



Hindering Global Sustainability: A Systematic Literature Review on the Greenwashing Outcomes

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Abstract

Greenwashing refers to deceptive green marketing strategies used by companies and organizations to enhance their competitive edge and generate higher profits by appealing to environmentally conscious consumers. This practice arises when the actions of these entities do not align with the claims they make regarding their environmental performance. The primary objective of this research was to examine the implications of greenwashing practices. To achieve this objective, a systematic literature review was conducted in the Scopus database on August 21, 2023, following predefined criteria and the guidelines outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement. Based on these selection criteria, 15 relevant documents were analyzed. Most of these were academic articles categorized into nine distinct thematic areas, highlighting the cross-disciplinary nature of greenwashing. The study's findings revealed numerous consequences of greenwashing, affecting various stakeholders, including consumers, investors, partner companies, owners or shareholders, and society. Greenwashing was shown to generate confusion and misinformation, intensify consumer skepticism, alter purchasing decisions, reduce corporate profitability, and cause ethical damage by manipulating societal values towards excessive consumerism. Furthermore, it adversely impacts public well-being and societal interests, erodes trust in companies and organizations, obstructs efforts toward sustainable consumption, and contributes to a significant decline in consumer confidence.

Keywords: Stakeholders, Greenwashing practices, Misleading advertising, Sustainability.

Introduction

Sustainability is a crucial concept that requires a fair balance among economic, environmental, and social dimensions (Kim & Selarl, 2023). However, sustainability, as an essential criterion for sustainable consumption, is often influenced by misinformation (Geissmar, Niemand, & Kraus, 2023).

Since the beginning of the environmental movement in the 1960s, concerns about pollution and environmental degradation have continued to increase (Szabo & Webster, 2021). Due to the increase in environmental problems and, consequently, greater public environmental awareness (Chen & Chang, 2012), pressure on companies to disclose their environmental performance and market sustainable products and services has increased (Kim and Lyon, 2015).

Being environmentally responsible can be a source of competitive advantage that attracts ecologically conscious consumers (Szabo & Webster, 2021; Inês, Diniz, & Moreira, 2023). In this context, companies that implement green marketing strategies that do not reflect their true environmental commitment may obtain undeserved economic and brand-image advantages (Boncinelli et al., 2023).

To ensure greater sustainability, governments, consumers, and organizations are becoming more aware of environmental problems and are increasingly pressuring companies to adopt appropriate practices (Pizzetti, Gatti, & Seele, 2021; Tseng et al., 2019). Furthermore, several studies indicate that consumers value responsible social practices over price when purchasing products (Mohr & Webb, 2005).

Currently, it is not enough for a brand to be merely functional or emotionally attractive. Consumers also expect companies to be socially responsible (Kotler, 2011). It appears that social issues such as forced labor, human trafficking, and child labor, among others, trigger a significant positive effect on consumer attitudes and the intention to purchase goods that meet social, economic, and environmental criteria throughout their life cycle and that offer sustainable value compared to other goods (Evans et al., 2017).

Consumers with a higher level of awareness and concern regarding social, economic, and

environmental issues are those who respond more positively to socially responsible business practices, as these are those who most easily recognize the obligation to make socially responsible consumption decisions and expect companies to operate responsibly in addressing social, economic, and environmental issues (Lee, Lee, & Ma, 2018).

Consequently, these practices trigger greater demand for these products, which, in turn, increases sales volume and improves companies' economic and financial performance (Tian, Wang, & Yang, 2011). In this sense, environmental concerns have led companies to develop and market "green" products and services to meet consumer needs and address their concerns. Typically, companies that publicize their efforts to implement socially responsible practices are considered trustworthy (Castaldo et al., 2009), and consumer trust fosters positive attitudes and purchase intentions toward the products these companies sell (Atkinson & Rosenthal, 2014).

Purchase intention and word of mouth are positive when consumers encounter surprising and sustainable product information (Szabo & Webster, 2021). However, suspicions arise that companies are trying to present a responsible, green image to consumers without making major changes (Darnall, Pointing & Vazquez-Brust, 2012). Some companies take actions that deceive their stakeholders through greenwashing (de Freitas Netto et al., 2020).

