Trust or Trickery? A Systematic Review of Greenwashing and Branding

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ABSTRACT

This study aims to systematically review the relationship between greenwashing and branding, with a focus on how deceptive environmental claims influence brand trust, perceived authenticity, and consumer behaviour. It seeks to identify key trends, challenges, and opportunities in sustainable branding. A systematic review was conducted, analysing peer-reviewed articles, industry reports, and conference proceedings published between 2012 and 2024. Scopus, the largest citation and abstract database, was utilized. The selected studies addressing greenwashing and branding were further analysed using bibliometric tools. The findings reveal that greenwashing significantly erodes consumer trust and brand reputation, especially when misleading claims are uncovered. Consumer responses vary based on knowledge levels, with some easily persuaded by green claims and others critically evaluating brand messaging. Authenticity and transparency are found to be crucial in fostering sustainable branding and rebuilding consumer trust. This study synthesizes dispersed literature on greenwashing's impact on branding, offering a consolidated bibliometric analysis that highlights evolving research patterns. It extends understanding by linking consumer scepticism, trust dynamics, and brand authenticity within the sustainability discourse. This review provides original insights by bridging greenwashing and branding literature systematically. It offers a comprehensive synthesis that benefits academics, marketers, and policymakers working to advance ethical and sustainable branding practices.

Keywords: Greenwashing, Consumer Trust, Authenticity, Sustainable Marketing, Ethical Branding
JEL Classifications: M31, Q56, M14, D83

1. INTRODUCTION

The escalating prominence of sustainability in business practices has driven corporations to adopt green branding as a strategy to communicate their environmental commitments, a trend that has seen significant academic and managerial attention (Rahman and Nguyen☐Viet, 2023). Green branding serves as a differentiator in competitive markets, appealing to consumers' increasing preference for eco-friendly products and fostering brand loyalty through environmental consciousness (Le et al., 2024). As sustainability becomes a central concern across industries, corporations face growing pressure to align their branding strategies with the principles of environmental and social responsibility (Ha et al., 2022). This alignment has become even more critical as consumers demand greater transparency and accountability in corporate environmental practices (Delmas and Burbano, 2011).

However, the widespread adoption of green branding has been accompanied by the rising prevalence of greenwashing, a deceptive practice in which organizations exaggerate or falsely claim their environmental contributions (Santos et al., 2024). Greenwashing erodes consumer trust and undermines the integrity of genuine sustainability efforts by masking unsustainable practices with superficial environmental claims (Zhang and Yuan, 2024). This phenomenon not only poses ethical challenges but also creates substantial risks to corporate reputation, as consumers increasingly scrutinize the authenticity of environmental claims made by brands

(Parguel et al., 2011). Moreover, greenwashing can distort market competition by allowing firms with unsustainable practices to reap the benefits of appearing environmentally responsible without incurring the costs of actual compliance (Parguel et al., 2011).

Research on greenwashing has proliferated over the past two decades, encompassing its psychological, behavioural, and economic dimensions (Nazish et al., 2024). Studies have explored the motivations driving greenwashing, including regulatory pressures, market opportunities, and the desire to gain a competitive advantage in sustainability-conscious markets (Sajid et al., 2024). In parallel, research has examined the impact of greenwashing on consumer behaviour, revealing that perceived greenwashing leads to diminished trust, lower purchase intentions, and increased scepticism toward green claims in general (Le et al., 2024). These findings underscore the complex interplay between corporate greenwashing practices and consumer perceptions, which can have far-reaching implications for both brand equity and environmental performance (Zaid et al., 2024).

Despite these advancements, the literature on greenwashing remains fragmented, with significant gaps in understanding its broader implications for branding and sustainability (Qayyum et al., 2023). Existing studies have primarily focused on individual components of greenwashing, such as its antecedents and consequences, without integrating these insights into a cohesive framework (Camilleri, 2022). This lack of integration limits the theoretical development of the field and hinders the identification of effective strategies to combat greenwashing (Sturm et al., 2024). Furthermore, while greenwashing has been widely recognized as a barrier to achieving sustainable development goals, particularly SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action), the mechanisms through which it undermines these goals have not been thoroughly explored (Ghouse et al., 2024).

The need for a systematic consolidation of greenwashing research is further amplified by the increasing reliance on green branding as a tool for achieving competitive advantage in sustainability-oriented markets (Leonidou et al., 2022). Green branding not only influences consumer behaviour but also plays a critical role in shaping public perceptions of corporate responsibility and environmental stewardship (Chen, 2025). However, the effectiveness of green branding is contingent upon its perceived authenticity, which is compromised when greenwashing practices are uncovered (Parguel et al., 2011; 2015). This tension between trust and trickery highlights the urgent need for a comprehensive understanding of the dynamics between greenwashing and branding.

