Assessing ethics and sustainability standards in corporate practices

Walter Leal Filho, Laís Viera Trevisan, João Henrique Paulino Pires Eustachio, Izabela Simon Rampasso, Rosley Anholon, Johannes Platje, Markus Will, Federica Doni, Muhammad Mazhar, Jaluza Maria Lima Silva Borsatto and Carla Bonato Marcolin

Abstract

Purpose – This study aims to investigate how sustainability and ethics are being addressed both by the literature and companies. Furthermore, it seeks to identify the specific strategies that these companies use to foster ethical behaviour and promote sustainability in their business operations.

Design/methodology/approach – The study entails a bibliometric analysis and a set of case studies from a sample of companies working in different industry sectors. Based on these tools, it analyses whether – and how – enterprises are placing an emphasis on sustainability and ethics as part of their businesses. In addition, the selected companies' unethical practices or socially irresponsible corporate activities were investigated and presented.

Findings – The findings suggest that using an ethics perspective can be a valuable tool in improving the accuracy and correctness of business decision-making. In addition, the paper has identified the fact that sustainability standards can be used to improve customer satisfaction as many important issues are addressed. Finally, the paper highlights the importance of ethical considerations when designing and implementing sustainability standards at enterprises and the need for regulatory guidance in this regard. **Originality/value** – The paper addresses the need for studies on how sustainability and ethics are being discussed by both the literature and companies. The paper presents some elements that can be used as possible corporate indicators for a wider implementation of sustainability and ethics objectives in enterprises.

Keywords Ethics, Sustainable development, Sustainability, Business, Corporate practices **Paper type** Research paper

1. Introduction

Building an ethical culture is important to the growth, reputation and finances of an organisation (Azmi, 2011). With the increasing importance of social media, where satisfied customers quickly disseminate information about their positive experiences, ethical corporate activities tend to create a positive image of companies and solid relationships with their stakeholders (Cabrera-Luján *et al.*, 2023; Arjoon and Rambocas, 2011). In fact, ethics and corporate social responsibility (CSR) are the main stimulants of getting loyalty, identification and trust from consumers (Hayat *et al.*, 2022). Therefore, business ethics can be considered a valuable intangible asset, as it is a source of moral authority and competitive advantage for enterprises (Azmi, 2006). Furthermore, ethical corporate practices create trust among the different stakeholders, including employees, customers, suppliers and the community in which the organisation is located. Building and maintaining such effective relationships with the stakeholders may foster integrity, mutual respect and trust (Azmi, 2011).

Business ethics help build a brand that attracts the best talents to it and may help retain employees in the organisation (Schwartz, 2013). In addition, it helps create a suitable work

(Information about the authors can be found at the end of this article.)

Received 1 March 2023 Revised 28 April 2023 20 June 2023 13 August 2023 Accepted 6 October 2023

© Walter Leal Filho, Laís Viera Trevisan João Henrique Paulino Pires Eustachio. Izabela Simon Rampasso. Rosley Anholon, Johannes Platje, Markus Will, Federica Doni, Muhammad Mazhar, Jaluza Maria Lima Silva Borsatto and Carla Bonato Marcolin. Published by Emerald Publishing Limited. This article is published under the Creative Commons Attribution (CC BY 4.0) licence. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this licence may be seen at http:// creativecommons.org/licences/ by/4.0/legalcode

Since submission of this article, the following author has updated their affiliation: Laís Viera Trevisan is at the Business School, Federal University of Rio Grande do Sul, Porto Alegre, Brazil. environment with positive relationships among colleagues. Supervisors and leaders also trust their subordinates and tend to give them more autonomy. As a result, employees become motivated and more productive in their work, which plays a key role in retaining employees (Azmi, 2011). Therefore, it seems that ethics create a virtuous cycle that promotes consistent and better decision-making, which creates greater trust and confidence (Schwartz, 2013). It leads to more motivated employees and loyal customers and, as a result, improves a company's financial performance and reputation. Consumers experience a sense of assurance when acquiring goods from reputable companies (Hayat *et al.*, 2022).

On the other hand, poor business ethics could result in litigation, loss of customers and loss of business partners, which would affect a firm's profitability and reputation (Mach and Rochat, 2022). In cases where an organisation tries to cut corners due to profit issues, either by avoiding compliance with labour laws or by using low-guality raw materials, heavy fines and legal fees can be applied (Schwartz, 2013). This results in high financial consequences, negative publicity and a poor reputation. In other words, the other side of CSR is corporate social irresponsibility (Jones, 2013). Enron, once America's most innovative and profitable company in the energy field, no longer exists mostly because of the accounting fraud that took place in the company's financial department (Akerlof and Shiller, 2009). Organisations should, therefore, provide ethical training to their employees and improve their ethical structures so that they instill ethical practices and self-discipline among their employees and other stakeholders. Besides that, companies should maintain high levels of integrity concerning financial reporting and records. Particularly during crisis periods, a consistent and effective CSR disclosure can protect a corporate reputational image and play a protective role after financial restatements (Zhang et al., 2021). Indeed, CSR and ethical practices encompass not just organising, reducing and avoiding risks but also creating opportunities, enhancing performance and surpassing potential hazards (Khosroshahi et al., 2021).

It is believed that the recent trends in sustainability reporting (European Union, 2022) and the increasing development of ethical ratings can improve financial reporting transparency and quality (Elayan *et al.*, 2016). Some studies investigated the relevance of ethical indexes by demonstrating a positive relationship between changes in ethical performance and firm value (Jo and Kim, 2008; Elayan *et al.*, 2016). To achieve a higher score of ethical rating, companies need to fulfill certain requirements of legality and sustainability by adopting high-quality corporate governance systems (La Rosa and Bernini, 2022). In this sense, some studies investigated the relationship between corporate governance practices and business ethics policies (García-Sánchez *et al.*, 2015; McKendall *et al.*, 1999; Hillman *et al.*, 2001; Kassinis & Vafeas, 2002). The importance of the external institutional context, internal corporate governance mechanisms and an organisational ethical infrastructure can affect an organisation's ethical vulnerability (Ullah *et al.*, 2015) by highlighting the importance of ethical leadership and internal audit functions on financial reporting decisions (Arel *et al.*, 2012).

Society has been experiencing many rapid changes related to political, economic, environmental, social and technological aspects, which require companies' resilience and adaptation to handle and overcome the faced challenges. For instance, some factors which have currently demanded society's attention and that have been hindering the implementation of the UN Sustainable Development Goals are the Ukraine war, climate change, the consequences of the COVID-19 Pandemic, the trade-offs between the SDGs, energy crises, inflation and supply chain disruptions (Leal Filho *et al.*, 2023). In this regard, there is a need for companies to develop business models aligning the SDGs and digital transformation process while also delivering high-performance levels and generating value for their stakeholders. Moreover, companies may incorporate ethical leadership into their strategies and management approaches to address the ever-evolving multidimensional

challenges (De los Ríos-Berjillos *et al.*, 2023). However, when it comes to the literature, there is a theoretical gap in how sustainability and ethics are being addressed by both the literature and companies. In this regard, this study is guided by two research questions:

- *RQ1.* How are sustainability and ethics being addressed by both the literature and companies?
- *RQ2.* To what extent are enterprises placing emphasis on sustainability and ethics as part of their businesses?

