing groupings, and the other industry groupings on strategic choices or organizational responses (i.e., DMAs, SPIs, and audits/assessments) on this issue that is important to organizations and to stakeholders. Similarly, we found no significant difference between firms operating from LMEs and CMEs in organizational responses on DMAs, SPIs, and audits/assessments of OHS. This is indicative of firms operating across industry sectors as well as operating in different IMEs who disclose vague/sententious information about OHS and well-being in GRI reports but rarely attempting to translate those sententious or self-righteous claims into sustainability performances or outcomes. However, this provides new opportunities for firms to design work, employee compensation and rewards, performance appraisals, and other practices with sustainable HRM characteristics that can minimize health risks at work. Achieving that goal will reduce the negative impacts of work on OHS and well-being and simultaneously bolster a firm's social legitimacy, thereby conferring a competitive advantage.

Finally, we found differences in the quality of disclosures on audits/assessments of information on employees' well-being between DJSI members and nonmembers in the FIRE industrial group. In the FIRE group, the products and services offered are neither difficult to replicate nor are they usually sufficiently differentiated to be unique. Hence, the higher quality of information disclosed on employees' well-being by firms with DJSI membership creates reputational advantages that build barriers to imitation and serve as a competitive advantage.

Declaration of Competing Interest

The authors report no declarations of interest.

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References

Adams, C. A. (2004). The ethical, social and environmental reporting-performance portrayal gap. *Accounting Auditing & Accountability Journal, 17*(5), 731–757.
Ali, W., Frynas, J. G., & Mahmood, Z. (2017). Determinants of corporate social responsibility (CSR) disclosure in developed and developing countries: A literature review. *Corporate Social Responsibility and Environmental Management, 24*(4), 273–294.
Aust, I., Matthews, B., & Muller-Camen, M. (2020). Common good HRM: A paradigm shift in sustainable HRM? *Human Resource Management Review, 30*(3), Article 100705.
Boiral, O. (2013). Sustainability reports as simulacra? A counter-account of A and A+ GRI reports. *Accounting Auditing & Accountability Journal, 26*(7), 1036–1071.
Bouten, L., Everaert, P., Van Liedekerke, L., De Moor, L., & Christiaens, J. (2011). Corporate social responsibility reporting: A comprehensive picture? *Accounting Forum, 35*(3), 187–204.
Boyce, W. S. (2016). Does truck driver health and wellness deserve more attention? *Journal of Transport & Health, 3*(1), 124–128.
Brammer, S., & Millington, A. (2003). The effect of stakeholder preferences, organizational structure and industry type on corporate community involvement. *Journal of Business Ethics, 45*(3), 213–226.
Brammer, S., & Pavelin, S. (2008). Factors influencing the quality of corporate environmental disclosure. *Business Strategy and the Environment, 17*(2), 120–136.
Branco, M. C., Delgado, C., Ferreira Gomes, S., & Cristina Pereira Eugénio, T. (2014). Factors influencing the assurance of sustainability reports in the context of the economic crisis in Portugal. *Managerial Auditing Journal, 29*(3), 237–252.
Calabrese, A., Costa, R., & Rosati, F. (2015). A feedback-based model for CSR assessment and materiality analysis. *Accounting Forum, 39*(4), 312–327.
Campbell, D., & Rahman, M. R. A. (2010). A longitudinal examination of intellectual capital reporting in Marks & Spencer annual reports, 1978–2008. *The British Accounting Review, 42*(1), 56–70.
Christensen, E. W., & Gordon, G. G. (1999). An exploration of industry, culture and revenue growth. *Organization Studies, 20*(3), 397–422.
Christensen, L. T., Morsing, M., & Thyssen, O. (2013). CSR as aspirational talk. *Organization, 20*(3), 372–393.
Christofi, A., Christofi, P., & Sisaye, S. (2012). Corporate sustainability: Historical development and reporting practices. *Management Research Review, 35*(2), 157–172.
Cooper, S., Crowther, D., Davies, M., & Davis, E. (2001). *Shareholder or stakeholder value: The development of indicators for the control and measurement of performance*. London: The Chartered Institute of Management Accountants.