Recent advancements in bibliometric and systematic review methodologies provide an opportunity to address these gaps by synthesizing the extant literature on greenwashing and branding (Donthu et al., 2021; Fakhar et al., 2023; Mukherjee et al., 2022). Bibliometric analyses offer a quantitative approach to mapping the intellectual structure of a field, enabling researchers to identify dominant trends, influential authors, and key conceptual frameworks (Khan et al., 2025). Systematic reviews, on the other hand, provide a qualitative lens for synthesizing insights from diverse studies, offering a holistic understanding of complex phenomena (Mukherjee et al., 2023). Together, these methodologies can illuminate the evolution of greenwashing research, uncovering its intersections with branding and sustainability while identifying critical gaps for future investigation (Kraus et al., 2022). This review aims to systematically analyze the interplay between greenwashing and branding, addressing the following research questions (RQ):

RQ1: What are the current trends and patterns in greenwashing research within branding literature?

RQ2: What avenues exist for future research to advance the understanding of greenwashing and branding?

Through an integrative analysis of the literature, this study seeks to contribute to the academic and practical understanding of greenwashing by highlighting its implications for branding, consumer trust, and sustainable development. By synthesizing existing knowledge and identifying critical research gaps, this review provides a foundation for advancing the discourse on greenwashing and branding, fostering greater transparency and accountability in corporate sustainability practices.

2. MATERIALS AND METHODS

This systematic review on greenwashing and branding adhered to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, which ensure transparency and reproducibility in the review process (Moher et al., 2009). The methodological process followed four stages: identification, screening, eligibility, and inclusion, as visualized in the PRISMA flow diagram (Liberati et al., 2009).

2.1. Identification
The identification stage involved a comprehensive search of peer-reviewed articles in two widely recognized databases, Scopus and Web of Science, for their extensive and multidisciplinary coverage of marketing and management literature (Donthu et al., 2021). The search was limited to studies published between 2012 and 2024 to capture the most recent developments in greenwashing and branding research (Ha et al., 2022; Le et al., 2024). The keywords "greenwashing" and "branding" were used with Boolean operators "OR" and "AND," along with truncation (*) to broaden the scope and include all relevant literature (Parguel et al., 2015). This search yielded an initial dataset of 187 articles (Chen and Chang, 2013).

2.2. Screening
Screening was conducted in two stages to ensure relevance and quality. In the first stage, titles and abstracts were reviewed, and 82 articles were excluded for addressing topics unrelated to the intersection of greenwashing and branding, such as technical environmental assessments or non-marketing studies (Christofi et al., 2017; Leonidou et al., 2022). The second stage involved excluding articles based on source type (e.g., non-peer-reviewed sources) and language (e.g., non-English articles) (Ishrat et al., 2023; Rashid et al., 2024). As a result, five articles with irrelevant source types and two non-English articles were removed, leaving 98 articles for full-text screening (Vrontis et al., 2021).

2.3. Eligibility

The eligibility assessment involved a detailed review of the full texts of the remaining 98 articles. Articles were included if they explicitly addressed greenwashing practices within the context of branding and provided empirical or conceptual insights. Studies that lacked substantive contributions to the topic or failed to connect greenwashing with branding frameworks were excluded. This stage resulted in the removal of one additional article, leaving a final sample of 97 articles.

2.4. Inclusion

The final sample of 97 articles formed the basis of this review. These studies utilized diverse methodological approaches, including empirical studies, theoretical analyses, and bibliometric reviews, to explore greenwashing and its implications for branding (Fakhar et al., 2023; Khan et al., 2024). Pritchard (1969) defined bibliometrics as "the application of mathematical and statistical methods to analyse books and other means of communication" (p. 349). The review employed bibliometric analysis, a robust and quantitative method for synthesizing large bodies of literature, which facilitated the identification of key trends, influential authors, and emerging themes in greenwashing research (Khan, Khan, et al., 2025; Khan, Uddin, et al., 2025; Rashid, Abdullah, Khatib, et al., 2024). This approach provided a comprehensive understanding of the field's intellectual structure and thematic evolution (Khan et al., 2024). By employing this rigorous and systematic process, this review not only synthesizes the extant literature but also identifies critical research gaps and proposes future research directions in greenwashing and branding. The findings aim to advance academic and practical understanding of green branding strategies, consumer trust, and corporate accountability.