Therefore, this study has two main objectives. The first one is to assess the literature on the topic, presenting the interconnections among ethics, sustainability and business practices. For that, a bibliometric analysis was carried out with the support of VOSviewer software. The second objective is to understand how companies are addressing these issues. Therefore, a sample of case studies was selected of companies considered to be "benchmarks" to establish guidelines for other companies that wish to adopt management models based on ethics and sustainability. The case studies embrace large multinationals that have a significant social and environmental impact. Besides the declared ethical practices, also the unethical or socially irresponsible corporate activities of these companies were researched and presented. According to Taleb (2012), it may be easier to agree on what not to do (bad practice) than on what to do (good practice), given the uncertain outcomes. Therefore, the implications of the study are two-fold. Firstly, it sheds some light on the connections between ethics and sustainability, hence providing a time contribution to the literature. Secondly, the study shows what some of the major corporations are doing to incorporate ethical considerations when designing and implementing sustainability standards. Indeed, the latter emphasises the need for regulatory guidance in this field.

The rest of the paper is structured as follows. Section 2 focuses on the connections between ethics and sustainability. The methodology adopted to carry out the study is presented in Section 3. Section 4 describes the results of the bibliometric and case studies analyses. Finally, Section 5 presents some conclusive remarks.

2. The links between ethics and sustainability

The concept of "sustainability" is currently a widely used term in policy contexts, businesses and third-sector organisations (Torelli, 2020). Companies across different sectors worldwide are required to implement sustainability practices in their operations (Walsh and Dodds, 2017). The environmental debate in the governmental and private context goes back to the report "Limits to Growth" in 1972, passing through the concepts of sustainable development, CSR and the triple bottom line. Currently, the proposal of the environmental, social and corporate governance (ESG) concept has replaced the previous ones and considers not only sustainability evolution but also corporate sustainability (Pereira, 2021).

Historically, crises initiate social, political and economic change (positive or negative) in society. Global crises demonstrate how interdependent and interlinked the components of sustainable development are Priyadarshini (2022). The Covid-19 pandemic is one example of this. Due to this crisis, some authors agree that society has awakened awareness of sustainability issues, that companies sought to accelerate their sustainable practices, that investors began to direct their investments to companies with ESG practices, and that more conscious consumers revealed a greater tendency to consume and even work in more sustainable companies. This is in line with a more human and conscious perspective, and with better socio-environmental and financial performance (Yu *et al.*, 2020).

Ethics, at both individual and organisational levels, can have an impact on implementing sustainability (Wesarat *et al.*, 2017). Actually, according to De Paula and Cavalcanti (2000), ethics is an essential element of sustainability. Moreover, "ethics is about wondering about the human meaningfulness of every activity, and it has an influence on both individuals and

society at large" (García and Sanz, 2018, p. 74). Because ethics can help clarify what is "right" and "wrong", the ethics principles offer guidelines for business practices and assist organisations to make moral decisions (Smith *et al.*, 2014). Therefore, the main purpose of business ethics is to ensure that managers' decisions have an ethical dimension and can weigh the ethical implications of their strategic decisions before acting (Ugoani, 2019).

Enterprises are required to be responsible and sustainable, as they can play a significant role in supporting sustainable development (Bredillet, 2014). However, Ab Wahab (2021) argues that companies are important contributors to environmental unsustainability. This could be due to ethical violations if environmental unsustainability is viewed through the lens of ethics and values. In turn, if an organisation adopts sustainability practices to reduce its environmental impact on the environment, it will have adopted sustainable behaviour – which is also ethically and morally acceptable (Torelli, 2020). Therefore, reflecting on business ethics to achieve sustainability is essential in ever-changing times (Cassar, 2019).

Considering that the main focus of companies is to obtain profit, one can question how to relate ethics, socio-environmental responsibility and business objectives. According to Germano *et al.* (2020), a business activity linked to ethical practices and environmental issues enables a balance between economic, social and environmental responsibilities. Companies with a focus on ethics are well-positioned to achieve sustainability. Therefore, ethics and sustainability are entangled in the context of organisations (De Lange *et al.*, 2012). Furthermore, business ethics can help achieve long-term business success (Wesarat *et al.*, 2017).

Ethics, sustainability, sustainable development, CSR and ESG are different constructs that are commonly used with different meanings for a single path. However, these terms have conceptual and operational relationships with each other (Torelli, 2020) and should be taken into account in companies' activities to avoid Corporate Social Irresponsibility and unethical behaviour (Lin-Hi and Müller, 2013). There is a grey area between responsible and irresponsible activities (Meadows, 1998, 1999; Clark *et al.*, 2022). Therefore, it is easier to identify what is harming sustainable development than what supports it (Taleb, 2012). For this reason, besides identifying CSR policy in large companies, it is also useful to identify unethical and irresponsible practices. This may enable stakeholders to apply pressure and reduce incentives for greenwashing and other unethical practices (Yue *et al.*, 2022).

3. Methods

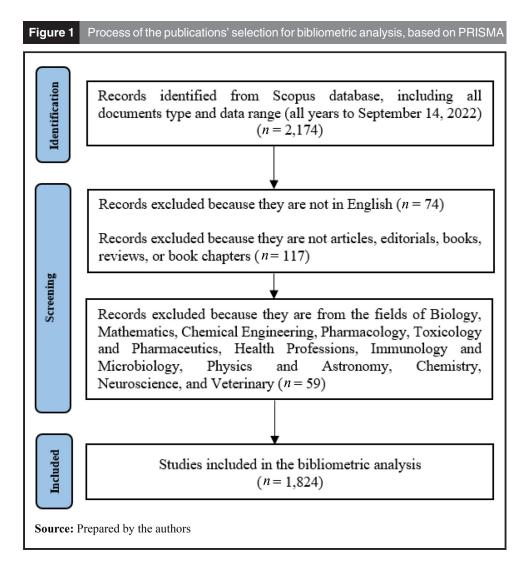
This study aims to investigate how sustainability and ethics are being addressed by both the literature and companies. More specifically, based on bibliometric analysis and case studies from a sample of companies working in different industry sectors, the study analyses whether – and how – enterprises are placing emphasis on sustainability and ethics as part of their businesses. Therefore, this study includes both a bibliometric analysis and the selection of 10 case studies to achieve the goals proposed. The use of a mixed review method increases the scope, objectivity and methodological rigor of the literature review (Dabić *et al.*, 2020). On the one hand, bibliometric analysis is based on quantitative methods to determine the impact of specific topics, authors, countries and other categorical delineations (Zupic and Čater, 2015). This technique can effectively demonstrate the dynamics and trajectory of a specific research field (Du *et al.*, 2021). On the other hand, the case study analysis, based on qualitative methods, enables researchers to understand the phenomenon in depth while strengthening the analytical conclusions of the study (Yin, 2009).

The bibliometric analysis started with the identification of search terms in the Scopus database, a well-known database of peer-reviewed academic literature (Piwowar-Sulej *et al.*, 2021). Data collection was performed in September 2022 by using the combination of terms related to ethics, sustainability and business, and the Boolean operators "AND" and "OR". The best combination of search strings was the following: TITLE ("ethic*" OR "ethics")

OR "ethical") AND TITLE-ABS-KEY ("sustainability" OR "sustainable" OR "sustainable development" OR "sustainable development goal*" OR "SDG*" OR "2030 agenda" OR "green" OR "CSR" OR "corporate social responsibility" OR "corporate responsibility" OR "ESG" OR "environmental social governance" OR "corporate sustainability") AND TITLE-ABS-KEY ("business" OR "businesses" OR "firm*" OR "company" OR "companies" OR "enterprise*" OR "organisation*" OR "organization*" OR "corporate" OR "SME*").