Greenwashing refers to a series of misleading communications that promote overly positive beliefs about the organization's environmental performance (Lyon & Maxwell, 2011). A phenomenon that is, nowadays, more virulent than ever (Montgomery, Lyon, & Barg, 2023), and has become a hot topic over the last two decades, with impressive growth in publications driven by public interest (Gatti, Seele, & Rademacher, 2019).

The term greenwashing was first used in 1986 by the environmentalist and activist Jay Westervelt in a publication about hotel industry practices related to promoting the reuse of towels (Guo et al., 2018). Supposedly, a water-saving communication strategy with implicit actions revealing little environmental impact (Pearson, 2010), while in other areas the organization demonstrated little or no environmental concern. He noticed the large amount of trash he

had found in other parts of the hotel and detected no visible signs of efforts to become more sustainable. Instead, the hotel was simply trying to cut costs by reducing towel washes while also presenting itself as environmentally friendly.

According to some scholars, greenwashing initially dealt exclusively with environmental issues. However, more recent literature also associates the term with social and economic issues (Seele & Gatti, 2017). The phenomenon of greenwashing has been accompanied by the growth of green markets (Majláth, 2017). In general, the literature describes the phenomenon as encompassing two behaviors simultaneously: (1) withholding the disclosure of negative information related to the company's environmental performance and (2) exposing positive information, exaggerating its impact in terms of environmental performance (de Freitas Netto et al., 2020; Delmas & Burbano, 2011).

Research identified three characteristics associated with the greenwashing phenomenon: the use of vague or ambiguous information; the omission of information; and the use of false or incorrect information (Carlson, Grove, & Kangun, 1993). In the literature, greenwashing can be classified as declarative or executional (de Freitas Netto et al., 2020), depending on whether environmental practices are actually implemented. The first involves textual assumptions about the ecological benefits of a product or service that create a misleading environmental claim. The second refers to elements that evoke nature, such as images that use colors, sounds, or natural landscapes that can create false perceptions of the company's greenness (Parguel, Benoit-Moreau, & Russell, 2015).

Companies may choose to withhold negative information about their environmental impact or disclose it only partially, and may even spread false positive information, hoping interested parties will punish poor environmental performance (Lyon & Maxwell, 2011). Therefore, it is considered a practice of disseminating false or misleading information about environmental strategies, objectives, motivations, and actions (Becker-Olsen & Potucek, 2013), with the intention of attracting ecologically conscious consumers (Samal & Bhalala, T2023), improving the image of the company and/or brand, and, in this way, increasing sales volume (Boncinelli et al., 2023).

Greenwashing occurs when companies claim to be sustainable while neglecting labor rights or selecting suppliers that pollute the environment (Pizzetti, Gatti, & Seele, 2021). Therefore, it refers to the strategies adopted by some producers/companies to convey ecological production methods through statements, green packaging, and images that evoke nature, without reflecting a genuine environmental commitment (Boncinelli et al., 2023). In other words, reality does not resemble or inadequately corresponds to the content of the shared messages.

Some companies invest in green marketing communications to be perceived as environmentally conscious, socially responsible, and concerned about the environmental impact of their actions. A practice of apparent efforts to protect the environment, suggesting that the company assumes the resulting costs when, actually, it makes a profit. Therefore, greenwashing is an organization's deceptive use of green marketing or green arguments about the environmental impact of its products and practices, with the aim of shaping an overly positive public image and promoting its reputation (Marquis, Toffel, & Zhou, 2016).

To be considered a practice of greenwashing, a "green" message/communication must combine falsehood (element related to information) with an accusation of being misleading (element of external distortion), although greenwashing, which is a perception in the eyes of the observer, can be instrumental or deliberative on the sender's side (Seele & Gatti, 2017). Intentionally misleading strategies can harm consumers' attitude or purchase intention (Parguel, Benoit-Moreau, & Larceneux, 2011), as well as the confidence of investors (Pizzetti, Gatti, & Seele, 2021) and cooperating companies and organizations (King & Lenox, 2000), contributing to degradation, brand (Nguyen et al., 2019), ethics (Nyilasy, Gangadharbatla, & Paladino, 2014), profitability (Du, 2015), and the company's market value (Chun & Giebelhausen, 2012).