3. ANALYSIS AND RESULTS

This section presents the results of the systematic review of greenwashing and branding research. Employing performance analysis and bibliometric techniques, this section identifies key publication trends, prolific contributors, influential works, and thematic evolution in the domain.

3.1. Performance Analysis

Performance analysis was conducted to quantify the research output and impact of greenwashing and branding studies. Table 1 summarizes the key performance metrics derived from the dataset. The dataset comprises 97 articles published in 70 journals between 2012 and 2024. These articles collectively received 3,612 citations, with an average of 37.24 citations per article. The dataset reveals a

Table 1: Publications and citations trends for OPE research

Metric	Value
Total Publications (TP)	97
Total Journals (TJ)	70
Total Citations (TC)	3612
Average citations per article	37.24
h-Index	33

Period of coverage=2012-2024

growing scholarly interest in greenwashing and branding, with an h-index of 33 demonstrating the significant impact and influence of these studies on the academic discourse (Tahir et al., 2020).

3.1.1. Annual publication trends

The annual publication trends, visualized in Figure 1, highlight a steady increase in research activity on greenwashing and branding. Since 2012, there has been a notable growth in publications, with 2023 emerging as the most productive year. This surge aligns with heightened consumer awareness of environmental sustainability and increased scrutiny of corporate green claims (Rahman & Nguyen-Viet, 2023). Early studies predominantly focused on conceptualizing greenwashing, while recent works explore its implications for consumer trust, regulatory frameworks, and branding strategies (Parguel et al., 2015). The sharp rise in publications post-2018 reflects the field's response to global sustainability initiatives, such as the UN Sustainable Development Goals (SDGs), particularly SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action) (Camilleri, 2021). Lastly, Table 2 presents the country-wise distribution of research publications in the domain, with the United States being the most highly represented.

3.1.2. The most prolific authors

The contributions of prolific authors in the domain of greenwashing and branding are essential for advancing theoretical frameworks, empirical studies, and practical applications. Table 3 identifies the most productive authors in the field, highlighting their total publications (TP), total citations (TC), and affiliations. The top authors in greenwashing and branding research have significantly shaped the field through diverse methodological approaches and thematic focus. Parguel et al. (2015) highlight sustainability ratings as deterrents to greenwashing, while Nyilasy et al. (2014) explore consumer scepticism and cognitive dissonance. Szabo and Webster (2021) provide a systematic review, categorizing greenwashing typologies, and Schmuck et al. (2018) examine emotional responses like anger and disappointment. Velikova et al. (2016) focus on cultural dimensions, emphasizing cross-cultural variations in consumer perceptions. Collectively, these works underscore the importance of transparency, authenticity, and tailored strategies in addressing greenwashing's challenges.

3.1.3. Most influential works (articles) and outlets (journals)

Highly cited articles are pivotal in shaping the intellectual foundation of any research field. In the context of greenwashing and branding, these articles provide valuable insights into theoretical frameworks, empirical findings, and emerging trends. Table 4 highlights the top five most-cited articles from the dataset, offering a snapshot of their contributions to the domain. The most-cited works in greenwashing and branding collectively advance our understanding of consumer trust, emotional responses, and regulatory mechanisms. Parguel et al. (2015) emphasize sustainability ratings as deterrents to greenwashing, while Nyilasy et al. (2014) explore consumer scepticism and cognitive dissonance. Szabo and Webster (2020) provide a systematic framework, highlighting typologies and research gaps. Schmuck et al. (2018) investigate emotional reactions, such as anger, that damage brand equity, and Sirieix et al. (2016) explore