The search returned 2,174 documents while considering all types of documents and all data in the range (all years to 14 September 2022). Then a first exclusion criterion was applied (only documents in English), and the search returned 2,100 documents. A second exclusion criterion was applied (only articles, editorials, books, reviews and book chapters), and the search returned 1,883 documents. A third criterion was applied, excluding documents from the following subject areas: Biology, Mathematics, Chemical Engineering, Pharmacology, Toxicology and Pharmaceutics, Health Professions, Immunology and Microbiology, Physics and Astronomy, Chemistry, Neuroscience and Veterinary. The final sample included 1,824 documents, both open-access and non–open-access (Figure 1).

Bibliometric analysis was carried out with the support of VOSviewer software (Van Eck and Waltman, 2021), version 1.6.17. The popular keywords on the topic were identified by



co-occurrence analysis. This analysis refers to the relationship proximity of two or more terms in a text unit, which allows for the detection of the main research topics (Arita, 2017). Terms that appear close to each other are expected to be associated and correspond to thematic clusters due to their co-occurrence frequency (Van Eck and Waltman, 2021).

To enrich the discussion and illustrate the connection between ethics and sustainability in corporate practices, this study also reviewed a set of 10 case studies of companies across different sectors. The case study selection was based on the relevance of the companies to the scope of this study and the diversification of their industry sectors' focus. Therefore, by conducting a document analysis, three experts were involved in the analysis of the companies sustainability reports and codes of conduct. Specifically, the categories analysed were as follows:

- the existence of a sustainability report;
- the existence of a code of conduct or ethics policy;
- whether ethical issues are part of their reports;
- the existence of an ethics department; and
- the existence of a sustainability department.

Subsequently, the company documents were deeply analysed to identify how they are placing emphasis on sustainability and ethics as part of their businesses. This analysis provides a first-hand overview of the links between ethics and sustainability in a corporate setting.

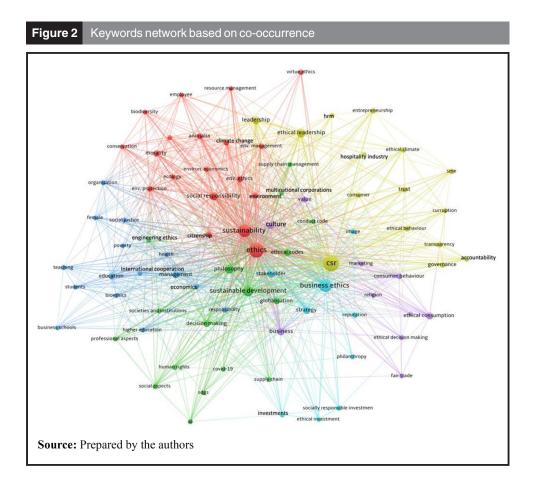
Afterwards, the unethical practices of corporate social irresponsibility were researched. The identification of unethical practices was based on a Google search function using the keywords "Corporate Social Irresponsibility", "Unethical behaviour" and "Greenwashing", accompanied by the company name. This allows for a general overview of issues damaging a company's reputation and may lead to a negative perception of its stakeholders.

4. Results and discussion

4.1 Bibliometric analysis

The analysis of the literature on the interconnections among ethics, sustainability and business shows a need for a new economic model based on social and ethical values in line with sustainable development, especially due to the current global challenges where enterprises play a key role – as they consume large amounts of resources in their processes and produce substantial waste. Therefore, ethical and sustainable practices are urgent issues among companies and should be incorporated into their strategies and management (Rincon-Roldan and Lopez-Cabrales, 2021). Moreover, within organisations, leaders have the power and the authority to cultivate ethical conduct, as they can establish norms and empower employees to apply them. Ethical leaders usually make difficult decisions, but they can also be ethical role models for employees and build trust while being truthful (Dimitriou, 2022). Figure 2 shows the map of the interconnections among ethics, sustainability and business, divided into six different clusters.

As shown in Figure 2, the red cluster is directly related to ethics and includes the literature on social responsibility, environmental ethics, environmental and resource management, environmental protection and climate change. Due to hazardous climate change in the last decades, the literature has focused on CSR practices developed by the government, companies and other stakeholders to positively impact the environment and society. The trends in climate change are also connected with CSR – leading to eco-branding and environmental advertising (Hayat *et al.*, 2022). This is in line with some topics approached by the purple cluster, which includes keywords such as value, culture, consumer behaviour, organisations' decision-making regarding sustainability practices, fair trade and the links



between marketing and corporate sustainability practices, among others. Organisations' values are composed of employees' values, which can guide the organisation towards sustainable performance or not. Therefore, individual and collective values must be aligned to build a sustainable organisational culture (Rincon-Roldan and Lopez-Cabrales, 2021).

However, ethics should not be a matter of unilateral approach. In the business context, customers have an important role in encouraging companies to act ethically and sustainably through their behaviour and choices. Thus ethics, CSR, and eco-branding, along with environmental concerns, social welfare awareness and personal loyalties, are critical factors for buying decisions (Dimitriou, 2022). Moreover, external and internal pressures, such as laws and governmental regulations can cause the so-called "institutional isomorphism", which is the result of organisational behaviours that generate increasingly homogeneous organisations within specific scopes of action (Rincon-Roldan and Lopez-Cabrales, 2021). In this regard, the stakeholders' role in ethical business practices highlights the importance of raising awareness in society and education for sustainability (Dimitriou, 2022). This is in line with the blue cluster, which refers to the role of education in ethics and sustainability practices. The literature has shown that education has the power and the responsibility to deliver effective skills regarding ethics. Then it may be taught to increase sustainability conduct in companies and society in general (Andrási *et al.*, 2022).

The yellow cluster, in turn, embraces terms such as CSR, leadership, ethical leadership, human resources management, ethical behaviour, transparency, governance, corruption and accountability. In a broad sense, this cluster reports on how top managers can contribute either positively or negatively to the companies' CSR practices and strategies to achieve sustainability performance – for instance, how companies are assembling their several

managerial systems to contribute to the companies' CSR and the extent to which ethical leadership can generate positive externalities. Another perspective in this cluster is related to the individual aspect of managers, where bad corporate governance and lack of ethical behaviour can have negative externalities for companies and employees. This perspective is evidenced by terms related to lack of accountability and transparency performance.

Despite being the smallest, the cyan cluster brings together important terms related to business ethics, stakeholders, philanthropy and investments (ethical and social responsibility). It entails the discussion of how business ethics could be connected to the strategy of the company. Finally, the green cluster considers terms related to sustainable development, sustainable development goals (SDGs), ethical codes, philosophy, human rights and supply chain management, among others. It entails the discussion of the sustainable development philosophy and how companies address this discussion in their ethical codes and corporate practices.

4.2 Case studies

This study also reviews a sample of 10 case studies of companies across different sectors and countries. Figure 3 shows the existence or not of sustainability reports and code of conduct or ethics policies in the companies, as well as whether ethical issues are part of their reports and the existence of ethics and sustainability departments.

