

Original Article

What Does ‘Green’ Mean to Consumers? A Qualitative Systematic Literature Review of Environmental Marketing Perceptions

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Abstract: The concept of ‘green’ as understood by consumers is neither uniform nor static: it is shaped by cognitive, emotional, social, and structural forces that vary significantly across cultural and demographic contexts. Despite the proliferation of green marketing strategies, a rigorous qualitative synthesis of how consumers define and respond to environmental marketing across divergent psychological profiles, cultural contexts, and trust conditions remains underexplored. This study presents a Qualitative Systematic Literature Review (SLR) following PRISMA guidelines, systematically analyzing 20 peer-reviewed studies (2020–2025) indexed in Scopus, SJR, Web of Science, DOAJ, and Inspec (SJR Quartile Q3 or above). Drawing on independent dual-coder thematic synthesis (Cohen’s $\kappa = 0.82$), five analytical themes were identified: (1) the Knowledge–Behavior Nexus and the paradox of green literacy; (2) affective pathways and the counter-intuitive power of negative emotional appeals; (3) the social construction of ‘green’ through cultural and normative determinants; (4) the trust–credibility nexus and greenwashing dynamics; and (5) structural drivers of the attitude–behavior gap. Critically synthesizing theoretical tensions across these themes, this study contributes: (a) a Multi-Dimensional Green Consumer Perception Framework integrating cognitive, affective, social, and structural layers; and (b) a Five-Profile Green Consumer Taxonomy (Knowledge-Critical, Emotion-Driven Altruist, Social Conformist, Habitual Sustainer, Intention-Blocked) that advances beyond attitudinal segmentation toward actionable behavioral profiling. The findings provide theoretical refinements of TPB, SOR, and Social Practice Theory within the green marketing domain.

Keywords: Environmental Marketing, Consumer Perceptions, Green Products, Systematic Literature Review, Green Purchase Behavior, Greenwashing, Attitude–Behavior Gap, Thematic Synthesis.

I. INTRODUCTION

The growing importance of environmental marketing is evident across multiple dimensions, reflecting changing consumer attitudes, corporate strategies, and broader societal shifts towards Sustainability. Environmental marketing, often termed green marketing, involves promoting products and services based on their environmental benefits and sustainability credentials. This marketing approach has become increasingly crucial as both consumers and businesses recognize the urgent need to address environmental challenges and support sustainable consumption practices. Empirical studies demonstrate that green advertising positively influences consumers’ intention to purchase environmentally friendly products, especially when coupled with environmental knowledge and credible branding elements such as eco-labels (Li, 2025). Similarly, consumer lifestyle factors oriented towards environmental values significantly impact purchasing decisions and future purchase intentions, as demonstrated in online shopping contexts (Štofejšová et al., 2023).

From a business perspective, the growing importance of environmental marketing is reflected in corporate strategies that integrate Sustainability into core brand image and social responsibility frameworks. Companies recognize that sustainability marketing, supported by genuine corporate social responsibility (CSR) initiatives, can enhance brand image and stimulate responsible, sustainable consumer behavior (Jia et al., 2023). However, despite the proliferation of green marketing, a persistent ‘attitude–behavior gap’ persists, in which positive environmental attitudes do not consistently translate into actual green purchases (Polonsky, 2011; Busalim et al., 2022). Understanding what ‘green’ genuinely means to consumers across diverse psychological, cultural, and structural contexts is therefore both a theoretical gap and a practical imperative.

Despite the growing body of literature, three critical deficits persist: (1) most empirical studies rely on purchase ‘intention’ rather than actual behavior as the primary dependent variable (Bravo et al., 2022); (2) cross-cultural heterogeneity in consumer definitions of ‘green’ remains theoretically underdeveloped (Nabivi, 2025; Shah et al., 2024); and (3) existing reviews tend toward narrative description rather than interpretive synthesis that reveals theoretical tensions and contributes novel frameworks. This study addresses these deficits through a rigorously designed Qualitative SLR following PRISMA guidelines, contributing: (a) a Multi-Dimensional Green Consumer Perception Framework; and (b) a Five-Profile Green



Consumer Taxonomy. Three primary research questions guide this inquiry: (RQ1) How do consumers define and interpret ‘green’ products across environmental marketing contexts? (RQ2) What cognitive, emotional, social, and structural factors shape these perceptions? (RQ3) What theoretical tensions and gaps characterize the current body of knowledge, and what novel frameworks can advance the field?