Figure 1: Article screening procedure using PRISMA protocol
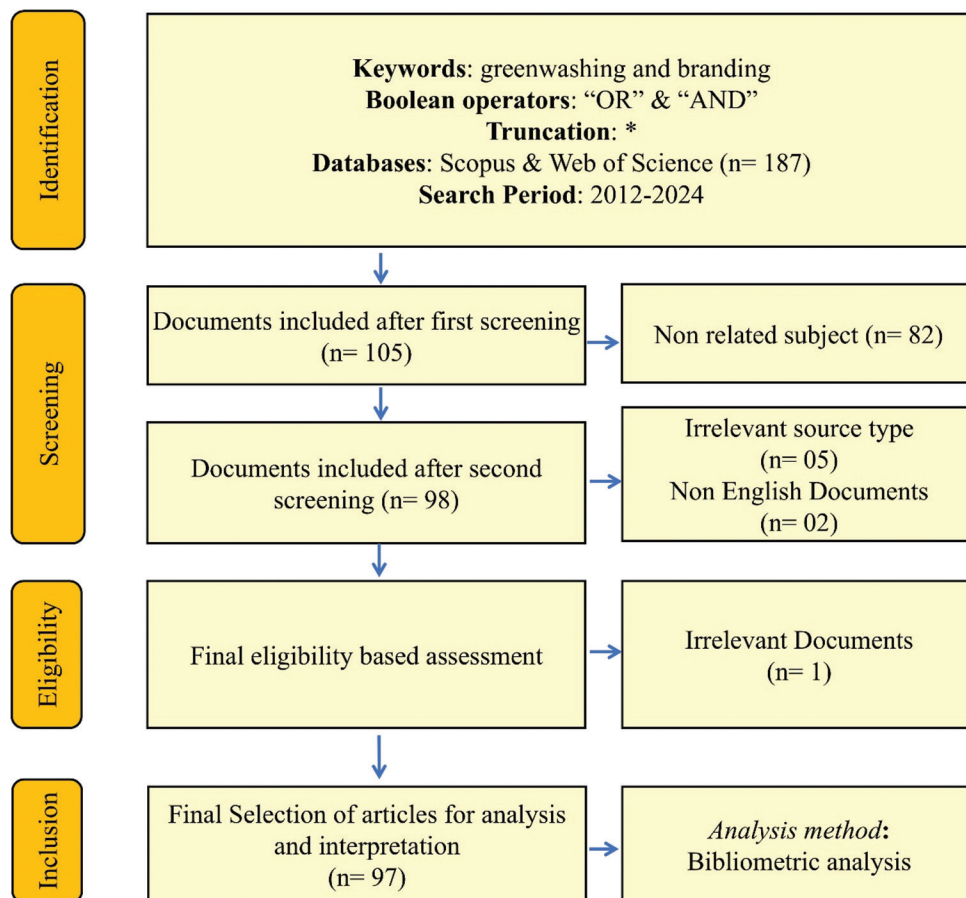
Source: Adapted from Moher et al. (2009) and Page et al. (2021)

Table 2: Country-based scientific production

Country	Publications (TP)	Citations (TC)
United States	32	1548
United Kingdom	21	827
Australia	15	643
Germany	10	416
France	8	178

Source: Bibliometrix-R

Table 3: Top 5 prolific authors as per productivity

Rank	Authors	Total publications (TP)	Total citations (TC)
1	Parguel B.; Benoît-Moreau F.; Larceneux F.	1	537
2	Nyilasy et al. (2014); Gangadharbatla H.; Paladino A.	2	427
3	Szabo S.; Webster J.	1	312
4	Schmuck D.; Matthes J.; Naderer B.	1	243
5	Sirieix L.; Delanchy M.; Remaud H.; Zepeda L.; Gurviez P.	1	200

Total publication (TP), Total citation (TC)
Source: Bibliometrix-R

Table 4: Top 5 highly cited articles in OPE research

Rank	Author (s)	Citations (TC)
1	Parguel et al. (2015): "How sustainability ratings might deter greenwashing"	537
2	Nyilasy et al. (2013): "The psychology of greenwashing and consumer responses"	427
3	Szabo and Webster (2020): "Greenwashing revisited: A systematic review"	312
4	Schmuck et al. (2018): "The role of emotions in greenwashing"	243
5	Sirieix et al. (2016): "Consumer perceptions of green branding strategies"	200

Total publication (TP), Total citation (TC)
Source: Bibliometrix-R

Table 5: Top 3 Outlets as per the productivity in OPE research

Rank	Journal	Citations (TC)
1	Journal of Business Ethics	827
2	Journal of Brand Management	643
3	Journal of Environmental Psychology	478

Total publication (TP), Total citation (TC)
Source: Bibliometrix-R

cultural nuances in consumer perceptions. Together, these studies underscore the need for transparency, tailored branding, and robust regulations to counteract greenwashing.

Table 5 lists the leading journals contributing to greenwashing and branding research, with the Journal of Business Ethics and Journal of Brand Management at the forefront. These journals are

renowned for publishing high-impact studies that bridge marketing, ethics, and sustainability, reflecting the interdisciplinary nature of greenwashing research (Camilleri, 2021).

3.2. Science Mapping

3.2.1. Keyword-based co-occurrence analysis

Using co-occurrence analysis, this section identifies the central themes and clusters within greenwashing and branding research. Following methodologies similar to Belfiore et al. (2022), we conducted a keyword co-occurrence analysis on 97 articles using VOSviewer, applying a threshold of at least three occurrences. This analysis yielded 47 keywords that met the criteria, forming five major thematic clusters, as shown in Figure 2.

