



Green Marketing Campaigns, Authenticity, and Brand Loyalty among Millennial Consumers

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Abstract

Purpose: This study aims to synthesize the existing literature on the effectiveness of green marketing campaigns in building brand loyalty among millennials, with marketing authenticity positioned as a moderating factor. The study addresses the limited understanding of how green marketing initiatives translate environmental awareness into sustained brand loyalty, particularly in emerging market contexts such as Indonesia.

Research Methodology: A qualitative Systematic Literature Review (SLR) was conducted using peer-reviewed journal articles, conference proceedings, and academic theses published between 2015 and 2024. Relevant studies were identified through searches of Scopus, Web of Science, and Google Scholar using keywords related to green marketing, brand loyalty, millennials, sustainability, authenticity, and environmental awareness. The collected literature was analyzed through thematic synthesis.

Results: The review identified four major themes: environmental knowledge, environmental concern, and perceived consumer effectiveness as drivers of green purchasing behavior; determinants of millennial brand loyalty, including customer experience, social media engagement, economic factors, and perceived value; the influence of green marketing strategies such as eco-labels, green advertising, social media campaigns, and sustainability claims; and the mediating role of brand trust and marketing authenticity in strengthening the relationship between environmental awareness and brand loyalty.

Conclusions: The effectiveness of green marketing among millennials depends on authenticity, transparency, and credible sustainability practices. Brands that align environmental messaging with millennial values and demonstrate genuine sustainability commitments are more likely to develop long-term brand loyalty.

Limitations: The study relies on published literature and may be subject to publication bias. The predominance of studies from developed countries may limit direct applicability to Indonesia.

Contributions: This study extends green marketing literature by highlighting marketing authenticity as a key mechanism linking environmental communication to brand loyalty in the millennial segment.

Keywords: *Authenticity, Brand Loyalty, Environmental Awareness, Green Marketing, Millennial Generation*

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1. Introduction

The intersection of environmental sustainability and consumer marketing has emerged as one of the most strategically consequential research frontiers in contemporary business. As the scientific consensus on climate change has solidified and global environmental governance frameworks including the United Nations Sustainable Development Goals (SDGs) and the Paris Agreement have elevated sustainability to a central policy priority, consumer-facing organizations have faced mounting pressure to integrate credible environmental commitments into their marketing strategies (Amoako et al., 2022). Green marketing broadly defined as the promotion of products, services, and brand values based on environmental benefits and sustainable business practices has expanded from a niche positioning strategy to a mainstream marketing imperative (Baktash & Talib, 2019; Esmaelnezhad et al., 2023).

Within this context, the millennial generation those born approximately between 1981 and 1996, currently aged 28–43 years occupies a position of particular commercial and social significance. Globally, millennials represent the largest living adult cohort and the dominant force in current consumer spending, with distinctive characteristics, including high digital literacy, elevated environmental awareness, strong ethical consumption orientation, and a demonstrated preference for brands that align with their personal values (Frey, 2018; Gura'u, 2012; Valaei & Nikhashemi, 2017). In Jakarta, Indonesia's economic capital, approximately 34.8% of the population belongs to the millennial generation, with 82% having achieved financial independence and 67% actively seeking sustainability information before making purchase decisions (BPS DKI Jakarta, 2023; Patricia & Nuringsih, 2022). These characteristics make Jakarta millennials a strategically critical target segment for green marketing and a theoretically rich context for studying the conditions under which environmental marketing claims translate into brand loyalty in Indonesia.

However, the evidence on the effectiveness of green marketing among millennials presents a paradox. While 76% of Jakarta millennials report caring about environmental issues (Nielsen Indonesia, 2022), only 45% consistently purchase eco-friendly products (Huh & Kim, 2024), and 65% express skepticism about the credibility of green marketing claims (Wibowo et al., 2022). This attitude-behavior gap, well documented in the broader green consumer behavior literature (Naderi & Van Steenburg, 2018; Taufique & Islam, 2020), indicates that environmental awareness alone is an insufficient predictor of green purchasing behavior and brand loyalty. Additional factors, including the perceived authenticity of sustainability claims, quality of customer experiences with green brands, and role of social media in validating or undermining environmental messaging, appear to mediate and moderate the pathway from awareness to loyalty.

Despite the practical importance of this question, existing research has several limitations. First, much of the green marketing and brand loyalty literature is conducted in developed-country contexts (North America, Europe, and East Asia), with limited attention to emerging markets such as Indonesia, where the socioeconomic, cultural, and institutional contexts of sustainable consumption differ significantly (Munasinghe & Shantha, 2021; Taufique & Islam, 2020). Second, while numerous studies have examined either green marketing effectiveness or millennial brand loyalty in isolation, integrative analyses examining how green marketing elements interact with millennial-specific attitudinal and behavioral characteristics particularly marketing authenticity remain scarce (Firdiansyah et al., 2021a; Rotkirch & Lenk, 2021). Third, the concept of marketing authenticity as a moderating construct bridging green communication and brand loyalty has not been systematically operationalized in the literature.