Cormier, D., Magnan, M., & Van Velthoven, B. (2005). Environmental disclosure quality in large German companies: Economic incentives, public pressures or institutional conditions? *European Accounting Review, 14*(1), 3–39.
Crane, A., & Glozer, S. (2016). Researching corporate social responsibility communication: Themes, opportunities and challenges. *Journal of Management Studies, 53*(7), 1223–1252.
Daub, C. H. (2007). Assessing the quality of sustainability reporting: An alternative methodological approach. *Journal of Cleaner Production, 15*(1), 75–85.
Delmas, C. (2014). Three reasons to ban advertising for health care services. *The American Journal of Bioethics, 14*(3), 51–52.
Dienes, D., Sassen, R., & Fischer, J. (2016). What are the drivers of sustainability reporting? A systematic review. *Sustainability Accounting Management and Policy Journal, 7*(2), 154–189.
DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*, 147–160.
Dixon, S. M., Nordvall, A. C., Cukier, W., & Neumann, W. P. (2017). Young consumers' considerations of healthy working conditions in purchasingdecisions: A qualitative examination. *Ergonomics, 60*(5), 601–612.
Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). The challenge of defining wellbeing. *International Journal of Wellbeing, 2*(3), 222–235.
Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behavior. *Pacific Sociological Review, 18*(1), 122–136.
Ehnert, I., Parsa, S., Roper, I., Wagner, M., & Muller-Camen, M. (2016). Reporting on sustainability and HRM: A comparative study of sustainability reporting practices by the world's largest companies. *International Journal of Human Resource Management, 27*(1), 88–108.
Elrick, J., & Thies, C. F. (2018). The social responsibility of business: Milton friedman reconsidered. *Journal of Markets & Morality, 21*(2).
Evangelinos, K., Fotiadis, S., Skouloudis, A., Khan, N., Konstandakopoulou, F., Nikolaou, I., et al. (2018). Occupational health and safety disclosures in sustainability reports: An overview of trends among corporate leaders. *Corporate Social Responsibility and Environmental Management, 25*(5), 961–970.
Farooq, M. B., & De Villiers, C. (2019). How sustainability assurance engagement scopes are determined, and its impact on capture and credibility enhancement. *Accounting Auditing & Accountability Journal, 33*(2), 417–445.
Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2014). Effect of stakeholders' pressure on transparency of sustainability reports within the GRI framework. *Journal of Business Ethics, 122*(1), 53–63.

Font, X., Guix, M., & Bonilla-Priego, M. J. (2016). Corporate social responsibility in cruising: Using materiality analysis to create shared value. *Tourism Management, 53*, 175–186.
Forcadell, F. J., & Aracil, E. (2017). European banks' reputation for corporate social responsibility. *Corporate Social Responsibility and Environmental Management, 24*(1), 1–14.
Gamerschlag, R., Möller, K., & Verbeeten, F. (2011). Determinants of voluntary CSR disclosure: Empirical evidence from Germany. *Review of Managerial Science, 5*(2-3), 233–262.
García-Sánchez, I. M., Rodríguez-Ariza, L., & Frías-Aceituno, J. V. (2013). The cultural system and integrated reporting. *International Business Review, 22*(5), 828–838.
Glencore International. (2016). *Sustainability report 2015*. Available at: https://www.glencore.com/dam/jcr:6fd34880-265c-4644-8208-220b29476a45/2015-Sustainability-report.pdf. Accessed on 4 August 2016.
GRI. (2013a). *G4 sustainability reporting guidelines: Implementation manual*. Available at: https://www.globalreporting.org/resourcelibrary/GRIG4-Part2-Implementation-Manual.pdf. Accessed on 25 April 2017.
GRI. (2013b). *G4 sustainability reporting guidelines: Reporting principles and standard disclosures*. Available at: https://www.globalreporting.org/resourcelibrary/grig4-part1-reporting-principles-and-standard-disclosures.pdf. Accessed on 25 April 2017.
Grice, J. W., & Iwasaki, M. (2007). A truly multivariate approach to MANOVA. *Applied Multivariate Research, 12*(3), 199–226.
Grupo Financiero Banorte. (2016). *Annual report 2015*. Available at: https://investors.banorte.com/~/media/Files/B/Banorte-IR/financial-information/annual-reports/en/2015/annual-report-2015.pdf. Accessed on 9 August 2016.