- Cluster 1 (Red Network): Greenwashing and Consumer Skepticism

This cluster comprises 13 keywords, including "green marketing," "green scepticism," "green brand equity," and "attribution theory." These terms reflect the interplay between corporate sustainability claims and consumer scepticism. Research in this cluster explores how greenwashing diminishes consumer trust and undermines brand equity (Chen and Chang, 2013). For instance, studies reveal that greenwashing increases cognitive dissonance, as consumers struggle to reconcile a company's environmental claims with its actual practices (Nyilasy et al., 2014). Parguel et al. (2015) emphasize the role of third-party certifications in mitigating scepticism by enhancing the credibility of sustainability

claims. Similarly, Schmuck et al. (2018) highlight the emotional consequences of greenwashing, such as anger and disappointment, which further erode trust. Research also points to the role of attribution theory in shaping consumer perceptions, as consumers assess the sincerity of green marketing based on the company's motives and actions (Carlini et al., 2019). Overall, this cluster underscores the need for authenticity in green marketing strategies. Brands must align their sustainability claims with genuine actions to maintain trust and foster long-term consumer loyalty.

- Cluster 2 (Green Network): Green Advertising and Purchase Intentions

The second cluster focuses on the relationship between green advertising and consumer purchase intentions, featuring keywords like "green advertising," "purchase intentions," and "environmental knowledge." Research in this area examines how environmental messaging influences consumer behaviour, highlighting both its persuasive potential and its limitations (Szabo and Webster, 2020). Green advertising is often seen as a double-edged sword. On one hand, it increases environmental awareness and encourages sustainable consumption (Leonidou et al., 2022). On the other hand, misleading claims can backfire, leading to scepticism and reduced purchase intentions (Nyilasy et al., 2013). Studies also emphasize the role of consumer environmental knowledge in moderating these effects. Well-informed consumers are more likely to detect greenwashing and react negatively, while less-informed consumers may be swayed by superficial claims (Schmuck et al.,

Figure 2: Co-occurrence network
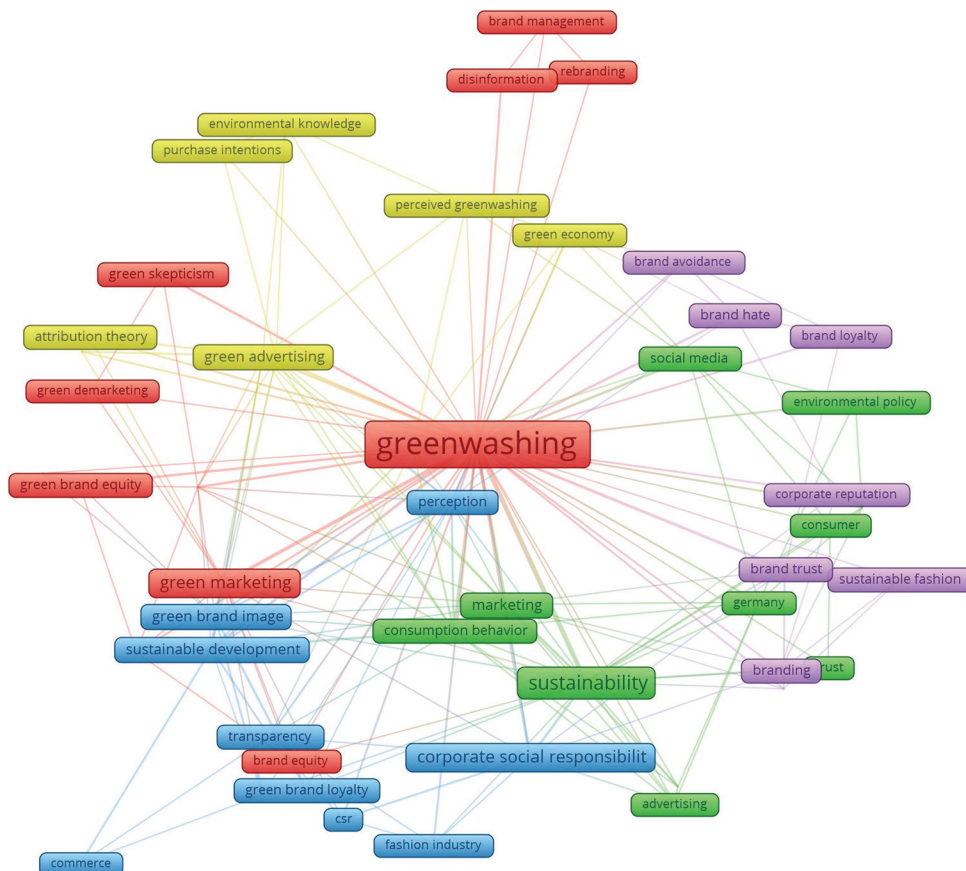
Source: VOSviewer

2018). Attribution theory is another critical lens within this cluster. Research shows that consumers are more likely to support brands perceived as genuinely committed to sustainability rather than those engaging in opportunistic greenwashing (Carlini et al., 2019). This cluster calls for a balanced approach to green advertising, where transparency and evidence-based claims take precedence.