Figure 3 Case studies on approaches used by companies to promote ethics and sustainability in their business practices

| Image: AutomotiveYesYesYesYesYesYesYesImage: AutomotiveYesYesYesYesYesNoYesImage: AutomotiveYesYesYesYesYesYesYesImage: AutomotiveFood & BeverageYesYesYesYesYesYesImage: AutomotiveFood & BeverageYesYesYesYesNoYesImage: AutomotiveFood & BeverageYesYesYesYesNoYesImage: AutomotiveFood & BeverageYesYesYesYesNoYesImage: AutomotiveFood & YesYesYesYesYesNoYesImage: AutomotiveYesYesYesYesYesYesNoImage: AutomotiveYesYesYesYesYesYesNoImage: AutomotiveYesYesYesYesYesYesYesImage: AutomotiveYesYesYesYesYesYesImage: AutomotiveYesYesYesYesYesYesImage: AutomotiveYesYesYesYesYesYesImage: AutomotiveYesYesYesYesYesYesImage: AutomotiveYesYesYesYesYesYesImage: AutomotiveYesYesYesYesYesYesImage: AutomotiveYes </th <th>Companies</th> <th>Sector</th> <th>Sustainability report</th> <th>Code of conduct or ethics policy</th> <th>Are ethical issues part of their reports?</th> <th>Ethics department</th> <th>Sustainability department</th> | Companies | Sector | Sustainability report | Code of conduct or ethics policy | Are ethical issues part of their reports? | Ethics department | Sustainability department |
|--|-----------------|------------|--------------------------|---|--|----------------------|------------------------------|
| NoFood & BeverageYesYesYesYesYesYesNoFood & BeverageYesYesYesYesNoYesImage: Image: | | Automotive | Yes | Yes | Yes | Yes | Yes |
| Nesstle.PesYesYesYesYesYesDANONEFood & BeverageYesYesYesNoYesImage: Image beverageYesYesYesYesNoYesImage: Image beverageYesYesYesYesYesNoYesImage: Image beverageYesYesYesYesYesNoYesImage: Image beverageYesYesYesYesYesYesYesImage: Image beverageYesYesYesYesYesYesYesImage: Image beverageYesYesYesYesYesYesYesImage: Image beverageYesYesYesYesYesYesYesImage: Image beverageYesYesYesYesYesYesYesImage beverageYesYesYesYesYesYesNoImage beverageYesYesYesYesYesYesNoImage beverageYesYesYesYesYesYesNoImage beverageYesYesYesYesYesYesNoImage beverageYesYesYesYesYesYesNoImage beverageYesYesYesYesYesYesNoImage beverageYesYesYesYesYesYesYesImage beverageYesYes <td< th=""><th>\bigotimes</th><th>Automotive</th><th>Yes</th><th>Yes</th><th>Yes</th><th>No</th><th>Yes</th></td<> | \bigotimes | Automotive | Yes | Yes | Yes | No | Yes |
| Deverage Yes Yes Yes Yes No Yes D - BASF Chemical Yes Yes Yes Yes No Yes Henkel Consumer Goods Yes Yes Yes Yes Yes Yes MERCK Healthcare Yes Yes Yes Yes Yes No No DONNECT Healthcare Yes Yes Yes Yes Yes No No | Nestlē. | | Yes | Yes | Yes | Yes | Yes |
| HenkelConsumer GoodsYesYesYesYesYesMERCKHealthcareYesYesYesNoNoHealthcareYesYesYesYesYesNo | DANONE | | Yes | Yes | Yes | No | Yes |
| Goods Yes Yes Yes Yes Yes MERCK Healthcare Yes Yes Yes No NOTECH® Healthcare Yes Yes Yes Yes | D • BASF | Chemical | Yes | Yes | Yes | No | Yes |
| BIONTECH Healthcare Yes Yes Yes No | Henkel | | Yes | Yes | Yes | Yes | Yes |
| | | Healthcare | Yes | Yes | Yes | No | No |
| AIRBUS Aviation Yes Yes Yes Yes Yes | BIONTECH | Healthcare | Yes | Yes | Yes | Yes | No |
| • | MAIRBUS | Aviation | Yes | Yes | Yes | Yes | Yes |
| Construction Ves Yes Yes No No | 🕙 Lufthansa | Aviation | Yes | Yes | Yes | No | No |

As presented in Figure 3, all the companies analysed in this study have sustainability reports and codes of conduct or ethics policies. Moreover, ethical issues are part of the reports of all of them. However, regarding the existence of a specific ethics department and sustainability department, some of them have them and others do not. By conducting a document analysis on the companies' sustainability reports and code of conduct or ethics policy, some common values and principles with which the companies are committed emerged. For instance, most of the companies have targets related to carbon neutral and greenhouses gas emissions. Volkswagen wants to accomplish this goal by 2050, as well as transit from fossil-driven approaches to smart and clean processes, advancing electric mobility. Daimler set up the "Ambition 2039" and the electric-only approach, which means that by the end of this decade, they want to offer all-electric vehicles, helping to reduce CO₂ emissions. Lufthansa wants to switch to carbon-neutral mobility on the ground in its home markets by 2030. Merck also seeks climate neutrality by 2040 and a reduction of its resource consumption. BASF aims at reducing CO2 emissions by 25% by 2030 compared with the baseline of 2018. Airbus is also working on the decarbonisation of the aerospace sector with a target of zero-emission commercial aircraft in the market by 2035. Nestlé wants to reduce their greenhouse gas emissions by 2030 and reach net zero by 2050. Henkel GmbH established some targets towards climate-positive operations by 2030, including 100% of their electricity sourced from renewable sources, zero plastic waste into nature (e.g.: 100% of packaging designed for recyclability and reusability) and circular water use at key manufacturing sites.

In addition to that, the companies analysed seem to be concerned about their supply chain and the natural resources involved in their processes. Nestlé is committed to eliminating deforestation in palm oil, pulp and paper, soya, sugar, coffee and cocoa supply chains by improving the traceability of the origins of the raw materials and understanding how they are produced. Henkel GmbH also seeks 100% transparency and traceability for palm and palm kernel oil by 2025. Furthermore, Nestlé claims to protect and promote the rights of people and animal welfare in their supply chains. Moreover, it has planned that, by 2025, 100% of its packaging will be recyclable or reusable, and it will reduce its use of virgin plastics by one-third. Danone, to ensure the safety and quality control of their products, demands some certifications from their suppliers and provides support to farmers they work with.

Furthermore, the companies are engaged in contributing to the UN SDGs. For instance, Daimler is supporting SDGs 8 (Decent Work and Economic Growth), 9 (Industry, Innovation, and Infrastructure), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production) and 13 (Climate Action). BASF has defined targets on water management, responsible procurement, engaged employees, women in leadership positions, occupational health and safety, and process safety, especially contributing to SDG 2 (Zero Hunger), SDG 5 (Gender Equality), SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 8 (Decent work and Economic Growth), SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action). Airbus is specifically dedicated to SDGs 4 (Quality Education), 5 (Gender Equality), 8 (Decent work and Economic Growth), 9 (Industry, Innovation, and Infrastructure), 12 (Responsible Consumption and Production), 13 (Climate Action), 16 (Life on Land) and 17 (Partnership for the Goals). Merck is committed to integrating sustainability into all their value chains by 2030, especially contributing to SDGs 3 (Good Health and Well-Being), 8 (Decent work and Economic Growth), 9 (Industry, Innovation and Infrastructure), 12 (Responsible Consumption and Production) and 17 (Partnership for the Goals). Henkel GmbH defined that each new product needs to contribute to sustainability.

Regarding the code of conduct or ethics policy, most of the companies analysed are signatories of the UN Global Compact, one of the prominent initiatives for encouraging responsible corporate management and reporting on their implementation. It includes 10 principles that are to be met by the organisations engaged (Figure 4).