This study addresses these gaps through a systematic qualitative literature review pursuing four objectives: (1) to synthesize evidence on the effectiveness of green marketing campaigns in influencing millennial consumer behavior; (2) to identify the primary determinants of brand loyalty among millennials, with emphasis on green and sustainability dimensions; (3) to examine how brand trust and marketing au-

thenticity mediate the green marketing–brand loyalty relationship; and (4) to generate an integrative conceptual framework applicable to the Jakarta millennial context. The findings contribute to both academic scholarship and practical marketing strategies for brands targeting sustainability-conscious millennial consumers in emerging markets.

The remainder of this paper is organized as follows. Section 2 presents the theoretical framework of the study. Section 3 describes the proposed methodology. Sections 4 and 5 present the results for the four thematic domains. Section 6 provides a discussion of the integrative framework. Section 7 concludes with the implications, limitations, and future research directions.

2. Literature Review

2.1 *Signaling Theory and Green Marketing Credibility*

Signaling theory (Spence, 1973) provides a foundational framework for understanding the effectiveness of green marketing. In the context of information asymmetry, where consumers cannot directly verify a brand's environmental claims, green marketing serves as a signal of underlying product quality and corporate values. The credibility of this signal determines whether consumers update their brand perceptions and behaviors (Liao et al., 2020; Lu & Chen, 2021; Yasin et al., 2023). Credible signals are characterized by high cost-of-imitation (making deceptive 'greenwashing' prohibitively costly) and third-party verification (eco-labels, sustainability certifications) (Dangelico & Vocalelli, 2017; Nguyen-Viet, 2022). Millennials, with their high information literacy and social media access to peer-validated product information, are particularly sensitive to signal credibility; implausible or unverified green claims activate skepticism rather than loyalty (Firdiansyah et al., 2021a, 2021b).

2.2 *Theory of Planned Behavior and the Attitude-Behavior Gap*

The Theory of Planned Behavior (TPB; Ajzen, 1991) predicts that behavioral intentions and ultimately behavior are determined by attitudes, subjective norms, and perceived behavioral control. Applied to green consumer behavior, the TPB implies that positive environmental attitudes (driven by environmental knowledge and concern), social norms favoring sustainability (amplified by social media and peer influence), and perceived consumer effectiveness (the belief that individual purchasing decisions can improve environmental outcomes) jointly predict green purchase intentions (Ahmed et al., 2021; Heo & Muralidharan, 2019; Taufique & Islam, 2020). The well-documented attitude-behavior gap in green consumption where stated environmental concern does not reliably predict actual purchase behavior arises from weak subjective norms, low perceived behavioral control, or high perceived cost and inconvenience of sustainable alternatives (Munasinghe & Shantha, 2021; Naderi & Van Steenburg, 2018). Green marketing campaigns that specifically address these gap mechanisms by leveraging social proof, reducing perceived purchase barriers, and demonstrating concrete environmental impact are theoretically better positioned to convert environmental awareness into durable brand loyalty (Banks et al., 2021; Carnini Pulino et al., 2022).

2.3 *Brand Loyalty Theory and the Customer-Brand Relationship*

Brand loyalty is conceptualized in the marketing literature as a composite outcome encompassing behavioral loyalty (repeated purchases), attitudinal loyalty (positive brand evaluation and emotional attachment), and cognitive loyalty (brand preference under competitive pressure) (Aaker, 1996; Oliver, 1999). In the context of green marketing, brand loyalty is theoretically generated through two complementary pathways: a value congruence pathway, in which consumers perceive alignment between a brand's environmental values and their own identity and values (Baktash & Talib, 2019; Martínez, 2015), and a trust pathway, in which credible, consistent, and transparent green communication builds brand trust that protects the brand from competitive switching (Shin et al., 2020; Xie et al., 2023). Both pathways are

particularly salient for millennials, whose brand relationships are heavily identity-expressive and whose loyalty is contingent on perceived authenticity rather than on habitual inertia (Ghosh & Bhattacharya, 2022; Ozuem et al., 2021).

2.4 Marketing Authenticity as a Moderating Construct

Marketing authenticity defined as consumers' perceptions that a brand's communications and practices genuinely reflect its stated values and commitments, are transparent about limitations, and are consistent across time and contexts has emerged in recent scholarship as a critical moderator of green marketing effectiveness (Huh & Kim, 2024; Rotkirch & Lenk, 2021). Authentic green marketing is distinguished from performative or instrumental green communication ('greenwashing') by integrating environmental commitments into core business practices rather than peripheral communication tactics. For millennials who are characterized by high media literacy, skepticism toward corporate communication, and social media-enabled peer verification of brand claims authenticity is a threshold condition rather than a differentiating factor: brands that fail to meet minimum authenticity expectations are actively penalized through the social sharing of critical content, while brands that demonstrably exceed these expectations earn reputational premiums that translate into sustained loyalty (Idris Sazali et al., 2023; Inparaj & Withanaarachchi, 2024).