- Cluster 3 (Blue Network): Corporate Social Responsibility and Brand Equity

The third cluster focuses on the relationship between corporate social responsibility (CSR) and brand equity, featuring keywords such as "sustainability," "corporate reputation," and "brand trust." CSR is a critical component of branding strategies, as it enhances consumer perceptions of corporate ethics and responsibility (Camilleri, 2021). However, the misuse of CSR initiatives for greenwashing purposes can have the opposite effect, damaging brand trust and equity (Szabo and Webster, 2020). Research in this cluster emphasizes the dual role of CSR as both an opportunity and a risk. Genuine CSR initiatives strengthen corporate reputation and foster brand loyalty, as consumers increasingly value companies that demonstrate a commitment to environmental and social issues (Leonidou et al., 2013). Conversely, insincere CSR efforts, such as exaggerated claims or incomplete disclosures, lead to reputational damage and consumer backlash (Parguel et al., 2015). One emerging theme in this cluster is the role of transparency. Schmuck et al. (2018) highlight the importance of open communication in building consumer trust. Companies that disclose both their achievements and shortcomings in sustainability are more likely to maintain credibility. This cluster underscores the need for robust CSR practices that align with long-term brand equity goals.

- Cluster 4 (Yellow Network): Social Media and Consumer Engagement

The fourth cluster examines the role of social media in shaping greenwashing narratives and fostering consumer engagement. Keywords in this cluster include "social media," "brand loyalty," "brand avoidance," and "disinformation." Social media platforms have become critical arenas for both promoting and critiquing corporate sustainability efforts (Camilleri, 2021). On one hand, social media allows brands to showcase their green initiatives and engage with consumers in real-time, enhancing transparency and trust (Nyilasy et al., 2013). On the other hand, it also provides a platform for consumers to expose and amplify instances of greenwashing. Negative reviews, viral posts, and activist campaigns can quickly escalate, leading to significant reputational damage (Schmuck et al., 2018). Disinformation is another critical theme in this cluster. Studies reveal how false or misleading claims about sustainability spread through social media, complicating efforts to identify genuine green initiatives (Szabo and Webster, 2020). This cluster highlights the need for brands to actively manage their social media presence, addressing consumer concerns promptly and authentically to mitigate the risks of greenwashing narratives.

- Cluster 5 (Purple Network): Sustainable Fashion and Corporate Reputation

The final cluster focuses on sustainable fashion and its impact on corporate reputation, featuring keywords such as "sustainable fashion," "environmental policy," and "corporate reputation." This cluster highlights the unique challenges and opportunities faced by the fashion industry, which is often scrutinized for its environmental impact (Leonidou et al., 2013). Research in this area explores how sustainable fashion brands position themselves as environmentally responsible, using transparency and innovation to differentiate from competitors (Parguel et al., 2015). However, instances of greenwashing—such as vague claims, lack of evidence, or selective disclosure—undermine these efforts, leading to reputational risks and consumer scepticism (Szabo and Webster, 2020). Studies also emphasize the role of environmental policy in shaping industry practices. Brands that comply with stringent environmental regulations are more likely to earn consumer trust and enhance their corporate reputation (Schmuck et al., 2018). This cluster calls for greater accountability and innovation in the fashion industry to align with sustainability goals and mitigate the risks of greenwashing.

4. DISCUSSION AND IMPLICATIONS

This systematic review highlights the pervasive nature of greenwashing in branding, revealing its impacts on consumer trust, brand equity, and corporate reputation. Greenwashing erodes trust, increases scepticism, and diminishes purchase intentions (Chen and Chang, 2013; Leonidou et al., 2013). Studies emphasize transparency and third-party certifications as effective measures to restore trust (Parguel et al., 2015). Greenwashing significantly affects brand equity, with exaggerated claims and omissions harming authenticity (Szabo and Webster, 2020). Negative emotions, such as anger, triggered by deceptive practices, further erode consumer loyalty (Schmuck et al., 2018). CSR initiatives offer opportunities to enhance brand reputation, but insincerity risks reputational damage (Camilleri, 2021). Social media amplifies both greenwashing narratives and consumer scrutiny, making authentic engagement critical (Nyilasy et al., 2013). Research gaps include the lack of cross-cultural studies, underexploration of technologies like blockchain for transparency, and limited longitudinal analyses (Szabo and Webster, 2020; Camilleri, 2021). Addressing these gaps will advance theoretical and practical insights into green branding.