In this context, this research contributes to the literature on the potential impact of greenwashing practices. This research is organized as follows. Section 1 introduces the topic. Section 2 explains the methodology used. Section 3 presents the results and discusses the consequences of greenwashing practices. Finally, the last section presents conclusions, limitations,

and directions for future research.

Methodology

To prepare for this research, a structured/systematized review of the literature was conducted, following the criteria established by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher et al., 2009). This structure ensures transparency in the selection and analysis of included studies and enables other researchers

to replicate the process. Also, it is an appropriate methodology for collecting large amounts of information (Rodgers et al., 2009) and for restricting the literature to a specific research question. In this particular research, the research question is: What are the consequences of the Greenwashing phenomenon?

Data collection was conducted on August 21, 2023, using the Scopus database. The predefined eligibility criteria and the methodological approach are available in Table 1.

Table 1: Publications' selection method and criteria

Database	Selection of publications
Scopus	(1) Search in: Article Title, Abstract, Keywords (2) Document type: All (3) Source type: All (4) Data range: without restrictions (5) Language: All

The search was carried out using article titles, abstracts, and keywords (Table 1), with the terms: "effects" OR "consequences" AND "greenwashing" AND "practices" OR "actions" AND "consumers" AND "sustainability". At this stage, 19 academic documents were selected

(Figure 1). After reading the full text, 4 documents were removed because they did not define and describe the phenomenon of greenwashing, nor did they portray its consequences. As shown in Figure 1, 15 documents were selected.