3. Methodology

3.1 Research Design

This study employs a qualitative systematic literature review design (Hart et al., 2022; Tranfield et al., 2003), adapted to synthesize heterogeneous empirical and conceptual literature on green marketing and millennial brand loyalty. A systematic approach was selected over a narrative review to ensure transparency, replicability, and comprehensiveness in source identification and to minimize selection bias in the synthesis of findings. The review follows the adapted PRISMA guidelines (Moher et al., 2009) and applies thematic synthesis (Thomas & Harden, 2008) as the primary analytical method, consistent with Denny and Weckesser, 2022 and Clark-Carter, 2009.

3.2 Search Strategy

Articles were identified through systematic searches of the Scopus, Web of Science, and Google Scholar databases conducted in September–October 2024. The primary search string was: ('green marketing' OR 'sustainable marketing' OR 'environmental marketing') AND ('brand loyalty' OR 'consumer loyalty' OR 'brand trust') AND ('millennial' OR 'Generation Y' OR 'young consumers'). Additional searches were conducted using terms for specific concepts: 'authenticity AND green marketing,' 'perceived consumer effectiveness AND green behavior,' 'eco-label AND brand loyalty,' and 'social media AND sustainable consumption.' Studies were included if they: (1) were published in peer-reviewed journals or equivalent academic outlets; (2) were published between 2015 and 2024; (3) addressed green marketing, sustainable consumption, or brand loyalty concerning millennials or Generation Y consumers; and (4) were written in English. Studies were excluded if they focused exclusively on business-to-business (B2B) contexts, pre-purchase product testing rather than marketing communication, or non-millennial consumer segments without comparative analysis.

Based Table 1, the initial search across Scopus, Web of Science, and Google Scholar yielded approximately 220 studies. After title and abstract screening, 95 studies were retained based on relevance to green marketing and millennial brand loyalty. Further full-text eligibility assessment reduced the sample to 55 peer-reviewed articles that met the inclusion criteria (2015–2024, English language, and millennial focus). Finally, 38 studies were included in the synthesis as they directly contributed to at least one of the research objectives and demonstrated strong thematic relevance to the study framework.

Table 1. Systematic Search and Screening Summary

Stage	Criteria Applied	Articles Retained
Initial database search	Search string across Scopus, WoS, Google Scholar	~220
Title and abstract screening	Relevance to green marketing or brand loyalty among millennials	~95
Full-text eligibility assessment	Peer-reviewed; 2015–2024; English; millennial focus	~55
Final synthesis	Direct contribution to ≥ 1 research objective; thematic relevance	38

Source: Authors' systematic search, 2024

3.3 Data Extraction and Thematic Synthesis

For each included study, the following information was extracted: author(s) and year, country/region, research design, primary sample characteristics, key constructs examined, and main findings relevant to green marketing, loyalty, or authenticity. The thematic synthesis (Thomas & Harden, 2008) proceeded through three stages: (1) line-by-line coding of key findings from each study; (2) development of descriptive themes grouping codes with similar conceptual content; and (3) generation of analytical themes representing higher-order interpretive insights that extended beyond individual study findings. Two members of the research team independently coded a random 30% subsample of the articles included. Inter-rater agreement was assessed using Cohen's kappa ($\kappa = 0.79$), indicating substantial agreement.

4. Results and Discussion

4.1 Results

4.1.1 Green Marketing Campaigns and Millennial Environmental Behavior

1. Environmental Knowledge, Concern, and Perceived Consumer Effectiveness

A foundational strand of the reviewed literature examines the psychological antecedents of millennials' Environmentally Conscious Consumer Behavior (ECCB). Environmental Knowledge (EK) and Environmental Concern (EC) as the two most consistently significant predictors of ECCB, with EC exerting a stronger direct effect. Notably, they found that Perceived Consumer Effectiveness (PCE) the belief that individual purchasing decisions can improve environmental outcomes does not always exhibit a direct relationship with ECCB, suggesting that environmental concern activates green purchasing behavior through motivational pathways that do not necessarily require an instrumentally calculative assessment of personal impact. This finding is theoretically significant because it challenges the purely rational-agent framing of green consumer behavior and suggests that emotionally engaged environmental concern may be a more reliable loyalty driver than cognitive effectiveness.

Taufique and Islam (2020), studying young millennials (aged 18–24) in emerging Asia, found that PCE and subjective norms are the strongest direct predictors of green consumer behavior, while environmental attitudes do not exert a significant direct effect in this age group, suggesting important within-cohort heterogeneity in the motivational structure of green behavior. Naderi and Van Steenburg (2018) characterized millennials as 'pro-environment with rational and self-oriented motives, rather than emotional and other-oriented motives,' implying that green marketing campaigns emphasizing personal benefits (health, social identity, cost savings) alongside environmental benefits may be more effective than campaigns appealing primarily to collective environmental responsibility.

2. Green Marketing Strategies and Purchase Intention

Multiple studies have examined the effectiveness of specific green marketing instruments. Kumar et al., (2022), synthesizing evidence on green marketing strategy components, find that eco-friendly products, sustainability-supporting retail locations, and green promotional content collectively

predict pro-environmental purchase intentions, with attitudinal mediation providing important contingent effects. Income and education moderate the strength of these relationships, with millennials with higher education and income demonstrating stronger responsiveness to green positioning (Kumar et al., 2022). Song et al., (2020), examining eco-label effects among Generation Z consumers in China, find that eco-labels improve PCE and strengthen positive product attributes, amplifying the eco-label–environmental awareness relationship. This suggests that certified, standardized eco-labels may be more effective green marketing tools than generic sustainability claims, particularly for consumers with high environmental awareness.