Figure 4 The ten principles of the UN Global Compact



Based on the ten principles of the UN Global Compact and their own ethics policies, the main topics addressed by the companies analysed in their ethics reports are responsibility for compliance, responsibility as a member of society, responsibility as a business partner, and responsibility in the workplace. These topics involve the protection of human rights and children's rights; equal opportunity and treatment; product conformity and product safety; environmental protection; donations; sponsorships; charity, communication and marketing by using honest and lawful means; political lobbying centrally and in line with the principles of openness, accountability and responsibility; respect for the personal interests and the private lives of colleagues; prohibition of corruption; prohibition of money laundering and terrorism financing; fair and free competition; occupational safety and health care; data protection; accurate accounting and financial reporting; integrity; and compliance with laws.

Nestlé implemented the CARE audit programme as a tool to monitor internal compliance. In 2021, it launched the channel "Speak Up", for non-compliance concerns and questions. The company is committed to being transparent with people about how it processes its data and avoids using data and technology in ways that are unethical or could lead to discrimination, exploitation or cause harm. Instead, it uses

technology to support sustainability in the supply chain. It manages vast amounts of information on where its raw materials are sourced from and uses this to help drive supply chain improvements. The company also uses data from satellite monitoring to evaluate forest areas at risk, with the aim to prevent deforestation before it happens.

Some of the companies analysed present a suppliers' code of conduct, which shows their concern for business partners and third parties with whom they do business. Volkswagen affirms a careful selection of suppliers and service providers based on objective criteria. Lufthansa cooperates only with suppliers who place as much value on sustainability as it does. For that, the company establishes certain minimum standards to be followed. Moreover, it avoids the use of raw materials in its products, which directly or indirectly finance armed groups that violate human rights.

Another outstanding aspect of the companies' codes of conduct is the employees' occupational safety and health-care approach. Daimler declares that it offers its employees prevention programmes for their health and creates conditions that support a work-life balance. Danone claims to provide a safe working environment where there is respect and equal opportunity for all, fair remuneration and a healthy work-life balance. For Airbus, the health and safety of employees are a top priority. Therefore, all employees are required to undergo a minimum amount of compliance training via e-learning. Furthermore, data protection seems to be a common concern for the companies analysed in this study. For instance, at Danone, all employees are required to protect Danone's confidential information and intellectual property, as well as to protect the consumers', customers' and business partners' confidential information and any of their intellectual property that the company may have access to.

However, declarations about ethics and CSR do not necessarily have to go in pairs with practice. This is why one needs to be careful and critical in reading and analysing company documents. Moreover, it is important to crosscheck with other types of information and reports. In this regard, Figure 5 shows some examples of unethical behaviours and corporate social irresponsibility in the corporate practices of the previously analysed companies.

5. General discussion

As previously highlighted, companies are increasingly required to perform their business models based on ethical and sustainable practices. Rincon-Roldan and Lopez-Cabrales (2021) claim the need for greater interconnection between such subjects. In the context mentioned above, this research had two objectives:

- 1. to carry out a bibliometric analysis of the literature with the support of VOSviewer software to understand better the structure that underlies the theme; and
- 2. to analyse a sample of case studies on companies considered to be "benchmarks" to establish guidelines for other companies that wish to adopt management models based on ethics and sustainability.

Regarding the bibliometric analysis, the studies in the area present a wide range of subtopics, which demonstrates at the same time the relevance of the subject and the multiple variables open to debate on ethics and sustainability in companies. The results highlighted sub-themes related to social responsibility, environmental management and climate change (red cluster), the importance of stakeholders and education (blue cluster), human resources and leadership (yellow cluster), the definition of codes of ethics and human rights (green cluster) and philanthropy and investments (cyan cluster), among other subjects.

Figure 5 Case studies on accusations of unethical behaviours and corporate social irresponsibility in business practices

| Companies | Sector | Example | | |
|--|--------------------|--|--|--|
| | Automotive | While being sued for fake emission reports, as Volkswagen did Mercedes used the 'Nature or nothing' slogan to market its electric vehicles. Mercedes argued it was only a local marketing campaign and was not approved for global use (Truths in Advertising, 2022). | | |
| \bigotimes | Automotive | Volkswagen has been called a 'Failure of Corporate Social Responsibility' due to its 'rejection of any ethical standards in engineering' by falsifying emission test results (Dans, 2015). While the company advertised its low emissions, due to the fake emission reports, Energy Tracker Asia (Koons, 2022) listed Volkswagen as number 3 in the top 10 Greenwashing Companies. | | |
| Nēstiē. | Food & Beverage | Nestlé was accused of the use of child labour in cocoa production (Andrei, 2021). In the past, the company was accused of a long history of unethical marketing practices (Dutta, 2004). O'Callaghan (2019) argued that by conducting unethical business practices such as taking clean drinking water in areas that sorely need it, participating in human trafficking and child labour, and exploiting uneducated mothers in developing countries, Nestlé is quite possibly one of the world's most corrupt corporations. | | |
| DANONE | Food & Beverage | Danone has been accused of causing deforestation by using palm oil and not fulfilling its promise to finish this (Palm Oil Directives, 2021). | | |
| D • BASF | Chemical | BASF has been accused of using greenwashing strategies in its marketing (Augustine et al., 2022). While using 'green' labels, Henkel has been accused of using tricks to create the impression that they use less plastic, or mentioning that plastic is 100% recyclable, when this issue depends on the system of eco-logistics and consumer behaviour (Knuth, 2021). | | |
| Henkel | Consumer Goods | | | |
| | Healthcare | While no direct information on Merck's unethical practices was found, greenwashing practices are also an issue here (Gordon & Zuegge, 2020). | | |
| BIONTECH | Healthcare | While no direct information on BioNTech's unethical practices w found, greenwashing practices are also an issue here (Gordon Zuegge, 2020). | | |
| line and the second sec | Aviation | A Greenpeace report argues that airline groups are doing too little to fulfil their climate claims and goals (Greenpeace, 2022). | | |
| 🔄 Lufthansa | Aviation | A Greenpeace report argues that airline groups are doing too little to fulfil their climate claims and goals (Greenpeace, 2022). | | |

Considering the case studies analysed, some guidelines can be highlighted:

- Information from the UN Global Compact can significantly contribute to guiding companies' initiatives.
- Ethics and sustainability initiatives may be expanded to the entire supply chain.
- The connection between the practices performed by the company and the UN SDGs should be evidenced (considering the companies analysed, the most evidenced SDGs were 8 (Decent Work and Economic Growth), 9 (Industry, Innovation, and Infrastructure), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production) and 13 (Climate Action).
- In sustainability reports, companies may take into account their responsibilities regarding the workplace, compliance, as a member of society and as business partners.

In addition to that, this study also shows that unethical behaviour, or corporate social irresponsibility, is a serious issue that requires deeper analysis. In particular, Volkswagen as a representative of the automotive industry as well as Nestlé from the food industry are examples of where not only the reputation of the companies was damaged. Their unethical practices may lead to the discrediting of the whole idea of CSR due to their market power, their global spread, and their importance for the national economy of their origin country. In general, identifying unethical practices enables stakeholders to direct their actions to the company in question to reduce unethical and irresponsible practices.

5.1 Practical implications

In terms of elements that can be used as possible corporate indicators for a wider implementation of sustainability and ethics objectives in enterprises, mention may be made to labour standards, diversity and environmental protection, as these relate to economic, environmental and social performance. Then, the practical implications of this paper are three-fold. Firstly, the findings suggest that using an ethics perspective can be a valuable tool in improving the accuracy and correctness of business decision-making. Secondly, the results indicate that sustainability standards can be used to improve customer satisfaction as many important issues are addressed. Finally, the paper highlights the importance of ethical considerations when designing and implementing sustainability standards at enterprises and the need for regulatory guidance in this regard.

