



A Systematic Review of Digital Communication and Green Consumer Behavior in the Digital Era

Irma Hidayati^{1*}✉, Galih Fajar Nugroho¹, Imroatul Khasanah¹

Universitas Diponegoro, Semarang, Indonesia¹

ABSTRACT

The growing urgency of environmental sustainability and the penetration of digital media have significantly reshaped consumer behavior in the digital era. Social media has evolved beyond a communication tool into an ecosystem that shapes consumers' psychological constructions through parasocial interactions with influencers, engagement in online communities, and trust-based information sharing. This systematic literature review aims to explore how digital communication and marketing strategies influence consumers' attitudes and behaviors toward sustainable products. Using the WataSe Uake database, 403 Scopus-indexed articles were initially identified. The selection process followed the PRISMA 2020 protocol, resulting in 54 final articles published between 2020 and 2025 that met the inclusion criteria. Thematic synthesis reveals three dominant research streams: (1) the role of social media in shaping sustainability awareness and consumer perception, (2) the effect of digital engagement such as e-word-of-mouth and green influencers on green purchase behavior, and (3) the integration of digital marketing communication to promote sustainable consumption. This review highlights the growing academic and practical importance of understanding digital engagement in fostering pro-environmental behavior, while identifying research gaps related to platform effectiveness, demographic variations, and theoretical frameworks.

Keywords: *Digital Engagement, Green Consumer Behavior, Social Media Marketing, Sustainable Purchase Intention.*

CORRESPONDING AUTHOR:

Irma Hidayati

Universitas Diponegoro, Semarang, Indonesia

contact: irmahida02@gmail.com

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1. | INTRODUCTION

Green purchasing behavior emerges from a combination of psychological influences, social dynamics, and personal value orientations. Research consistently shows that environmental consciousness, moral principles, and favourable attitudes toward sustainability significantly enhance individuals' intentions to engage in green consumption (Kolodenko et al., 2024; Lee et al., 2024; Ruangkanjanases et al., 2020; Yang et al., 2021). Emotional responses particularly feelings like pride or guilt and a heightened sense of moral responsibility also play a critical role in reinforcing consumers' choices to adopt environmentally responsible products (Bevan-dye & Synodinos, 2025; Lu & Park, 2025). Moreover, specific product attributes, including perceived quality, eco-certification labels, and associated health benefits, further shape consumer perceptions and strengthen their preferences toward green offerings (Consumers, 2024; Marcon et al., 2022).

In the digital environment, social media has emerged as a critical determinant in shaping pro-environmental consumer behavior. Empirical evidence indicates that influencers, electronic word-of-mouth (e-WOM), visual communication, and interactive online engagements collectively contribute to the enhancement of green brand image, consumer trust, and intentions to purchase environmentally sustainable products (Khare, 2026; Kim et al., 2020; Li, 2025; Le et al., 2025; Zhao et al., 2024). Furthermore, the intensity and consistency of social media exposure have been shown to strengthen sustainable consumption practices, particularly among younger cohorts who are highly embedded in digital ecosystems (Huo et al., 2024; Jahari et al., 2025; Yanyan, 2025).

Several barriers continue to impede the adoption of sustainable consumption behaviors. A key challenge is the intention–behavior gap, in which strong intentions to act sustainably do not always result in actual behavior because of high prices, perceived risks, or unclear and insufficient product information (Khan et al., 2025; Prakash et al., 2024; Sun et al., 2022). In addition, greenwashing poses a significant obstacle, as misleading environmental claims undermine consumer trust and reduce the overall credibility and effectiveness of sustainability-related communications (Hossain, 2022; Pires et al., 2020; Zeynalova, 2022; Zhang & Yuan, 2024).

Overall, the literature indicates that green consumer behavior emerges from a complex interplay of psychological, social, and digital communication factors. Social media functions as a critical mediator that links consumers' personal values to their green purchasing decisions by enhancing engagement and trust. Evidence from 55 reviewed articles including like, Boccia and Tohidi (2024), Javed and Mahmoud (2025), Naz et al. (2022), Wang (2025), and Zhang et al. (2025) highlights the need for a systematic examination of the dominant patterns and variables that shape the relationship between digital communication and green consumer behavior.