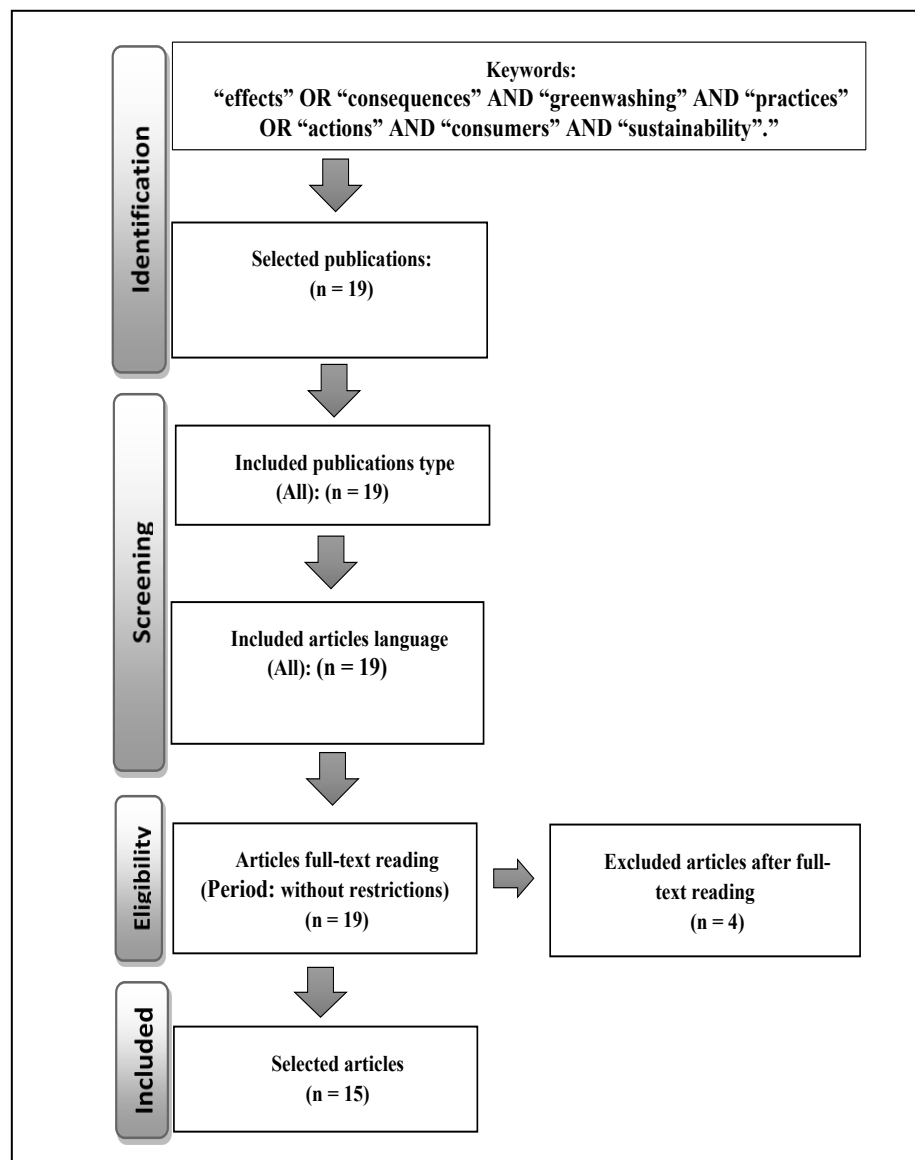


Fig 1. PRISMA flow diagram

Subsequently, a descriptive analysis of the data was carried out, namely, the evolution of the number of publications and number of citations, document type, number of publications by scientific area, number of publications by source title, and number of publications by country/territory. Finally, the sample publications were analyzed regarding the consequences of greenwashing practices.

Results and Discussion

Figure 2 shows the progression of the number of

studies and citations over time through August 21, 2023. Prior to 2019, there were only publications in 2011, 2012, 2015, and 2017, totaling 4 publications (one per year). No studies reporting the consequences of greenwashing were published in the Scopus database in 2019. In 2023, a maximum of 6 publications was recorded, although, given the date of the present research (August 21, 2023), a third of the year is missing. Regarding citations, the trend has been very positive since 2019, reaching a high of 263 in 2022.

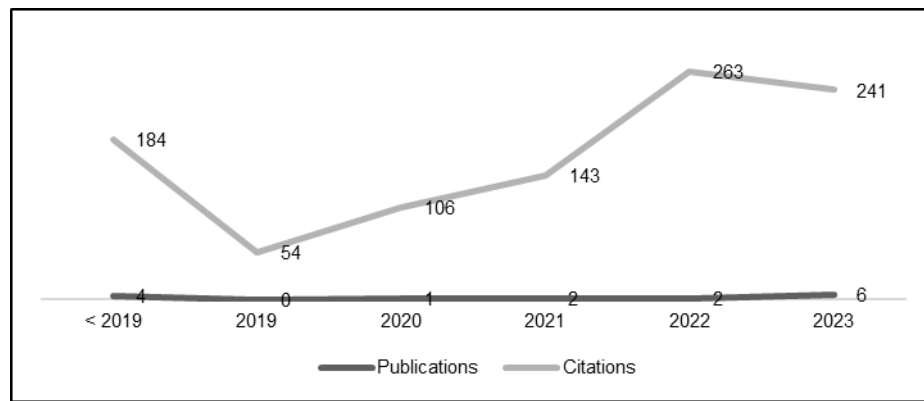


Fig 2. Evolution of the number of publications and citations

Figure 3 shows that, of the 15 documents selected for the review, the vast majority are

articles (80.0%), with the remaining evenly distributed among book chapters (6.7%), reviews (6.7%), and conference papers (6.7%).