5.2 Limitations

This study has some limitations. The first is the fact that bibliometric analysis focused on Scopus. Despite its relevance in the academic area, using other databases could lead to different results. Secondly, the software used, and the specific analysis parameters have influenced the results, which can also be considered another limitation. Regarding the case studies, ten companies were chosen, but choosing other companies and even other sectors could lead to different results. Despite these limitations, the paper provides a welcome addition to the literature in the sense that it sheds some light on the relationships between sustainability and ethics among enterprises, some of which are large ones.

5.3 Future studies

In respect of future research, it is recommended to carry out case studies in companies from other sectors, to conduct a survey with specialists in the subject, and to prepare models to ensure ethical and sustainable corporate practices.

Acknowledgments

This study is part of the "00 papers to accelerate the implementation of the UN Sustainable Development Goals" initiative.

Funding and/or Conflicts of interests/Competing interests: No funding was received for conducting this study. The authors have no competing interests to declare that are relevant to the content of this article.

References

Ab Wahab, M. (2021), "Is an unsustainability environmentally unethical? Ethics orientation, environmental sustainability engagement and performance", *Journal of Cleaner Production*, Vol. 294, pp. 1-11, doi: 10.1016/j.jclepro.2021.126240.

Akerlof, G.A. and Shiller, R.J. (2009), *Animal Spirits: How Human Psychology Drives the Economy, and Why It Matters for Global Capitalism*, Princeton University Press.

Andrási, G., Körtvési, D. and Szegedi, K. (2022), "Developing ethical future managers embracing sustainability: case study of Budapest business school", *International Journal of Web-Based Learning and Teaching Technologies*, Vol. 17 No. 8, pp. 1-19, doi: 10.4018/IJWLTT.300786.

Arel, B., Beaudoin, C.A. and Cianci, A.M. (2012), "The impact of ethical leadership, the internal audit function, and moral intensity on a financial reporting decision", *Journal of Business Ethics*, Vol. 109 No. 3, pp. 351-366, doi: 10.1007/s10551-011-1133-1.

Arita, H.T. (2017), "Multisite and multispecies measures of overlap co-occurrence and co-diversity", *Ecography*, Vol. 40 No. 6, pp. 709-718, doi: 10.1111/ecog.01942.

Arjoon, S. and Rambocas, M. (2011), "Ethics and customer loyalty: some insights into online retailing services", *International Journal of Business and Social Science*, Vol. 2 No. 14, pp. 135-142.

Azmi, R.A. (2006), "Business ethics as competitive advantage for companies in the globalization era", SSRN Electronic Journal, pp. 1-8, doi: 10.2139/ssrn.1010073.

Azmi, R.A. (2011), "Cooperative finance and sustainability after the financial crisis", in Sun, W., Louche, C. and Pérez, R. (Eds), *Finance and Sustainability: Towards a New Paradigm? A Post-Crisis Agenda (Critical Studies on Corporate Responsibility, Governance and Sustainability*, Vol. 2, doi: 10.1108/S2043-9059(2011)000002017.

Bredillet, C. (2014), "Ethics in project management: some Aristotelian insights", *International Journal of Managing Projects in Business*, Vol. 7 No. 4, pp. 548-565, doi: 10.1108/IJMPB-08-2013-0041.

Cabrera-Luján, S.L., Sánchez-Lima, D.J., Guevara-Flores, S.A., Millones-Liza, D.Y., García-Salirrosas, E. E. and Villar-Guevara, M. (2023), "Impact of corporate social responsibility, business ethics and corporate reputation on the retention of users of third-sector institutions", *Sustainability*, Vol. 15 No. 3, pp. 1-18, doi: 10.3390/su15031781.

Cassar, C. (2019), "Business ethics and sustainable development", in Leal Filho, W. (Ed.), *Encyclopedia of Sustainability in Higher Education*, Springer, Cham, doi: 10.1007/978-3-030-11352-0_39.

Clark, C.E., Riera, M. and Iborra, M. (2022), "Toward a theoretical framework of corporate social irresponsibility: clarifying the gray zones between responsibility and irresponsibility", *Business & Society*, Vol. 61 No. 6, pp. 1473-1511, doi: 10.1177/00076503211015911.

Dabić, M., Maley, J., Dana, L.-P., Novak, I., Pellegrini, M.M. and Caputo, A. (2020), "Pathways of SME internationalization: a bibliometric and systematic review", *Small Business Economics*, Vol. 55 No. 3, pp. 705-725, doi: 10.1007/s11187-019-00181-6.

De Lange, D.E., Busch, T. and Delgado-Ceballos, J. (2012), "Sustaining sustainability in organizations", *Journal of Business Ethics*, Vol. 110 No. 2, pp. 151-156, doi: 10.1007/s10551-012-1425-0.

De los Ríos-Berjillos, A., Millán-Lara, S., Sepúlveda del Rio, I. and Ruiz-Lozano, M. (2023), "Fostering a culture of business ethics: a roadmap for responsible management through codes of ethics based on the experience of Spanish companies", *Social Responsibility Journal*, Vol. 19 No. 9, pp. 1-18, doi: 10.1108/SRJ-06-2022-0228.

De Paula, G.O. and Cavalcanti, R.N. (2000), "Ethics: essence for sustainability", *Journal of Cleaner Production*, Vol. 8 No. 2, pp. 109-117, doi: 10.1016/S0959-6526(99)00321-2.

Dimitriou, D. (2022), "Corporate ethics: philosophical concepts guiding business practices", *Conatus*, Vol. 7 No. 1, pp. 33-60, doi: 10.12681/cjp.29864.

Du, H.S., Xu, J., Li, Z., Liu, Y. and Chu, S.K.W. (2021), "Bibliometric mapping on sustainable development at the base-of-the-pyramid", *Journal of Cleaner Production*, Vol. 281, pp. 1-14, doi: 10.1016/j.jclepro.2020.125290.

Elayan, F.A., Li, J., Liu, Z.F., Meyer, T.O. and Felton, S. (2016), "Changes in the covalence ethical quote, financial performance and financial reporting quality", *Journal of Business Ethics*, Vol. 134 No. 3, pp. 369-395, doi: 10.1007/s10551-014-2437-8.

European Union (2022), "Directive (EU) 2022/2464 of 14 December 2022 amending regulation (EU) no 537/2014 as regards corporate sustainability reporting (CSRD)", available at: www.eur-lex.europa.eu/ legal-content/EN/TXT/PDF/?uri=CELEX:32022L2464&from=EN

García, J.L.S. and Sanz, J.M.D. (2018), "Climate change, ethics and sustainability: an innovative approach", *Journal of Innovation & Knowledge*, Vol. 3 No. 2, pp. 70-75, doi: 10.1016/j.jik.2017.12.002.

García-Sánchez, I.M., Rodríguez-Domínguez, L. and Frías-Aceituno, J.V. (2015), "Board of directors and ethics codes in different corporate governance systems", *Journal of Business Ethics*, Vol. 131 No. 3, pp. 681-698, doi: 10.1007/s10551-014-2300-y.

Germano, F.D., Caron, A. and Ponchirolli, O. (2020), "Interdependência: lucro, ética, responsabilidade social e estratégias das organizações", *Caderno PAIC*, Vol. 21 No. 1, pp. 281-298.