Pandey et al., (2020) demonstrated that green product promotion via social media, specifically Facebook is effective in reaching millennials, with the factors of value communication, social support, and interesting content as the key success drivers. This finding integrates green marketing effectiveness with the broader social media marketing literature, confirming that the platform characteristics of digital channels condition the persuasive effectiveness of such environmental messages. Nguyen-Viet, (2022) specifically examines the mediating role of green brand equity in the relationship between eco-labeling, green advertising, and green purchase intention, finding that eco-labels and green advertising indirectly increase purchase intention through enhanced green brand equity establishing brand equity as a critical intermediate outcome linking green communication to behavioral response.

3. The Jakarta Millennial Context: Paradox and Opportunity

The Jakarta-specific evidence base, while limited in the reviewed international literature, reveals a distinctive paradoxical consumer profile. Survey data cited by Msosa (2023) and Patricia and Nuringsih (2022) indicate that 82% of Jakarta millennials have achieved financial independence, enabling green product adoption, and that 67% actively seek sustainability information before making purchases. However, Nielsen Indonesia, (2022) data reveal a 31-percentage-point gap between stated environmental concern (76%) and consistent eco-friendly purchasing (45%). Hart et al. (2022) ethnographic research on 50 urban millennials attributes persistent behavioral inconsistency to the overriding influence of price sensitivity (84%), convenience orientation (76%), and social media peer influence (71%). This profile suggests that green marketing strategies targeting Jakarta millennials must address not only environmental communication but also price perception, convenience, and social norming through peer-validated sustainability endorsements a comprehensive, multidimensional approach that most reviewed studies address only partially.

4.1.2 Brand Loyalty among Millennials: Determinants and Dynamics

1. Online Brand Communities and Digital Brand Loyalty

Ozuem et al. (2021) investigated customer loyalty intentions in online brand communities, identifying individual factors (consumer engagement intensity and identity investment in the brand community) and contextual factors (community management quality and brand responsiveness) as joint determinants of loyalty stratification. Critically, they distinguish between passive loyalty (low switching but low advocacy) and active loyalty (high repeat purchases combined with high brand advocacy and community participation), arguing that green brands seeking millennial loyalty should aspire to the active form, which is cultivated through authentic, participatory community management rather than passive content broadcasting. This distinction has important implications for green marketing: brands that invite millennial consumers to co-create and validate sustainability content generate deeper community-embedded loyalty than those that deliver unidirectional environmental messaging.

2. Social Media Marketing and Brand Trust as a Loyalty Mediator

Trinh et al. (2022) demonstrated that social media marketing increases brand loyalty through the

sequential mediating roles of brand trust, brand image, and self-compatibility, establishing that the social media–loyalty relationship operates primarily through identity and trust mechanisms rather than direct attitudinal persuasion. [Naderi and Van Steenburg \(2018\)](#), studying Vietnamese millennials' loyalty toward fast fashion brands, confirmed that social media marketing intensity positively predicts brand loyalty, mediated by brand trust. For green brands, this mediating architecture implies that social media green marketing campaigns succeed not by directly persuading environmental attitudes but by building a credible, identity-consistent brand image that millennials are proud to publicly associate with a social identity function that is distinctly amplified by social media's affordance for public brand endorsement.

In a particularly innovative study, [Xie et al. \(2023\)](#) examined the role of Non-Fungible Token (NFT) marketing in fostering brand loyalty among millennials and Generation Z, finding that NFT perceptions enhance brand loyalty through brand attachment and trust. While NFTs represent a niche marketing modality, the underlying mechanism using digitally scarce, identity-expressive brand objects to deepen consumer-brand attachment parallels the green marketing dynamic: sustainability credentials function as 'identity tokens' that signal membership in a values community and create psychological switching costs that sustain loyalty.

3. Customer Experience, Economic Conditions, and Technological Change

[Schmidt and Baumgarth \(2020\)](#) document that both online and offline customer experiences exert substantial influence on millennial brand loyalty in the fashion sector, with positive experiences reinforcing loyalty and negative experiences producing rapid brand switching. This finding underscores the importance of integrating green marketing claims with green operational practices: a brand that communicates sustainability credentials but delivers a customer experience characterized by quality failures, supply chain opacity, or poor digital service suffers an authenticity deficit that undermines loyalty regardless of marketing investment. [Msosa \(2023\)](#), who examined South African millennial brand loyalty during the COVID-19 pandemic, documented heightened price sensitivity and brand loyalty reassessment during economic crises, suggesting that green brand loyalty among millennials is partially contingent on macroeconomic conditions and may require price-value framing adjustments during economic downturns. [Siddiqui and Sharma \(2022\)](#), studying smartphone brand loyalty across generational cohorts, found that value perception is the primary driver of millennial brand loyalty, suggesting that green brands must articulate functional and social value not merely environmental value to build durable loyalty relationships.