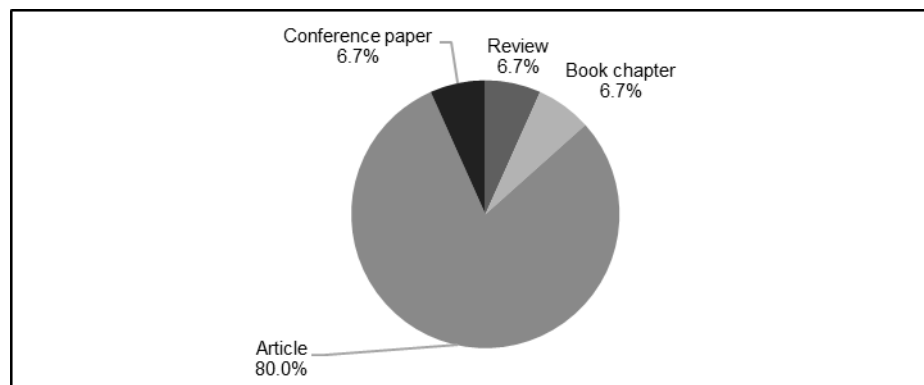


Fig 3. Document type

There are more publications in the scientific areas of Business, Management, and Accounting (12), Social Sciences (9), and Environmental Science (6), as shown in Figure 4. In smaller numbers, other very diverse and distinct scientific areas were considered, namely, Engineering (5), Energy (4), Economics,

Econometrics and Finance (3), Arts and Humanities (1), Computer Science (1), and Decision Sciences (1). The presence of such diverse scientific areas is justified by the multidisciplinary nature of the greenwashing phenomenon (Yang et al., 2020).

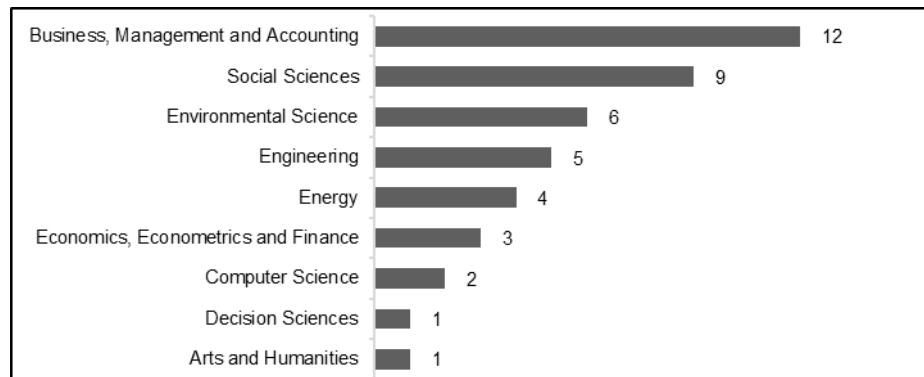


Fig 4. Number of publications by scientific area

Figure 5 exhibits the journals in which the manuscripts were published. As shown, the three journals with the most studies on the consequences of Greenwashing are “Business

Strategy and the Environment”, “Journal of Business Ethics”, and “Journal of Cleaner Production”. The 15 manuscripts analyzed were published in 12 journals.