Hayat, K., Jianjun, Z. and Ali, S. (2022), "Reinforcing purchase behaviors through CSR and ethical practices", *Marketing Intelligence & Planning*, Vol. 40 No. 2, pp. 256-272, doi: 10.1108/MIP-08-2021-0268.

Hillman, A.J., Keim, G.D. and Luce, R.A. (2001), "Board composition and stakeholder performance: do stakeholder directors make a difference?", *Business & Society*, Vol. 40 No. 3, pp. 295-314, doi: 10.1177/000765030104000304.

Jo, H. and Kim, Y. (2008), "Ethics and disclosure: a study of the financial performance of firms in the seasoned equity offerings market", *Journal of Business Ethics*, Vol. 80 No. 4, pp. 855-878, doi: 10.1007/s10551-007-9473-6.

Jones, B. (2013), "Corporate social irresponsibility", in Idowu, S.O., Capaldi, N., Zu, L. and Gupta, A.D. (Eds), *Encyclopedia of Corporate Social Responsibility*, Springer, Berlin, Heidelberg, doi: 10.1007/978-3-642-28036-8_650.

Kassinis, G. and Vafeas, N. (2002), "Corporate boards and outside stakeholders as determinants of environmental litigation", *Strategic Management Journal*, Vol. 23 No. 5, pp. 399-415, doi: 10.1002/smj.230.

Khosroshahi, H., Dimitrov, S. and Hejazi, S.R. (2021), "Pricing, greening, and transparency decisions considering the impact of government subsidies and CSR behavior in supply chain decisions", *Journal of Retailing and Consumer Services*, Vol. 60, pp. 1-19, doi: 10.1016/j.jretconser.2021.102485.

La Rosa, F. and Bernini, F. (2022), "Punishing vices or rewarding virtues? The motivations for and benefits of ethical ratings for private Italian companies", *Journal of Business Ethics*, Vol. 176 No. 3, pp. 467-485, doi: 10.1007/s10551-020-04699-8.

Leal Filho, W., Viera Trevisan, L., Simon Rampasso, I., Anholon, R., Pimenta Dinis, M.A., Londero Brandli, L., Sierra, J., Lange Salvia, A., Pretorius, R., Nicolau, M., Paulino Pires Eustachio, J.H. and Mazutti, J. (2023), "When the alarm bells ring: why the UN sustainable development goals may not be achieved by 2030", *Journal of Cleaner Production*, Vol. 407, pp. 1-11, doi: 10.1016/j.jclepro.2023.137108.

Lehnert, K., Park, Y.H. and Singh, N. (2015), "Research note and review of the empirical ethical decisionmaking literature: boundary conditions and extensions", *Journal of Business Ethics*, Vol. 129 No. 1, pp. 195-219, doi: 10.1007/s10551-014-2147-2.

Lin-Hi, N. and Müller, K. (2013), "The CSR bottom line: preventing corporate social irresponsibility", *Journal of Business Research*, Vol. 66 No. 10, pp. 1928-1936, doi: 10.1016/j.jbusres.2013.02.015.

McKendall, M., Sánchez, C. and Sicilian, P. (1999), "Corporate governance and corporate illegality: the effects of board structure on environmental violations", *The International Journal of Organizational Analysis*, Vol. 7 No. 3, pp. 201-223, doi: 10.1108/eb028900.

Mach, A. and Rochat, M. (2022), "White paper", Greenwashing risk indicator, Covalence ESG ratings, Covalence SA, Geneva, available at: www.covalence.ch/docs/Covalence_GreenwashingRiskIndicator_WhitePaper.pdf

Meadows, D. (1998), *Indicators and Information Systems for Sustainable Development*, The Sustainability Institute, Hartland.

Meadows, D. (1999), *Leverage Points – Places to Intervene in a System*, The Sustainability Institute, Hartland.

Pereira, C. (2021), "A evolução do ESG no Brasil. Pacto global rede Brasil e stilingue", available at: www. d335luupugsy2.cloudfront.net/cms%2Ffiles%2F150560%2F1619627473Estudo_A_Evoluo_do_ESG_no_Brasil. pdf

Piwowar-Sulej, K., Krzywonos, M. and Kwil, I. (2021), "Environmental entrepreneurship – bibliometric and content analysis of the subject literature based on H-Core", *Journal of Cleaner Production*, Vol. 295, pp. 1-25, doi: 10.1016/j.jclepro.2021.126277.

Priyadarshini, P. (2022), "The COVID-19 pandemic has derailed the progress of the sustainable development goals", *Anthropocene Science*, Vol. 1 No. 3, pp. 410-412, doi: 10.1007/s44177-022-00032-2.

Rincon-Roldan, F. and Lopez-Cabrales, A. (2021), "Ethical values in social economy for sustainable development", *Annals of Public and Cooperative Economics*, Vol. 92 No. 4, pp. 705-729, doi: 10.1111/ apce.12300.

Schwartz, M.S. (2013), "Developing and sustaining an ethical corporate culture: the core elements", *Business Horizons*, Vol. 56 No. 1, pp. 39-50, doi: 10.1016/j.bushor.2012.09.002.

Smith, G.E., Barnes, K.J. and Harris, C. (2014), "A learning approach to the ethical organization", *The Learning Organization*, Vol. 21 No. 2, pp. 113-125.

Taleb, N.N. (2012), Antifragile - Things That Gain from Disorder, Penguin Books, London.

Torelli, R. (2020), "Sustainability, responsibility and ethics: different concepts for a single path", *Social Responsibility Journal*, Vol. 17 No. 5, pp. 719-739.

Ugoani, J. (2019), "Business ethics and its effect on organizational sustainability", *Global Journal of Social Sciences Studies*, Vol. 5 No. 2, pp. 119-131, doi: 10.20448/807.5.2.119.131.

Ullah, S., Ahmad, S., Akbar, S. and Kodwani, D. (2019), "International evidence on the determinants of organizational ethical vulnerability", *British Journal of Management*, Vol. 30 No. 3, pp. 668-691, doi: 10.1111/1467-8551.12289.

Van Eck, N.J. and Waltman, L. (2021), "Manual for VOSviewer version 1.6.16", CWTS Meaningful Metrics, Universiteit Leiden.

Walsh, P.R. and Dodds, R. (2017), "Measuring the choice of environmental sustainability strategies in creating a competitive advantage", *Business Strategy and the Environment*, Vol. 26 No. 5, pp. 672-687, doi: 10.1002/bse.1949.

Wesarat, P.O., Yazam, S.M. and Majid, A.H. (2017), "Role of organizational ethics in sustainable development: a conceptual framework", *International Journal of Sustainable Future for Human Security*, Vol. 5 No. 1, pp. 67-76.

Yin, R. (2009), Case Study Research: Design and Methods, 3rd ed., Sage, Thousand Oaks, CA.

Yu, E.P.Y., Van Luu, B. and Chen, C.H. (2020), "Greenwashing in environmental, social and governance disclosures", *Research in International Business and Finance*, Vol. 52, pp. 1-23, doi: 10.1016/j. ribaf.2020.101192.

Yue, C.A., Tao, W. and Ferguson, M.A. (2022), "The joint effect of corporate social irresponsibility and social responsibility on consumer outcomes", *European Management Journal*, Vol. 41 No. 5, pp. 1-11, doi: 10.1016/j.emj.2022.05.002.

Zhang, L., Shan, Y.G. and Chang, M. (2021), "Can CSR disclosure protect firm reputation during financial restatements?", *Journal of Business Ethics*, Vol. 173 No. 1, pp. 157-184, doi: 10.1007/s10551-020-04527-z.