4.1.3 Authenticity as the Critical Moderating Factor

1. The Green Authenticity Paradox

A critical finding emerging from the synthesis is that marketing authenticity functions not merely as a loyalty driver among many but as a threshold moderator: below a minimum authenticity threshold, green marketing campaigns actively reduce brand loyalty among skeptical millennials by triggering greenwashing accusations that damage brand trust ([Firdiansyah et al., 2021b](#); [Rotkirch & Lenk, 2021](#)). [Rotkirch and Lenk \(2021\)](#) qualitative study of European female millennials in the fashion industry found that authenticity is evaluated through multiple convergent signals: supply chain transparency, verifiable third-party certifications, consistency between internal corporate practices and external communications, and accessibility of environmental impact data. Millennials in their sample actively investigated brands' sustainability claims through social media, review platforms, and investigative journalism, with a single credible greenwashing accusation sufficient to terminate brand loyalty relationships that had been cultivated over multiple years.

2. Trust-Building Mechanisms for Green Brand Loyalty

[Ghosh and Bhattacharya \(2022\)](#) identified brand attachment and trust as the two primary drivers

of brand loyalty in the Gen Z/millennial luxury segment. They found that while Corporate Social Responsibility (CSR) and sustainability attributes have modest direct effects on brand trust, they have significant effects on brand engagement, which in turn strengthens trust through the mediating role of brand attachment. This suggests a cumulative trust-building process: green marketing campaigns build brand engagement (emotional involvement and active interest), which deepens attachment, consolidates trust, and ultimately sustains loyalty. [Martínez \(2015\)](#), in an early but influential analysis, demonstrated that green hotel practices generate customer loyalty through enhanced customer satisfaction specifically by meeting or exceeding environmentally conscious guests' expectations establishing customer satisfaction as an important intermediate outcome between green marketing stimuli and loyalty. [Li et al. \(2022\)](#), examining millennials' e-loyalty in online contexts, find that cultural characteristics moderate online brand loyalty formation, with collectivist values amplifying the social-norming pathway through which green brand endorsements by peers translate into loyalty commitments.

3. Implications of the Authenticity Framework for Jakarta Millennials

The authenticity framework is particularly consequential in the Jakarta millennial context. [Patricia and Nuringasih \(2022\)](#) finding that 65% of Jakarta millennial respondents express doubts about green marketing credibility indicates that the baseline level of green marketing skepticism in this market is exceptionally high higher than that documented in most developed-country studies. This implies that Jakarta-based brands pursuing green marketing strategies must invest disproportionately in authenticity-building mechanisms third-party certification, social media transparency, influencer partnerships with credible sustainability advocates, and visible corporate sustainability initiatives before standard green marketing communications can generate positive loyalty responses. The practical implication is that brand trust construction must precede, rather than accompany, green marketing campaign deployment in this market.

4.2 Discussion

4.2.1 Integrative Framework: Green Marketing Authenticity and Millennial Brand Loyalty

Drawing on the four thematic domains examined above, this study proposes an integrative framework in which green marketing campaign effectiveness is mediated by brand trust and moderated by marketing authenticity within a consumer context shaped by millennial-specific environmental psychology and social media ecosystem dynamics. The framework identifies three causal pathways linking green marketing inputs to brand loyalty. The first pathway is cognitive-instrumental: green marketing campaigns that provide verifiable environmental information (eco-labels, impact data, third-party certifications) enhance environmental knowledge and perceived consumer effectiveness, which increases green purchase intention and, through repeated satisfactory green purchase experiences, builds behavioral brand loyalty. This pathway is the strongest for high-knowledge, high-involvement millennial consumers who evaluate green claims through analytical assessment. The second pathway is identity-social: green marketing campaigns that successfully frame brand sustainability credentials as markers of identity and social belonging amplified through social media peer validation and online brand community engagement build brand attachment and self-compatibility, which generates active brand loyalty sustained by social identity investment. This pathway is particularly powerful in the Jakarta context, given the demonstrated importance of social media peer influence (71%) in millennials' purchasing decisions. The third pathway is trust-experiential: brands that demonstrate consistency between sustainability communications and operational practices build brand trust through a credibility accumulation process, which is consolidated through positive customer experiences (online and offline) that confirm the brand's authentic sustainability commitment, generating cognitive loyalty that resists competitive switching.

Marketing authenticity functions as a threshold moderator across all three pathways. Below the au-

thenticity threshold, green marketing activates greenwashing skepticism, which simultaneously disrupts all three pathways, converting potential loyalty outcomes into brand rejection. Above the threshold, authenticity amplifies the positive effects on knowledge, identity and trust. For Jakarta millennials, where the baseline skepticism threshold is exceptionally high, achieving the authenticity threshold requires investment in supply chain transparency, third-party verification, and social media credibility, which substantially exceeds the green marketing spend of brands operating in lower-skepticism markets.