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.
Hall, P. A., & Soskice, D. (2001). "An introduction to varieties of capitalism". In P. A. Hall, & D. Soskice (Eds.), *Varieties of capitalism: The institutional foundations of comparative advantage* (pp. 1–68). Oxford, UK: Oxford University Press.
Hinson, R., Boateng, R., & Madichie, N. (2010). Corporate social responsibility activity reportage on bank websites in Ghana. *International Journal of Bank Marketing, 28*(7), 498–518.
Hughey, C. J., & Sulkowski, A. J. (2012). More disclosure = better CSR reputation? An examination of CSR reputation leaders and laggards in the global oil & gas industry. *Journal of Academy of Business and Economics, 12*(2), 24–34.
Jackson, G., & Apostolakou, A. (2010). Corporate social responsibility in Western Europe: An institutional mirror or substitute? *Journal of Business Ethics, 94*(3), 371–394.
Jones, T. M., Harrison, J. S., & Felps, W. (2018). How applying instrumental stakeholder theory can provide sustainable competitive advantage. *The Academy of Management Review, 43*(3), 371–391.
Kawashita, F., Taniyama, Y., Hwi, S. Y., Fujisaki, T., Kameda, T., & Mori, K. (2005). Occupational safety and health aspects of corporate social responsibility (CSR) in Japanese companies listed on the Tokyo Stock Exchange (TSE) first section. *Journal of Occupational Health, 47*(6), 533–539.
Kolk, A., & Perego, P. (2010). Determinants of the adoption of sustainability assurance statements: An international investigation. *Business Strategy and the Environment, 19*(3), 182–198.
Koskela, M. (2014). Occupational health and safety in corporate social responsibility reports. *Safety Science, 68*, 294–308.
KPMG. (2020). *The time has come: The KPMG survey of corporate responsibility reporting 20207*. Available at: https://home.kpmg/xx/en/home/insights/2020/11/the-time-has-come-survey-of-sustainability-reporting.html. Accessed on 3 December 2020.
Kuo, T. C., Kremer, G. E. O., Phuong, N. T., & Hsu, C. W. (2016). Motivations and barriers for corporate social responsibility reporting: Evidence from the airline industry. *Journal of Air Transport Management, 57*, 184–195.
Lammers, J. C. (2011). How institutions communicate: Institutional messages, institutional logics and organizational communication. *Management Communication Quarterly, 25*, 154–182.
Lanis, R., & Richardson, G. (2012). Corporate social responsibility and tax aggressiveness: A test of legitimacy theory. *Accounting Auditing & Accountability Journal, 26*, 75–100.
Lee, Y. W., Strong, D. M., Kahn, B. K., & Wang, R. Y. (2002). AIMQ: A methodology for information quality assessment. *Information & Management, 40*(2), 133–146.
Mariappanadar, S. (2014). Stakeholder harm index: A framework to review work intensification from the critical HRM perspective. *Human Resource Management Review, 24*(4), 313–329.
Mariappanadar, S. (2016). Health harm of work from the sustainable HRM perspective: Scale development and validation. *International Journal of Manpower, 37*(6), 924–944.
Mariappanadar, S. (2019). *Sustainable human resource management: Strategies, practices and challenges*. London: Macmillan International Publisher.
Mariappanadar, S. (2020). Do HRM systems impose restrictions on employee quality of life? Evidence from a sustainable HRM perspective. *Journal of Business Research, 118*, 38–48.
Messner, M. (2016). Does industry matter? How industry context shapes management accounting practice. *Management Accounting Research, 31*, 103–111.
O'Loughlin, D., & Szmigin, I. (2005). Customer perspectives on the role and importance of branding in Irish retail financial services. *International Journal of Bank Marketing, 23*(1), 8–27.
Oh, C. H., Park, J. H., & Ghauri, P. N. (2013). Doing right, investing right: Socially responsible investing and shareholder activism in the financial sector. *Business Horizons, 56*(6), 703–714.
Pérez, A., & López, C. (2015). Corporate reputation in the Spanish context: An interaction between reporting to stakeholders and industry. *Journal of Business Ethics, 129*(3), 733–746.