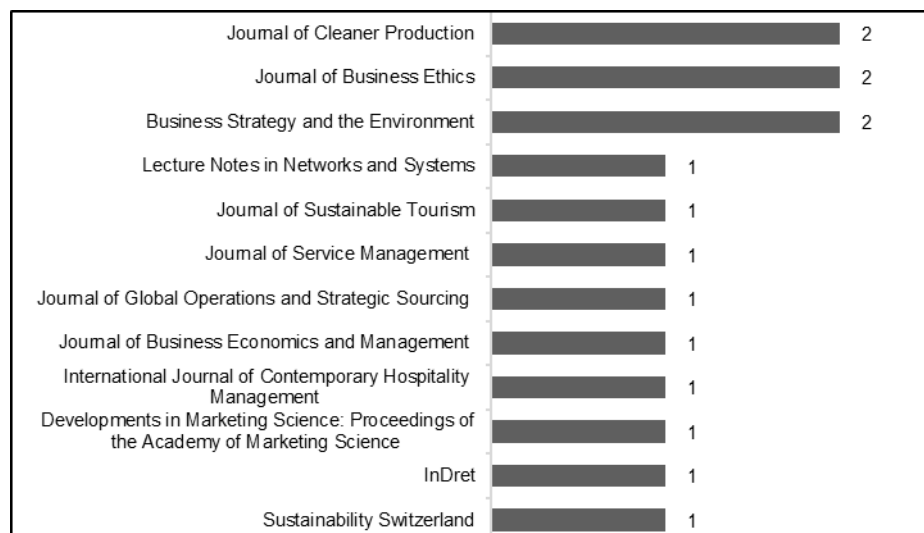


Fig 5. Number of publications by source title

Most authors conducted their research in the West, specifically in the United States and in several European countries (Figure 6). The same results were obtained in a study that analyzed articles published on Web of Science, ScienceDirect, Springer, and Emerald Insight databases between 2000 and 2020 on the causes,

taxonomy, and consequences of greenwashing behaviors (Rahman, Park, & Chi, 2015). The three countries that registered the highest number of publications were, in descending order, the United States (4), Germany (3), and Italy (2), as shown in Figure 6.

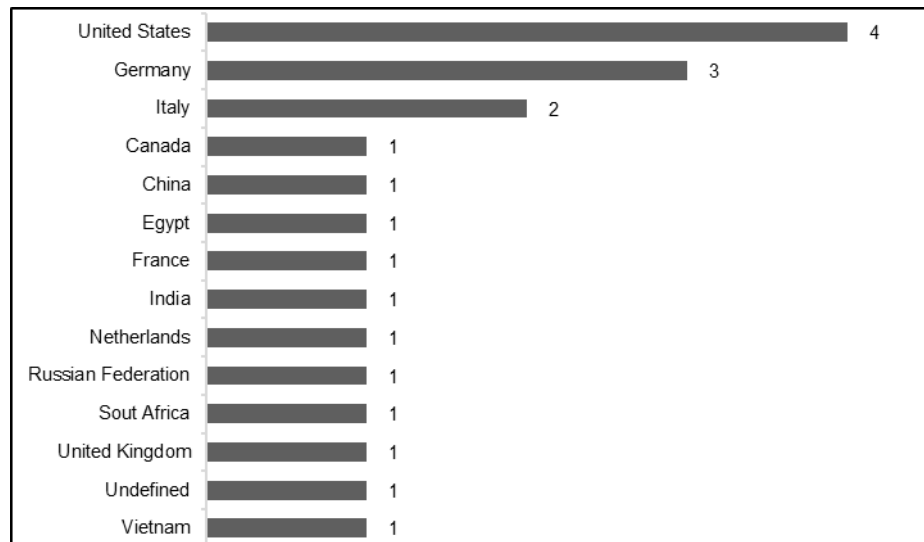


Fig 6. Number of publications by country/territory

Table 2 presents the consequences of greenwashing practices identified in the analyzed manuscripts, organized in descending order of citations. Given the impact of greenwashing, its effects can be considered at four levels: consumers, investors, cooperating

companies, and owners/shareholders. These results are consistent with the research conducted by Santos, Coelho, and Marques (2024) on greenwashing, which suggests that such practices harm consumers, brands, and organizations.

Table 2: Consequences of greenwashing portrayed in the analysed publications

Authors (date)	Citations	Consequences
Parguel, Benoit-Moreau, and Russell (2015)	404	Increases confusion/misinformation. Given the information overload, consumers often struggle to identify companies that are truly sustainable (e.g., furniture).
Rahman, Park, and Chi (2015)	169	Causes skepticism in consumers. Distrust and skepticism negatively influence consumers' purchasing intentions and the intention to participate in ecological actions promoted by companies and organizations (e.g., hotels).
Rausch and Kopplin (2021)	135	Influences purchase intention. Although consumers' attitudes towards sustainable products have a greater impact on purchase intentions, this association is, however, negatively influenced by consumers' concerns about greenwashing (e.g., clothing).
Szabo and Webster (2021)	131	Affects the company's profitability and can cause major ethical damage (e.g., consumer products and consulting firms).
Font, Elgammal, and Lamond (2017)	101	Manipulates society's values towards consumerism. It leaves the customer at ease, making it appear that the business has taken their environmental concerns into account (e.g., tourism).
Yang et al. (2020)	34	Harms consumers' and society's interests, despite offering significant benefits to interested parties (additional profits). Loss of attractiveness for potential investors. Prevents potentially interested parties from investing in a company that produces environmentally friendly products. Loss of brand trust among green brands. Affects social well-being.