II. CONCEPTUAL CLARIFICATION: THE TERMINOLOGICAL LANDSCAPE

A critical preliminary step for any rigorous SLR in this domain is establishing definitional boundaries, as the literature inconsistently uses ‘green marketing,’ ‘environmental marketing,’ and ‘sustainability marketing’ as if interchangeable, even though they are distinct constructs with different scopes, theoretical anchors, and strategic implications.

Environmental marketing is the broadest term, encompassing all marketing activities that address ecological concerns across the product lifecycle, from material sourcing to post-consumer waste management. It includes regulatory compliance, lifecycle assessment (LCA) integration, and policy-driven disclosure (García-Salirrosas & Rondon-Eusebio, 2022). Green Marketing is a more product- and brand-specific subset, focused on positioning products or services based on their eco-friendly attributes (organic ingredients, recyclable packaging, low-carbon footprint) and leveraging these attributes in promotional communications to influence consumer purchase decisions (Nguyen et al., 2025). Sustainability Marketing adopts the broadest Triple Bottom Line (TBL) orientation, integrating People, Planet, and Profit and extends beyond ecological claims to encompass social responsibility, ethical sourcing, and long-term stakeholder value creation (Jia et al., 2023). In this study, ‘environmental marketing’ serves as the overarching umbrella term; ‘green marketing’ refers to product- or brand-specific eco-positioning; and ‘sustainability marketing’ is reserved for discussions of TBL-oriented corporate strategy. This terminological precision is maintained consistently throughout the analysis.

The key components of environmental marketing include: Green Products and Services (eco-friendly attributes, biodegradable materials, recyclable packaging); Green Advertising and Communication (transparent, informative sustainability messaging); Green Business Image and Branding (credible eco-positioning enhancing brand loyalty and willingness to pay premium prices); the Green 7Ps Marketing Mix (Product, Price, Place, Promotion, People, Process, Physical Evidence); Environmental Labeling and Certification (eco-labels as trust signals); and Technological Integration, notably Artificial Intelligence for personalized green consumer engagement (Cui et al., 2025; Mei et al., 2025; Nguyen et al., 2025).

III. LITERATURE REVIEW

A) *Theoretical Frameworks in Environmental Marketing Research*

Environmental marketing research draws on several major theoretical frameworks. The Theory of Planned Behavior (TPB) is the most widely applied, explaining how attitudes, subjective norms, and perceived behavioral control shape individual green purchase intentions; moral obligation partially mediates the relationship between intention and behavior (Cui et al., 2024). The Stimulus-Organism-Response (SOR) Model captures how green marketing stimuli affect internal consumer states (green consumption value, pro-environmental self-identity) and behavioral responses (Zhang, Zhao, et al., 2025). Social Practice Theory shifts focus from individual cognition to collective habitual practices, explaining how organizational green marketing practices interact with environmental knowledge to influence behavior at the societal scale (Ali, 2021). The Resource-Based View (RBV) and Dynamic Capabilities View (DCV) conceptualize sustainable marketing as a firm-level competitive capability built on adaptive and market-shaping competencies (Madhavaram & Nirjar, 2025). Innovation Diffusion Theory explains how green innovation spreads and creates sustainability-oriented organizational climates (Alshammari & Alshammari, 2023).

B) *Consumer Perceptions of Green Products: Key Insights and Tensions*

Cognitive, emotional, and social factors shape consumer perceptions of ‘green’ products. Environmental knowledge is a consistent predictor of pro-green attitudes. Still, its relationship to actual behavior is non-linear: knowledge amplifies the effectiveness of green advertising (Li, 2025) yet can also generate skepticism and ‘green fatigue’ when consumers feel overwhelmed by environmental information (Su & Li, 2024). This non-linearity constitutes a fundamental theoretical tension not adequately theorized in existing frameworks. Trust is another critical mediator: green brand knowledge, green trust, and perceived social responsibility exert significant effects on purchase intentions (Tanveer et al., 2024), while greenwashing profoundly undermines this trust and can provoke boycott intentions (Nguyen & Duong, 2025; Hazarika et al., 2025). Post-purchase dynamics, largely underexplored, represent a frontier area, with evidence that disclosing core green attributes can mitigate skepticism (Zhang, Zhang, et al., 2025). Cultural and demographic factors further complicate universal theorization: what drives green behavior in East Asian collectivist contexts (social norms, conformity) differs substantially from the Western individualist drivers (personal environmental values, knowledge) (Nabivi, 2025; Baltacı et al., 2025).