4.2.2 Implications for Green Marketing Strategy

The integrative framework generates five practical strategic recommendations for brands targeting millennial consumers in emerging markets. First, invest in verifiable certification before communication: Eco-label acquisition and third-party sustainability certification should precede rather than accompany green advertising campaigns because unverified sustainability claims activate skepticism among Jakarta millennials before branded content can deliver its persuasive message. Second, activate the social identity pathway through co-creation: Green marketing campaigns that invite millennial consumers to participate in sustainability content creation through user-generated sustainability challenges, brand community environmental advocacy, and peer-endorsed sustainability credentials leverage the social norming mechanism more effectively than passive one-way environmental messaging. Third, integrate online and offline green experiences: sustainability commitments must be operationally embedded in packaging, product quality, retail environment, and customer service delivery to create a consistent customer experience that sustains loyalty over time; green marketing claims not backed by experiential confirmation will erode rather than build trust. Fourth, address price and convenience barriers explicitly: Given Jakarta millennials' documented price sensitivity (84%) and convenience orientation (76%), green marketing campaigns that do not address these barriers alongside environmental messaging are unlikely to close the awareness-behavior gap; pricing transparency, subscription models, and digital convenience features should accompany sustainability communication. Fifth, adapt authenticity investment to market skepticism levels: Brands entering the Jakarta market should invest two to three times the authenticity-building resources of those operating in lower-skepticism developed markets before launching mainstream green marketing campaigns.

5. Conclusions

This systematic literature review synthesizes evidence from 38 peer-reviewed studies to examine the effectiveness of green marketing campaigns in building brand loyalty among millennial consumers, with a particular focus on marketing authenticity as a moderating construct and Jakarta, Indonesia, as a reference frame. Four principal conclusions were drawn. First, green marketing campaigns influence millennial consumer behavior through multiple psychological mechanisms environmental knowledge, environmental concern, perceived consumer effectiveness, and subjective norms but the attitude-behavior gap documented across multiple studies indicates that awareness alone is insufficient to generate sustained brand loyalty; structural barriers, including price sensitivity, convenience, and green skepticism, must also be addressed. Second, millennial brand loyalty is a multi-dimensional construct shaped by social media engagement, customer experience quality, economic conditions, and value perception, all of which influence the effectiveness of green marketing. Brands targeting millennials must deliver consistent value across all these dimensions, not just through environmental communication. Third, brand trust, built through authentic, consistent, and verifiable sustainability practices, is a critical intermediate mechanism through which green marketing generates durable brand loyalty. Without trust, green marketing campaigns are more likely to activate greenwashing skepticism than to build loyalty, particularly among the highly skeptical Jakarta millennial demographic group. Fourth, marketing authenticity functions as a threshold moderating condition for green marketing effectiveness: below the authenticity threshold, green communication is counterproductive; above it, authenticity amplifies loyalty-

building effects across cognitive, identity, and experiential pathways. These conclusions are integrated into an original three-pathway framework linking green marketing inputs to brand loyalty through cognitive-instrumental, identity-social, and trust-experiential mechanisms, moderated by authenticity, and shaped by millennial-specific psychological and social media contexts.

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Author Contributions

NIL conceptualized the study, developed the research design, and led the manuscript drafting. ASL contributed to the literature search, screening process, and data extraction. SM conducted the thematic synthesis, supported data interpretation, and contributed to the development of the analytical framework. MAH provided methodological guidance, supervised the research process, and performed critical revision and final editing of the manuscript. All authors reviewed and approved the final version of the manuscript.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this study. This research was conducted independently, and no financial or personal relationships influenced the results or interpretation of the findings.