4.1. Implications

The findings of this systematic review on greenwashing and branding have significant theoretical, practical, and policy implications. These insights contribute to the academic discourse on sustainable marketing, offer actionable strategies for practitioners, and highlight areas for regulatory intervention.

4.1.1. Theoretical implications

This review advances the theoretical understanding of greenwashing by synthesizing its impact on consumer trust, brand equity, and corporate reputation. It consolidates diverse perspectives, including attribution theory and cognitive dissonance theory, as critical lenses for understanding consumer responses to greenwashing (Nyilasy et al., 2013; Schmuck et al., 2018). By mapping the thematic evolution of greenwashing research, this

study provides a comprehensive framework for future theoretical exploration, particularly in under-researched areas such as the intersection of greenwashing and emerging technologies like blockchain and AI (Camilleri, 2021). Additionally, it identifies the lack of cross-cultural studies as a major gap, urging scholars to adopt comparative approaches to understand greenwashing's varied manifestations across global markets (Leonidou et al., 2013).

4.1.2. Practical implications

For marketing practitioners, the review underscores the critical importance of transparency and authenticity in green branding strategies. Research demonstrates that deceptive practices erode consumer trust, reduce purchase intentions, and harm long-term brand equity (Chen and Chang, 2013; Szabo and Webster, 2020). Brands must ensure that their sustainability claims are supported by verifiable evidence, such as third-party certifications, to build credibility and avoid scepticism (Parguel et al., 2015). The findings also emphasize the role of digital media in amplifying greenwashing narratives. While social media provides opportunities for engaging with consumers and showcasing sustainability initiatives, it also serves as a platform for exposing deceptive practices (Nyilasy et al., 2013). Companies should invest in proactive social media strategies to address consumer concerns promptly and authentically, mitigating the reputational risks associated with greenwashing (Schmuck et al., 2018). Furthermore, industry-specific insights, particularly in the fashion sector, highlight the need for brands to align their practices with stringent environmental policies to maintain consumer trust and enhance corporate reputation (Leonidou et al., 2013; Parguel et al., 2015).

4.2. Future Research Directions

This systematic review identifies several avenues for future research that can enhance the theoretical understanding and practical mitigation of greenwashing in branding. One critical area for exploration is the need for cross-cultural studies. Most existing research focuses on Western contexts, neglecting how greenwashing is perceived in non-Western and emerging economies (Leonidou et al., 2013). Cultural differences significantly influence trust and scepticism toward green branding, as collectivist societies may emphasize community-oriented benefits over individual gains (Carlini et al., 2019). Expanding research to diverse cultural and regulatory environments would provide a more comprehensive understanding of global greenwashing practices. The potential of emerging technologies like blockchain and artificial intelligence (AI) also warrants attention. Blockchain can enhance transparency by providing immutable records of supply chain practices, enabling consumers to verify sustainability claims independently (Camilleri, 2021). Similarly, AI could be utilized to analyze corporate communications and identify patterns indicative of greenwashing (Szabo and Webster, 2020). Research into the practical application and adoption of these technologies in green branding strategies could offer actionable insights for building trust and accountability in corporate sustainability efforts (Nyilasy et al., 2013). Longitudinal studies represent another critical gap in the literature. Existing research predominantly relies on cross-sectional methods, which limit insights into the long-term

effects of greenwashing (Schmuck et al., 2018). Studies tracking consumer perceptions and brand equity over time would provide valuable information on how greenwashing impacts consumer loyalty and trust in the long run (Parguel et al., 2015). Additionally, longitudinal research could assess the effectiveness of corrective measures such as transparency initiatives and third-party certifications in mitigating the adverse effects of greenwashing (Leonidou et al., 2013).