Chun and Giebelhausen (2012)	25	Affects the credibility of companies and organizations that announce the adoption of green practices. The loss of credibility leads to decreased evaluations of these companies and organizations (e.g., services).
Cavazos et al. (2023)	1	Increases waste through increased consumerism (e.g., the food sector).
Ramtiyal et al. (2024)	0	Affects sustainable purchasing behavior, word-of-mouth advertising, and brand loyalty.
Bladt, van Capelleveen, and Yazan (2024)	0	Harms consumer well-being.
Geissmar, Niemand, and Kraus (2023)	0	Consumer misinformation. Surprisingly, sustainable information about unsustainable products increases purchase intent and word of mouth. In contrast, surprising and unsustainable information about sustainable products has opposite effects. Allocates resources to unsustainable products that could be used to produce sustainable products.
Boncinelli et al. (2023)	2	Threatens the development of an environmentally and economically sustainable market, as companies can potentially increase their market share among consumers, especially those with ecological concerns (e.g., the food sector).
Firsanova et al. (2022)	0	Loss of consumer confidence. Consumers lose trust in companies and the principles of sustainable development.

At the consumer level, the phenomenon of greenwashing can result in consumer distrust and confusion (Geissmar, Niemand, & Kraus, 2023; Parguel, Benoit-Moreau, & Russell, 2015; Firsanova et al., 2022), which in turn generates skepticism (Rahman, Park, & Chi, 2015; Rausch & Kopplin, 2021). The practice of greenwashing leads to several problems, such as influencing and confusing consumers' purchasing intentions (Martinez et al., 2020).

Rahman, Park, and Chi (2015) investigated consumer reactions to the greenwashing phenomenon in the accommodation industry. The results demonstrated that the hotels' green initiatives generated consumer skepticism, which, in turn, negatively influenced consumers' intention to participate in the linen reuse program and intention to revisit the hotel. Therefore, the authors concluded that skepticism negatively influences green purchasing intentions. Similar results had already been obtained in another research (Kwong & Balaji, 2016; Zhang et al., 2018). A study in the textile sector found that attitudes towards sustainable clothing have the greatest impact on purchase

intention. However, this correlation is negatively influenced by consumers' concerns about greenwashing (Rausch & Kopplin, 2021). As this phenomenon is increasingly common, consumers are becoming more skeptical of companies that take advantage of environmental trends (Nguyen et al., 2019). On the one hand, greenwashing changes consumers' sustainable purchase intentions, making it difficult for them to evaluate products (Rausch & Kopplin, 2021; Gosselt, Rompay, & Haske, 2017). On the other hand, it alters the consumer-company/supplier relationship (Firsanova et al., 2021).

Greenwashing undermines favorable consumer perceptions about a company/organization, products, and/or services (Darke & Ritchie, 2007) when perceiving the difference between a company's performance and its green advertising (Nyilasy, Gangadharbatla, & Paladino, 2014), and the consumer's attitude towards the brand of sustainable products (Bladt, van Capelleveen, & Yazan, 2024). A brand's greenwashing behavior also negatively affects consumers' purchase intention for green products from other brands in the industry

(Wang, Ma, & Bai, 2019).

Greenwashing significantly affects consumers' brand attitude, green brand equity, purchase intention, and brand loyalty (Nguyen et al., 2019; Yang et al., 2020; Rahman, Park, & Chi, 2015; Rausch & Kopplin, 2021; Bladt, van Capelleveen, & Yazan, 2024; Zhang et al., 2018; Ramtiyal et al., 2024; Akturan, 2018) and leads to negative word of mouth (Leonidou & Skarmeeas, 2017). Greenwashing impacts perceptions, skepticism, purchase intent, trust, and word of mouth (Santos, Coelho, & Marques, 2023). Furthermore, information overload can lead to confusion. Even the most conscious consumers can be attracted by misleading advertising.