C) Identified Gaps in the Literature

Six critical gaps motivate this review: (1) over-reliance on purchase intention rather than actual behavior as the dependent variable (Bravo et al., 2022); (2) under-exploration of post-purchase attitude dynamics (Zhang, Zhang, et al., 2025); (3) insufficient cross-cultural comparative theorization (Nabivi, 2025; Shah et al., 2024); (4) the absence of comprehensive consumer typologies that move beyond attitudinal segmentation to behavioral profiling; (5) the unintended negative effects of green semiotics (eco-symbols) in certain market contexts (Worakittikul et al., 2024); and (6) inconsistent theoretical treatment of the knowledge–behavior paradox in green marketing (Su & Li, 2024). This review systematically addresses these gaps through rigorous thematic synthesis.

IV. METHODOLOGY

A) Research Design and Justification for Qualitative SLR

A Qualitative Systematic Literature Review (SLR) methodology was adopted, combining the rigor of systematic search and selection methods with interpretive synthesis approaches appropriate for qualitative and mixed-methods evidence. A qualitative SLR is particularly suited to this study because consumer perceptions of ‘green’ are inherently interpretive, culturally embedded, and contextually variable phenomena. The goal is not to aggregate effect sizes (as in quantitative meta-analysis) but to achieve interpretive integration that generates higher-order conceptual insights, identifies theoretical tensions, and constructs frameworks that transcend individual study findings (Gunnell et al., 2022; Lu et al., 2024). The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) framework guided all reporting stages to ensure transparency and reproducibility (Silva Júnior & Dutra, 2021).

B) Search Strategy and Search Strings

A comprehensive, reproducible search was conducted across five major academic databases from January 2020 to December 2025. Table 1 presents the complete search strings, filters, and initial record counts for each database.

Table 1: Database Search Strings, Filters, and Initial Records

Database	Search String (Boolean)	Filters Applied	Initial Records
Scopus	("green marketing" OR "environmental marketing" OR "sustainability marketing") AND ("consumer perception" OR "green purchase" OR "purchase intention" OR "green behavior" OR "green consumer")	2020–2025; Article; English	234
SJR	("green marketing" OR "environmental marketing") AND ("consumer attitude" OR "green product" OR "eco-label" OR "greenwashing")	2020–2025; Article; Q3+	189
Web of Science	TS=("green marketing" OR "environmental marketing") AND TS=("consumer perception" OR "green purchase behavior" OR "sustainable consumption")	2020–2025; Article; English	156
DOAJ	"green marketing" AND "consumer" AND ("perception" OR "behavior" OR "purchase intention")	2020–2025; Open access; English	178
Inspec	"green marketing" OR "eco-marketing" AND "consumer behavior" AND "sustainability"	2020–2025; Article	90
			847

Source: Authors (2025)

C) Inclusion and Exclusion Criteria

Inclusion and exclusion criteria were established a priori and applied consistently during both screening phases. Table 2 presents the full criteria matrix.

Table 2: Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
Published 2020–2025	Published before 2020
Indexed in Scopus, SJR, WoS, DOAJ, or Inspec	Not indexed in any of the five databases
SJR Quartile Q3 or higher	SJR Quartile Q4 or unranked
Article, book chapter, or conference paper	Editorials, letters, dissertations, grey literature
Written in English	Non-English language publications
Focuses on consumer perception, attitude, or behavior toward green/environmental/sustainable products and marketing	Focuses solely on firm-level strategy or supply-side perspectives without the consumer behavior dimension
Provides empirical, conceptual, or systematic review contributions	Duplicate entries or republished data

Source: Authors (2025)

D) PRISMA Flow Diagram

Figure 1 presents the PRISMA flow diagram detailing the record identification, screening, eligibility assessment, and final inclusion process.