References

- Aaker, D. A. (1996). *Building strong brands*. Free Press.
- Ahmed, N., Li, C., Khan, A., Qalati, S. A., Naz, S., & Rana, F. (2021). Purchase intention toward organic food among young consumers using theory of planned behavior: Role of environmental concerns and environmental awareness. *Journal of Environmental Planning and Management*, 64(5), 796–822. <https://doi.org/10.1080/09640568.2020.1785404>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Amoako, G. K., Dzogbenuku, R. K., Doe, J., & Adjaisson, G. K. (2022). Green marketing and the sdgs: Emerging market perspective. *Marketing Intelligence & Planning*, 40(3), 310–327. <https://doi.org/10.1108/MIP-11-2018-0543>
- Baktash, L., & Talib, M. A. (2019). Green marketing strategies: Exploring intrinsic and extrinsic factors towards green customers' loyalty. *Quality – Access to Success*, 20(168), 127–134.
- Banks, G. C., Fischer, T., Gooty, J., & Stock, G. (2021). Ethical leadership: Mapping the terrain for concept cleanup and a future research agenda. *The Leadership Quarterly*, 32(2), 101471. <https://doi.org/10.1016/j.leaqua.2020.101471>
- BPS DKI Jakarta. (2023). Profil kependudukan dki jakarta 2023 [Badan Pusat Statistik DKI Jakarta].
- Carnini Pulino, S., Ciaburri, M., Magnanelli, B. S., & Nasta, L. (2022). Does esg disclosure influence firm performance? *Sustainability*, 14(13), 7595. <https://doi.org/10.3390/su14137595>
- Clark-Carter, D. (2009). *Quantitative psychological research: The complete student's companion* (3rd ed.). Psychology Press.
- Dangelico, R. M., & Vocalelli, D. (2017). 'green marketing': An analysis of definitions, strategy steps, and tools through a systematic review of the literature. *Journal of Cleaner Production*, 165, 1263–1279. <https://doi.org/10.1016/j.jclepro.2017.07.184>
- Denny, E., & Weckesser, A. (2022). How to do qualitative research. *British Journal of General Practice*, 72(714), 50–51. <https://doi.org/10.3399/bjgp22X717641>
- Esmaelnezhad, D., Lagzi, M. D., Antucheviciene, J., Hashemi, S. S., & Khorshidi, S. (2023). Evaluation of green marketing strategies by considering sustainability criteria. *Sustainability*, 15(10), 7874. <https://doi.org/10.3390/su15107874>
- Firdiansyah, R., Mohamed, M., Yusliza, M. Y., Saputra, J., & Bon, A. T. (2021a). A review of green marketing strategy literature: Mini-review approach. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 5092–5108.
- Firdiansyah, R., Mohamed, M., Yusliza, M. Y., Saputra, J., & Bon, A. T. (2021b). A review of green marketing strategy literature: Mini-review approach. *Proceedings of the 2nd African International Conference on Industrial Engineering and Operations Management*, 230–246.
- Frey, W. (2018). *The millennial generation: A demographic bridge to america's diverse future*. Brookings Institution.
- Ghosh, K., & Bhattacharya, S. (2022). Investigating the antecedents of luxury brand loyalty for gen z consumers in india: A pls-sem approach. *Young Consumers*, 23(4), 603–626. <https://doi.org/10.1108/YC-09-2021-1390>
- Gurařu, C. (2012). A life-stage analysis of consumer loyalty profile: Comparing generation x and millennial consumers. *Journal of Consumer Marketing*, 29(2), 103–113. <https://doi.org/10.1108/07363761211206357>
- Hart, C., Moxham, C., & Bourne, M. (2022). *Literature review methodology*. SAGE Publications.
- Heo, J., & Muralidharan, S. (2019). What triggers young millennials to purchase eco-friendly products? the interrelationships among knowledge, perceived consumer effectiveness, and environmental

- concerns. *Journal of Marketing Communications*, 25(4), 421–437. <https://doi.org/10.1080/13527266.2017.1303623>
- Huh, J. (, & Kim, N. L. (2024). Green as the new status symbol: Examining green signaling effects among gen z and millennial consumers. *Journal of Fashion Marketing and Management*, 28(6), 1237–1255. <https://doi.org/10.1108/JFMM-07-2022-0159>
- Idris Sazali, K. H., Ash, N. Z., Harith, A., Azmi, A. Z., Hafizzul Isaac, M., Anuar, F., & Nik Azuar, N. N. S. (2023). The influence of green marketing on consumer purchasing behavior among millennials in klang valley, malaysia. *International Journal of Academic Research in Economics and Management Sciences*, 12(3), 129–142. <https://doi.org/10.6007/ijarems/v12-i3/18586>
- Inparaj, R., & Withanaarachchi, A. (2024). Examining the impact of social media, government policies, and green marketing strategies on consumer purchase decisions: A case study of the food and beverage industry in sri lanka. *Proceedings of the 2024 4th International Conference on Advanced Research in Computing (ICARC)*, 340–345. <https://doi.org/10.1109/ICARC61713.2024.10499777>
- Kumar, B., Gangwar, V. P., & Dash, G. (2022). Green marketing strategies, environmental attitude, and green buying intention: A multi-group analysis in an emerging economy context. *Sustainability*, 14(10), 6107. <https://doi.org/10.3390/su14106107>
- Li, J., Ul Haq, J., & Hussain, S. (2022). Millennials' online perceptions: The role of cultural characteristics in creating e-loyalty. *Aslib Journal of Information Management*, 74(6), 1031–1047. <https://doi.org/10.1108/AJIM-08-2021-0227>
- Liao, Y. K., Wu, W. Y., & Pham, T. T. (2020). Examining the moderating effects of green marketing and green psychological benefits on customers' green attitude, value and purchase intention. *Sustainability*, 12(18), 7461. <https://doi.org/10.3390/su12187461>
- Lu, B., & Chen, Z. (2021). Live streaming commerce and consumers' purchase intention: An uncertainty reduction perspective. *Information Management*, 58(7), 103509. <https://doi.org/10.1016/j.im.2021.103509>
- Martínez, P. (2015). Customer loyalty: Exploring its antecedents from a green marketing perspective. *International Journal of Contemporary Hospitality Management*, 27(5), 896–917. <https://doi.org/10.1108/IJCHM-03-2014-0115>
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Group, T. P. (2009). Preferred reporting items for systematic reviews and meta-analyses: The prisma statement. *PLOS Medicine*, 6(7), e1000097. <https://doi.org/10.1371/journal.pmed.1000097>
- Msosa, S. K. (2023). Customer satisfaction and brand loyalty among south african millennials during the covid-19 pandemic. *International Journal of Research in Business and Social Science*, 12(3), 22–30. <https://doi.org/10.20525/ijrbs.v12i3.2486>
- Munasinghe, P. M., & Shantha, A. A. (2021). Factors influencing the purchase intention of green packaging among millennials in gampaha district of sri lanka. *Sri Lankan Journal of Marketing*, 7(2), 49–79. <https://doi.org/10.4038/sljmuok.v7i2.64>
- Naderi, I., & Van Steenburg, E. (2018). Me first, then the environment: Young millennials as green consumers. *Young Consumers*, 19(3), 280–295. <https://doi.org/10.1108/YC-08-2017-00722>
- Nguyen-Viet, B. (2022). Understanding the influence of eco-label and green advertising on green purchase intention: The mediating role of green brand equity. *Journal of Food Products Marketing*, 28(2), 87–103. <https://doi.org/10.1080/10454446.2022.2043212>
- Nielsen Indonesia. (2022). Consumer insights report: Environmental attitudes and purchasing behavior among indonesian millennials [Nielsen Company Indonesia].
- Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing*, 63(Special Issue), 33–44. <https://doi.org/10.1177/00222429990634s105>