In this sense, companies can, in the short and medium term, increase sales volume, attract conscious consumers, and increase consumerism (Font, Elgammal, & Lamond, 2017; Cavazos et al., 2023), thereby improving profitability. Greenwashing products can potentially increase market share against non-greenwashed products (Boncinelli et al., 2023). However, greenwashing poses a major threat and does not offer a true competitive advantage (De Jong et al., 2018). With these deceptive practices, the consumers end up not realizing the consequences of their purchasing behavior (Horiuchi et al., 2009) because, in reality, instead of resources being directed to the production of products and provision of sustainable services, they end up being allocated to production of unsustainable goods and services causing damage to the environment, consumer well-being and Society as a whole (Kim & Selar, 2023; Yang et al., 2020; Font, Elgammal, & Lamond, 2017), and sometimes a violation of existing laws or legal regulations can occur. Consequently, such actions may be subject to criminal, contractual, and/or administrative sanctions, putting the reputation of the companies that carry them out at risk (Kim & Selar, 2023).

The literature also suggests that investors are less likely to invest in companies that engage in greenwashing, preferring those that do not, even though the latter may reveal bad corporate behavior. Managers also show little willingness to collaborate with companies that resort to these deceptive practices (Yang et al., 2020). The phenomenon of greenwashing constitutes a threat to the development of an environmentally and economically sustainable market (Boncinelli et al., 2023; Jakubczak & Gotowska, 2020). In

addition to deceiving consumers, greenwashing is considered an important barrier to the adoption of socially responsible practices (Leonidou & Skarmeeas, 2017). Consumers lose trust in companies, their declared sustainability values, and the principles of sustainable development in general (Firsanova et al., 2022). The difficulty of distinguishing truth from falsehood in green advertising creates general skepticism among consumers. This skepticism makes it difficult for truly environmentally friendly companies to communicate their environmental contributions, which, in some cases, discourages the development of truly green products (Paço & Reis, 2012).

In summary, greenwashing is a major problem in the modern economy that deceives consumers, harms the environment, and companies (Bladt, van Capelleveen, & Yazan, 2023). In this context, responsible companies must not only promote new products to the market through sustainable marketing but also educate consumers to recognize unfair greenwashing practices by other manufacturers. By increasing consumers' competence, companies cannot only reduce the negative effects of unfair product promotion practices but also help build trust among consumers (Firsanova et al., 2022).

Conclusion

In this research, a brief systematic literature review was conducted using the Scopus database. The work was developed in accordance with the PRISMA guidelines to examine the consequences of greenwashing practices.

In general, during the period under analysis, the number of published documents and citations has been increasing. Most of the documents were articles published in Western countries within the scope of Business, Management and Accounting, Social Sciences, and Environmental Science. These articles were published in journals such as "Business Strategy and the Environment", "Journal of Business Ethics", and "Journal of Cleaner Production".

Due to its impact and scope, greenwashing is considered a social, economic, and environmental phenomenon with significant consequences for society, consumers, investors, cooperating companies, owners, and shareholders of companies and organizations. In fact, greenwashing increases confusion and misinformation, fosters consumer skepticism,

influences purchase intentions, affects the company's profitability, can cause significant ethical damage, manipulates society's values towards consumerism, promotes waste, harms consumers' well-being and society's interests, undermines the credibility of companies and organizations, hinders sustainable purchasing behavior, and leads to a loss of consumer confidence.

In view of the above, companies and organizations should make every effort to ensure that their environmental performance aligns exactly with the green information disclosed, which must be clear and transparent. In fact, only then will sustainable development prevail.

This research has several limitations, including the reduced number of publications analyzed. For future research, it is recommended to include other databases to increase the number of publications analyzed. Still within the scope of future research, it would be interesting to develop procedures to analyze the consequences of greenwashing in specific sectors, such as textiles and food, which have evolved significantly at the expense of environmental degradation.

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