Zupic, I. and Čater, T. (2015), "Bibliometric methods in management and organization", *Organizational Research Methods*, Vol. 18 No. 3, pp. 429-472, doi: 10.1177/1094428114562629.

Further reading

Airbus (2022a), "Code of conduct", available at: www.airbus.com/sites/g/files/jlcbta136/files/2021-07/ Airbus-Ethics-Compliance-Code-Conduct-EN.pdf

Airbus (2022b), "Our approach to sustainability reporting", available at: www.airbus.com/en/ sustainability/reporting-and-performance-data/our-approach-to-sustainability-reporting

Andrei, M. (2021), "Why nestle is one of the most hated companies in the world", ZME Science, available at: www.zmescience.com/science/nestle-company-pollution-children/ (accessed 1 February 2021).

Augustine, A., Javvaji and Abraham, H. (2022), "A study on the greenwashing strategies in BASF'S 'We love EVS' campaign", *Kristu Jayanti Journal of Humanities and Social Sciences (KJHSS)*, Vol. 2, pp. 56-64, available at: www.kristujayantijournal.com/index.php/ijss/article/view/2224

BASF (2022a), "BASF report 2021", available at: www.report.basf.com/2021/en/_assets/downloads/ entire-basf-ar21.pdf

BASF (2022b), "Our code of conduct", available at: www.basf.com/global/en/who-we-are/organization/ management/code-of-conduct.html

BioNTech (2022a), "Code of business conduct & ethics", available at: www.investors.biontech.de/static-files/e2ac32b2-96f8-4ef6-a19e-adbecd4d8af9#:~:text=At%20BioNTech%2C%20we%20believe% 20in,third%20parties%20who%20represent%20us

BioNTech (2022b), "Sustainability report 2021", available at: www.unglobalcompact.org/participation/ report/cop/create-and-submit/active/466625

Danone (2022a), "Danone integrated annual report", available at: www.danone.com/content/dam/ danone-corp/danone-com/rai/2021/danone-integrated-annual-report-2021.pdf

Danone (2022b), "Danone's code of business conduct", available at: www.danone.com/content/dam/ danone-corp/danone-com/about-us-impact/policies-and-commitments/en/2021/Danone-Code-of-Business-Conduct.pdf

Dans, E. (2015), "Volkswagen and the failure of corporate social responsibility", Forbes", available at: www.forbes.com/sites/enriquedans/2015/09/27/volkswagen-and-the-failure-of-corporate-social-responsibility/?sh=385cde7e4405 (accessed 27 September 2015).

Dutta, S. (2004), "Nestlé's social irresponsibility in developing countries", IBS Center for Management Research, available at: www.thecasecentre.org/products/view?id=20499

Gordon, D. and Zuegge, K.L. (2020), "Greenwashing in health care marketing", ASA Monitor, Vol. 84, pp. 18-21.

Greenpeace (2022), "Analysis of the environmental, social and governance information and performance of European airlines (from 2018 to 2020)", available at: www.greenpeace.at/assets/uploads/pdf/presse/ OSCR_Report_2022.pdf

Henkel (2022a), "Our code of conduct", available at: www.henkel.com/resource/blob/20062/ 4376272ddbd1ba8336737ed9285707ab/data/code-of-conduct-english.pdf

Henkel (2022b), "Sustainability report 2021", available at: www.henkel.com/resource/blob/1616952/ 56b3f141043a2c60ca1743c8255f5f26/data/2021-sustainability-report.pdf

Knuth, H. (2021), "Henkel Waescht Sich rein, Zeit online", available at: www.zeit.de/2021/45/ greenwashing-henkel-persil-waschmittel-umweltsiegel-nachhaltigkeit (accessed 6 November 2021).

Koons, E. (2022), "Greenwashing examples 2022: top 10 greenwashing companies, energy tracker Asia", available at: www.energytracker.asia/greenwashing-examples-of-top-companies/

Lufthansa (2022a), "Code of conduct", available at: www.investor-relations.lufthansagroup.com/en/ corporate-governance/compliance/code-of-conduct.html

Lufthansa (2022b), "Sustainability in 2021", available at: www.lufthansagroup.com/en/themes/ nachhaltigkeitsreporting.html

Mecedez-Benz (2022a), "Our integrity code", available at: www.group.mercedes-benz.com/documents/ company/compliance/daimler-integritycode.pdf

Mecedez-Benz (2022b), "Sustainability report 2021", available at: www.sustainabilityreport.mercedesbenz.com/2021/

Merck (2022a), "Sustainability report 2021", available at: www.merckgroup.com/en/sustainability-report/2021/services/downloads.html

Merck (2022b), "The Merck code of conduct", available at: www.merck.com/company-overview/cultureand-values/code-of-conduct/

Nestlé (2022a), "Code of business conduct", available at: www.nestle.com/investors/corporategovernance/codeofbusinessconduct

Nestlé (2022b), "Creating shared value and sustainability report 2021", available at: www.nestle.com/ sites/default/files/2022-03/creating-shared-value-sustainability-report-2021-en.pdf

O'Callaghan, K. (2019), "Nestle: the world's most corrupt corporation, the skier scribbler", available at: www.skierscribbler.com/7671/opinion/nestle-the-worlds-most-corrupt-corporation/

Palm Oil Directives (2021), "Palm oil ecoside and deforestation sponsored by Danone", available at: www.palmoildetectives.com/2021/03/06/danone/

Truths in Advertising (2022), "Mercedes accused of greenwashing with 'nature or nothing' ads - automaker environmental record speaks for itself", available at: www.truthinadvertising.org/articles/ mercedes-accused-of-greenwashing-with-nature-or-nothing-ads/

Volkswagen (2022a), "Code of conduct", available at: www.volkswagenag.com/presence/konzern/documents/ Code_of_Conduct_Group_En.pdf

Volkswagen (2022b), "Sustainability report 2021", available at: www.volkswagenag.com/en/sustainability/ reporting-and-esg-performance/sustainability-report.html

Author affiliations

Walter Leal Filho is based at the Department of Natural Sciences, Manchester Metropolitan University, Manchester, UK and Faculty of Life Sciences, Hamburg University of Applied Sciences, Hamburg, Germany.

Laís Viera Trevisan is based at Hamburg University of Applied Sciences, Hamburg, Germany.

João Henrique Paulino Pires Eustachio is based at the Faculty of Life Sciences, Hamburg University of Applied Sciences, Hamburg, Germany.

Izabela Simon Rampasso is based at the Department of Industrial Engineering, Universidad Católica del Norte, Antofagasta, Chile.

Rosley Anholon is based at the School of Mechanical Engineering, State University of Campinas, Campinas, Brazil.

Johannes Platje is based at the WSB Merito University Wrocław, Wroclaw University of Economics and Business, Wroclaw, Poland.

Markus Will is based at the Faculty of Natural and Environmental Sciences, Zittau/Görlitz University of Applied Sciences, Zittau, Germany.

Federica Doni is based at the Department of Business and Law, University of Milano Bicocca, Milan, Italy.

Muhammad Mazhar is based at the Nottingham Business School, Nottingham Trent University, Nottingham, UK.

Jaluza Maria Lima Silva Borsatto and Carla Bonato Marcolin are both based at the School of Management and Business, Universidade Federal de Uberlandia, Uberlandia, Brazil.

Corresponding author

Laís Viera Trevisan can be contacted at: lais.trevisan@ufrgs.br

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm Or contact us for further details: permissions@emeraldinsight.com