2. | LITERATURE REVIEW

Social media has become a central channel for promoting sustainable consumption, serving not only as a vehicle for information dissemination but also as a catalyst for shaping environmental values, attitudes, and behavioral intentions. Prior research consistently

highlights that digital communication can enhance consumers' understanding of sustainability issues and foster favorable evaluations of eco-friendly products (Hossain, 2022; Zhang et al., 2025). Informative, persuasive, and visually engaging content enables consumers to process environmental messages more effectively, contributing to stronger green brand perceptions and greater intention to engage in sustainable purchasing (Javed & Mahmoud, 2025).

A key mechanism through which social media influences behavior operates at the emotional, cognitive, and social levels. Emotionally charged messages such as appeals to pride, guilt, or moral responsibility have been shown to strengthen pro-environmental attitudes and motivate sustainable actions (Lu & Park, 2025). At the cognitive level, digital platforms enhance sustainability knowledge by providing accessible explanations, product transparency, and educational narratives that support informed decision-making. Socially, online interactions encourage community identification, strengthen norms supporting green behaviors, and cultivate trust through peer recommendations and e-WOM (Zhao et al., 2024; Boccia & Tohidi, 2024). These forms of engagement normalize sustainable lifestyles and embed them into consumers' social identities.

However, the influence of digital communication is not uniform. Several challenges, such as greenwashing, information overload, and perceived risks, limit the effectiveness of sustainability messages. Greenwashing, in particular, undermines message credibility, creating scepticism toward brand claims and weakening the impact of environmental communication (Pires et al., 2020; Zhang & Yuan, 2024). Cultural differences and variations in digital literacy further produce divergent consumer responses, contributing to gaps between sustainability intentions and real purchasing behavior (Prakash et al., 2024).

Furthermore, social influence in digital spaces plays a critical role in shaping sustainable choices. Parasocial relationships with influencers have been found to enhance trust in sustainability-related endorsements, thus affecting consumers' willingness to adopt green products (Zhao et al., 2024). Likewise, e-WOM helps reduce perceived risks and offers credibility through collective peer experiences, reinforcing positive sustainability norms. Yet, the growing complexity of digital ecosystems also introduces barriers, including inconsistent information, cultural differences in interpreting sustainability messages, and discrepancies between consumers' expressed intentions and their actual behaviors (Prakash et al., 2024). Digital communication, when credible and effectively designed, can elevate environmental awareness, strengthen moral and emotional engagement, and cultivate normative support for sustainable lifestyles. However, its influence remains contingent on message authenticity, cultural relevance, and the alignment between digital intentions and offline behaviors.

3. | RESEARCH METHOD

This study applies the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework as the primary guideline for conducting a systematic literature review. PRISMA is widely recognized for ensuring that the processes of identifying, selecting, and analyzing academic publications are carried out in a structured, transparent, and replicable manner. A systematic literature review is understood as an organized and objective procedure for locating, evaluating, and synthesizing relevant research.

In this study, the literature search was conducted using the Scopus database, accessed through the Watase Uake platform. The search strategy incorporated keywords such as “green consumer behavior,” “social media on green consumer,” “digital communication for

sustainability,” and “green purchase intention.” The initial search process identified a total of 403 articles from Scopus, supplemented by one additional article from an external source, resulting in an initial dataset of 404 records.

All records were subsequently screened using predefined inclusion and exclusion criteria. This screening process ensured that each selected article was relevant to the central focus of the study, namely the relationship between digital communication and green consumer behavior. After assessing duplicates, relevance, methodological quality, and completeness, the number of articles was progressively reduced from the identification stage to the eligibility stage. In the final step, 55 articles were deemed suitable for further analysis, as illustrated in the PRISMA flow diagram presented in Figure 1.