Perrini, F. (2005). Building a European portrait of corporate social responsibility reporting. *European Management Journal, 23*(6), 611–627.
Pfeffer, J. (2018). *Dying for a paycheck: How modern management harms employee health and company performance—and what we can do about it*. New York, NY: HarperCollins.
Prado-Lorenzo, J. M., Gallego-Alvarez, I., & Garcia-Sanchez, I. M. (2009). Stakeholder engagement and corporate social responsibility reporting: The ownership structure effect. *Corporate Social Responsibility and Environmental Management, 16*(2), 94–107.
RobecoSAM (n.d.). *RobecoSAM. We are sustainability investing*. Available at: https://www.robecosam.com/en/. Accessed on 15 May 2019.
Roca, L. C., & Searcy, C. (2012). An analysis of indicators disclosed in corporate sustainability reports. *Journal of Cleaner Production, 20*(1), 103–118.
Schiehll, E., & Kolahgar, S. (2020). Financial materiality in the informativeness of sustainability reporting. *Business Strategy and the Environment*, 1–16.
Searcy, C., Dixon, S. M., & Neumann, W. P. (2016). The use of work environment performance indicators in corporate social responsibility reporting. *Journal of Cleaner Production, 112*, 2907–2921.
Shabana, K. M., Buchholtz, A. K., & Carroll, A. B. (2017). The institutionalization of corporate social responsibility reporting. *Business and Society, 56*(8), 1107–1135.
Sinelnikov, S., Inouye, J., & Kerper, S. (2015). Using leading indicators to measure occupational health and safety performance. *Safety Science, 72*, 240–248.
Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *The Academy of Management Review, 20*(3), 571–610.
Suddaby, R. (2010). Challenges for institutional theory. *Journal of Management Inquiry, 19*(1), 14–20.
Székely, F., & Knirsch, M. (2005). Responsible leadership and corporate social responsibility: Metrics for sustainable performance. *European Management Journal, 23*(6), 628–647.
Toms, J. S. (2002). Firm resources, quality signals and the determinants of corporate environmental reputation: Some UK evidence. *The British Accounting Review, 34*(3), 257–282.
Torelli, R., Balluchi, F., & Furlotti, K. (2020). The materiality assessment and stakeholder engagement: A content analysis of sustainability reports. *Corporate Social Responsibility and Environmental Management, 27*(2), 470–484.
Tsalis, T. A., Stylianou, M. S., & Nikolaou, I. E. (2018). Evaluating the quality of corporate social responsibility reports: The case of occupational health and safety disclosures. *Safety Science, 109*, 313–323.
Unerman, J. (2000). Methodological issues-Reflections on quantification in corporate social reporting content analysis. *Accounting Auditing & Accountability Journal, 13*(5), 667–680.
van Berkel, J., Meershoek, A., Janssens, R. M., Boot, C. R., Proper, K. I., & van der Beek, A. J. (2014). Ethical considerations of worksite health promotion: An exploration of stakeholders' views. *BMC Public Health, 14*(1), 458.
van Staden, C. J., & Hooks, J. (2007). A comprehensive comparison of corporate environmental reporting and responsiveness. *The British Accounting Review, 39*(3), 197–210.
Vodafone. (2016). *Sustainable business report 2015-16*. Available at: https://www.vodafone.com/content/dam/vodafone-images/sustainability/downloads/report2016.pdf. Accessed on 28 July 2016.
Vuontisjärvi, T. (2006). Corporate social reporting in the European context and human resource disclosures: An analysis of Finnish companies. *Journal of Business Ethics, 69*(4), 331–354.
Wang, Q., Sharma, U., & Davey, H. (2016). Intellectual capital disclosure by Chinese and Indian information technology companies: A comparative analysis. *Journal of Intellectual Capital, 17*(3), 507–529.
Witt, M. A., & Jackson, G. (2016). Varieties of capitalism and institutional comparative advantage: A test and reinterpretation. *Journal of International Business Studies, 47*(7), 778–806.
Witt, M. A., Kabbach de Castro, L. R., Amaeshi, K., Mahroum, S., Bohle, D., & Saez, L. (2018). Mapping the business systems of 61 major economies: A taxonomy and implications for varieties of capitalism and business systems research. *Socio-economic Review, 16*(1), 5–38.