Industry-specific research also remains underexplored, despite its critical importance. Greenwashing manifests differently across sectors, shaped by varying consumer expectations and regulatory pressures (Szabo and Webster, 2020). For instance, the fashion industry, given its high environmental impact, offers a unique context for studying how brands balance sustainability claims with accountability (Parguel et al., 2015). Future research could examine sector-specific dynamics and compare strategies across industries to identify best practices for mitigating greenwashing and enhancing consumer trust (Camilleri, 2021). Further, the role of emotions and psychology in consumer responses to greenwashing needs deeper exploration. While studies highlight emotions like anger and disappointment as key mediators, the underlying psychological mechanisms remain underexplored (Schmuck et al., 2018). Understanding how these emotions influence trust, scepticism, and purchasing behaviour could inform the development of branding strategies that address both cognitive and emotional dimensions (Chen and Chang, 2013). Such insights would be particularly valuable in designing communication strategies that restore consumer confidence in green brands. Social media's dual role in amplifying and exposing greenwashing also presents a fertile area for research. Platforms like Twitter and Instagram act as critical spaces for promoting green initiatives while simultaneously enabling consumer activism against deceptive practices (Nyilasy et al., 2013). Future research could explore how user-generated content and misinformation shape perceptions of green branding, as well as the effectiveness of corporate engagement strategies in addressing greenwashing allegations (Szabo and Webster, 2020). This line of inquiry would provide valuable insights into managing reputational risks in the digital age. Finally, interdisciplinary approaches could greatly enrich the field of greenwashing research. Combining insights from marketing, psychology, technology, and sociology could offer a more holistic understanding of greenwashing and its mitigation (Leonidou et al., 2013). For example, integrating consumer behaviour theories with advancements in AI could illuminate how digital tools can detect and counteract greenwashing effectively (Carlini et al., 2019). Collaborative efforts across disciplines and geographic boundaries would not only fill existing gaps but also pave the way for innovative solutions to promote transparency and accountability in branding. In conclusion, future research should prioritize cultural diversity, leverage emerging technologies, and adopt longitudinal and interdisciplinary approaches to deepen our understanding of greenwashing. Addressing these gaps will advance both theoretical and practical knowledge, enabling stakeholders to develop effective strategies for fostering transparency, trust, and authenticity in green branding.

5. CONCLUSION AND LIMITATIONS

This systematic review provides a comprehensive synthesis of the extant literature on greenwashing and branding, identifying key themes, theoretical advancements, and areas for further exploration. The findings underscore the pervasive nature of greenwashing and its multifaceted impacts on consumer trust, brand equity, and corporate reputation (Chen and Chang, 2013). The analysis reveals how greenwashing erodes consumer confidence by fostering scepticism and cognitive dissonance, which negatively influence purchase intentions and loyalty (Nyilasy et al., 2013; Schmuck et al., 2018). Furthermore, the role of corporate social responsibility (CSR) as both an opportunity and a risk highlight the delicate balance between authentic branding and reputational harm (Camilleri, 2021). The thematic clusters identified in the co-occurrence analysis illuminate the complex interplay between green marketing strategies, consumer perceptions, and digital dynamics. For instance, the amplification of greenwashing narratives through social media underscores the need for brands to actively engage with consumers to mitigate reputational risks (Szabo and Webster, 2020). Additionally, the unique challenges faced by sectors like fashion highlight the importance of industry-specific strategies for addressing greenwashing (Parguel et al., 2015). Collectively, these insights contribute to the growing body of knowledge on green branding, offering actionable recommendations for promoting transparency, authenticity, and accountability in marketing practices.

Despite these contributions, this review has several limitations that warrant consideration. First, the study focuses on articles published between 2012 and 2024, potentially excluding earlier seminal works that could provide historical context for the evolution of greenwashing practices (Leonidou et al., 2013). Second, the reliance on databases like Scopus and Web of Science may have introduced selection bias, as studies published in less widely indexed journals were not included. This limitation may restrict the diversity of perspectives, particularly from non-Western contexts (Szabo and Webster, 2020). Moreover, while the co-occurrence analysis identifies key thematic clusters, it does not fully capture the nuances of greenwashing practices across different cultural and regulatory environments (Carlini et al., 2019). Future research should address these gaps by incorporating a broader range of sources and adopting cross-cultural frameworks to enhance the generalizability of findings (Leonidou et al., 2013). Additionally, the lack of longitudinal studies limits the understanding of how consumer perceptions of greenwashing evolve and their long-term impact on brand equity (Schmuck et al., 2018). Addressing these limitations will further advance the theoretical and practical implications of greenwashing research. Lastly, this review highlights the critical importance of fostering trust and authenticity in green branding to mitigate the adverse effects of greenwashing. By addressing the identified limitations and gaps, future research can provide a more holistic understanding of greenwashing, offering innovative solutions to enhance transparency and accountability in corporate sustainability practices.

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