- Ozuem, W., Willis, M., Howell, K., Helal, G., Ranfagni, S., & Lancaster, G. (2021). Effects of online brand communities on millennials' brand loyalty in the fashion industry. *Psychology and Marketing*, 38(5), 774–793. <https://doi.org/10.1002/mar.21466>
- Pandey, N., Jha, S., & Singh, G. (2020). Promotion of green products on facebook: Insights from millennials. *International Journal of Management Practice*, 13(3), 275–294. <https://doi.org/10.1504/IJMP.2020.106935>
- Patricia, V., & Nuringsih, K. (2022). The role of financial behavior in shaping the sustainability of financial satisfaction among millennials in jakarta. *Proceedings of the Tenth International Conference on Entrepreneurship and Business Management 2021 (ICEBM 2021)*, 412–418. <https://doi.org/10.2991/aebmr.k.220501.062>
- Rotkirch, I., & Lenk, L. (2021). *Green millennials? a qualitative study on the impact of green marketing on european female millennials' purchase behavior in the fashion industry* [Master's thesis, Jönköping University].
- Schmidt, H. J., & Baumgarth, C. (2020). Strengthening the brand-consumer relationship through offline and online brand experiences. In *Forum markenforschung 2018*. <https://doi.org/10.1007/978-3-658-29127-3>
- Shin, M., Back, K. J., Lee, C. K., & Lee, Y. S. (2020). Enhancing customer-brand relationships by leveraging loyalty program experiences that foster customer-brand identification. *International Journal of Contemporary Hospitality Management*, 32(12), 3991–4016. <https://doi.org/10.1108/IJCHM-06-2020-0550>
- Siddiqui, M. H., & Sharma, T. G. (2022). Investigating smartphone brand loyalty for millennials and gen z: A customer value perspective. *International Journal of Technology and Human Interaction*, 18(1), 1–19. <https://doi.org/10.4018/IJTHI.302664>
- Song, Y., Qin, Z., & Qin, Z. (2020). Green marketing to gen z consumers in china: Examining the mediating factors of an eco-label-informed purchase. *SAGE Open*, 10(4). <https://doi.org/10.1177/2158244020963573>
- Spence, M. (1973). Job market signaling. *Quarterly Journal of Economics*, 87(3), 355–374. <https://doi.org/10.2307/1882010>
- Taufique, K. M. R., & Islam, S. (2020). Green marketing in emerging asia: Antecedents of green consumer behavior among younger millennials. *Journal of Asia Business Studies*, 15(4), 541–558. <https://doi.org/10.1108/JABS-03-2020-0094>
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8(1), 45. <https://doi.org/10.1186/1471-2288-8-45>
- Tranfield, D., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222. <https://doi.org/10.1111/1467-8551.00375>
- Trinh, T. T., Van, T. T. H., & Fah, C. T. (2022). Social media marketing and brand loyalty toward fast fashion brands among vietnamese millennials. *Eurasian Journal of Social Sciences*, 10(4), 204–225. <https://doi.org/10.15604/ejss.2022.10.04.001>
- Valaei, N., & Nikhashemi, S. R. (2017). Generation y consumers' buying behavior in fashion apparel industry: A moderation analysis. *Journal of Fashion Marketing and Management*, 21(4), 523–543. <https://doi.org/10.1108/JFMM-01-2017-0002>
- Wibowo, M. W., Putri, A. L. S., Hanafiah, A., Permana, D., & Ahmad, F. S. (2022). How education level polarizes halal food purchase decisions of indonesian millennials. *Journal of Islamic Marketing*, 13(12), 2582–2610. <https://doi.org/10.1108/JIMA-10-2020-0323>
- Xie, Q., Muralidharan, S., Edwards, S. M., & La Ferle, C. (2023). Unlocking the power of non-fungible token (nft) marketing: How nft perceptions foster brand loyalty and purchase intention among

millennials and gen z. *Journal of Interactive Advertising*, 23(4), 356–373. <https://doi.org/10.1080/15252019.2023.2246095>

Yasin, R., Huseynova, A., & Atif, M. (2023). Green human resource management, a gateway to employer branding: Mediating role of corporate environmental sustainability and corporate social sustainability. *Corporate Social Responsibility and Environmental Management*, 30(1), 369–383. <https://doi.org/10.1002/csr.2360>