Table 1. Articles Criteria

Criteria Inclusion	Criteria Exclusion
Research articles published 2020-2025	Research articles published before 2020
Scopus-indexed articles (Q1–Q4)	Articles not indexed in Scopus
Research articles that focus on discussing green consumer behavior, green purchase intention, or digital communication	Articles not relevant to green consumer behavior
Full-text articles available	Articles without full text or abstract-only records
Empirical studies (survey/experimental)	Non-empirical review papers

After the screening process was completed, a total of 55 articles were deemed eligible and included in the final analysis. The detailed steps of the screening procedure, along with the number of articles retained at each stage, are presented in the PRISMA flow diagram in Figure 1, covering the phases of identification, screening, and final selection of relevant studies.

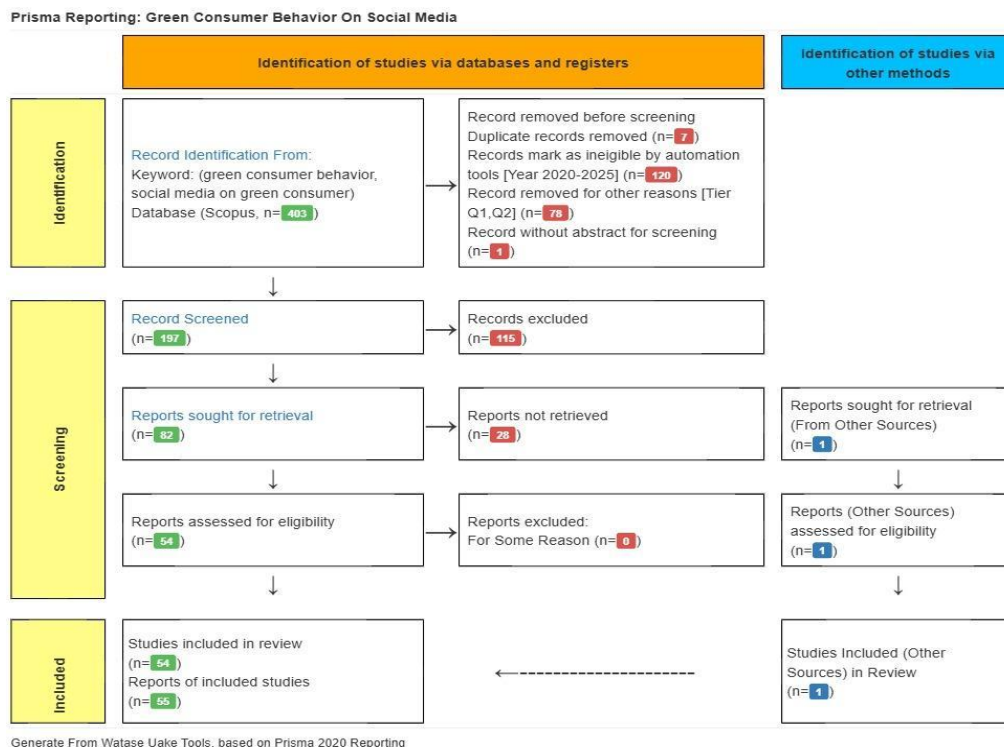


Figure 1. Systematic Literature Review PRISMA

4. | RESULTS AND DISCUSSION

The review of the 55 selected articles indicates that social media plays a significant role in shaping consumers' attitudes and purchase intentions toward environmentally friendly products. Informative, dialogic, and engaging digital content has been shown to enhance consumer knowledge, awareness, and positive attitudes toward sustainability (Hossain, 2022; Zhang et al., 2025). Moreover, social media contributes to strengthening green brand image and consumer trust, which subsequently influence green purchase intention (Consumers, 2024; Javed & Mahmoud, 2025).

The influence of social media operates through emotional, cognitive, and social pathways. Emotional appeals such as feelings of pride or guilt motivate pro environmental behavior (Lu & Park, 2025). While parasocial relationships with influencers and electronic word of mouth (e-WOM) enhance trust and help normalize green consumption practices (Zhao et al., 2024; Boccia & Tohidi, 2024). Nevertheless, several barriers including greenwashing, cultural differences, and risk perceptions continue to limit the effectiveness of digital sustainability messages (Pires et al., 2020; Zhang & Yuan, 2024).

Table 2. Key Themes

Theme	Description	References
Digital Education	Social media enhances sustainability awareness and understanding	(Hossain, 2022)
Emotions	Emotional content encourages pro-environmental attitudes	(Lu & Park, 2025)
Influencers	Parasocial relationships influence green purchasing choices	(Zhao et al., 2024)
e-WOM	Online recommendations promote green consumption behavior	(Boccia & Tohidi, 2024)
Challenges	Greenwashing and information-related risks undermine message effectiveness	(Pires et al., 2020)

The most frequently applied theoretical framework is the Theory of Planned Behavior (TPB). TPB posits that the intention to purchase environmentally friendly products is shaped by three core components: attitudes toward the behavior, subjective norms derived from the social environment, and perceived behavioral control. In the digital context, these components are increasingly influenced by exposure to sustainability-related content, levels of social media engagement, and consumers' trust in the information they encounter (Li, 2025; Kim et al., 2020). Existing research further demonstrates that positive attitudes formed through digital messages, along with social pressure from online communities, significantly enhance consumers' intentions to engage in green purchasing (Sun et al., 2022).

In addition to TPB, two others frequently referenced theoretical frameworks are the Value Belief Norm (VBN) theory and the Stimulus Organism Response (SOR) model. The VBN framework highlights the role of environmental values and moral responsibility in driving

sustainable consumption behavior, particularly when moral or ethical messages are disseminated through social media platforms (He & Chen, 2023; Jahari et al., 2025). Meanwhile, the SOR model explains how digital content such as emotional appeals or sustainability focused visuals functions as a stimulus that shapes consumers' psychological states (the organism), including their emotions and perceptions, which subsequently lead to responses such as green purchase intentions or actual eco-friendly behaviors (Javed & Mahmoud, 2025). Collectively, these theories reinforce the notion that social media serves not only as an information channel but also as a powerful psychological and social medium that influences the formation of green consumer behavior.

The review of the 55 selected articles demonstrates that digital communication particularly through social media plays a critical role in shaping green consumer behavior and purchasing decisions. Informative and persuasive digital content has been shown to enhance consumers' sustainability knowledge and to strengthen positive attitudes toward environmentally friendly products (Hossain, 2022; Zhang et al., 2025). Social media further serves as an interactive environment that enables consumers to receive sustainability messages in a more personal, dialogic, and visually engaging manner, thereby contributing to the development of a strong green brand image and increasing green purchase intentions (Javed & Mahmoud, 2025).

Furthermore, social factors within the digital media environment make a substantial contribution to shaping green consumer behavior. Parasocial relationships between consumers and influencers, as well as the influence of electronic word-of-mouth (e-WOM) within online communities, have been shown to enhance trust and strengthen social norms that encourage sustainable consumption practices (Zhao et al., 2024; (Boccia & Tohidi, 2024). Nevertheless, several challenges persist. One major concern is the prevalence of greenwashing, which undermines the credibility of digital sustainability messages and weakens consumer trust (Pires et al., 2020; Zhang & Yuan, 2024). In addition, risk perceptions, cultural differences, and the persistent gap between consumers' intentions and their actual purchasing behaviors continue to hinder the realization of consistent green purchasing decisions (Prakash et al., 2024).

5. | CONCLUSION

This systematic literature review demonstrates that social media plays a strategic role in shaping green consumer behavior. Effective digital communication delivered through informative content, emotional messaging, influencers, and electronic word of mouth (e-WOM) has been shown to enhance consumer awareness, foster positive attitudes, and strengthen purchase intentions toward environmentally friendly products. Psychological factors, such as personal values and moral emotions, along with social factors, including identification with online communities, emerge as powerful drivers of sustainable behavioral outcomes. However, the effectiveness of digital sustainability messages is also constrained by several challenges, including greenwashing, cultural variations, and the persistent intention–behavior gap.

Overall, this study reaffirms that social media functions not only as a communication platform but also as a space where green consumer values and identities are shaped. These findings provide an important foundation for both scholars and practitioners to design digital communication strategies that are more credible, engaging, and sustainable in promoting environmentally responsible behavior.

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Conflict of Interest Statement

The authors declare that there is no conflict of interest.

Ethical Approval and Originality Statement

Ethical approval was obtained for this study. The manuscript represents original work and has not been previously published, nor is it under consideration by another journal.

Data Disclosure Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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