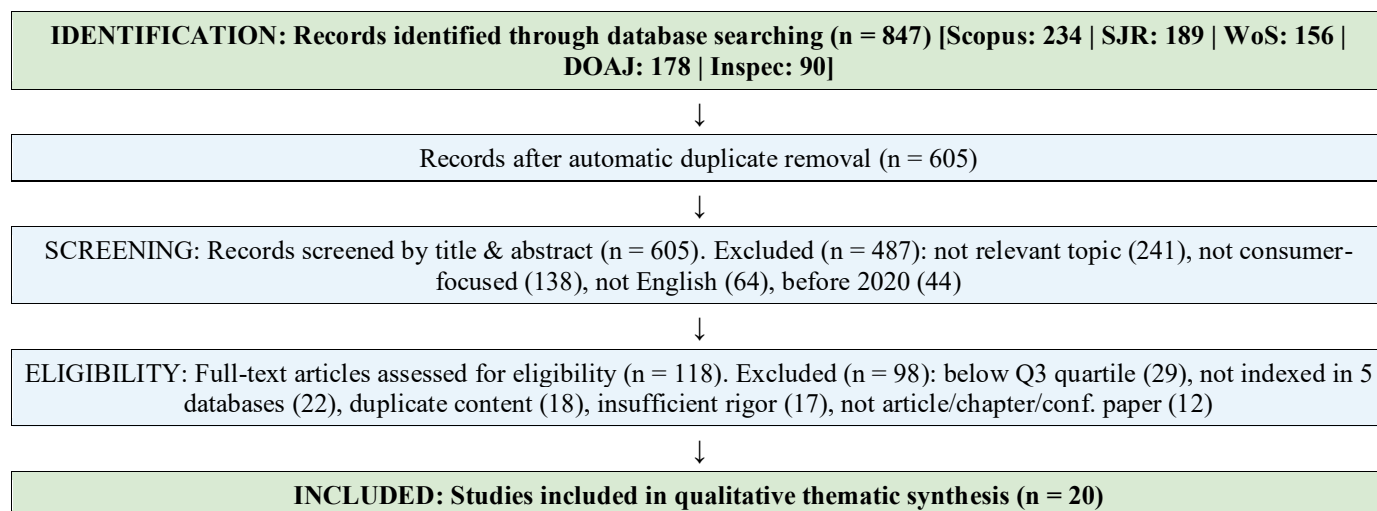


Figure 1. PRISMA Flow Diagram of Systematic Search and Selection Process

E) Quality Appraisal of Included Studies

Quality assessment drew on criteria adapted from the Rosalind Franklin Qualitative Research Appraisal Instrument (RF-QRA), evaluating four dimensions: credibility (trustworthiness of findings), transferability (applicability to other contexts), reliability (consistency of methods), and confirmability (objectivity and auditability) (De Melo Santos et al., 2025). Each included study was independently assessed by two coders; all 20 studies met a minimum 'Moderate' quality threshold. Studies rated 'Moderate' were included, but their findings were weighted accordingly in synthesis. Table 3 presents the quality appraisal results.

Table 3: Quality Appraisal of Included Studies (RF-QRA Adapted)

No	Author (Year)	Credibility	Transferability	Reliability	Confirmability	Overall Quality
1	Li (2025)	✓	✓	✓	✓	High
2	Nabivi (2025)	✓	✓	✓	Partial	High
3	Shang et al. (2024)	✓	✓	✓	✓	High
4	Su & Li (2024)	✓	Partial	✓	✓	Moderate-High
5	Duque Oliva et al. (2024)	✓	✓	✓	✓	High
6	Simanjuntak & Fitri (2024)	✓	Partial	✓	Partial	Moderate
7	Ngo et al. (2024)	✓	✓	✓	✓	High
8	Balaskas et al. (2023)	✓	✓	✓	✓	High
9	Chao & Yu (2023)	✓	✓	✓	✓	High
10	Ewe & Tjiptono (2023)	✓	✓	✓	Partial	High
11	Štofejová et al. (2023)	✓	Partial	✓	✓	Moderate-High
12	Busalim et al. (2022)	✓	✓	✓	✓	High
13	Skackauskiene & Vilkaite-Vaitone (2022)	✓	✓	✓	✓	High
14	Bravo et al. (2022)	✓	✓	Partial	✓	Moderate-High
15	Ali (2021)	✓	✓	✓	✓	High
16	Lopes et al. (2024)	✓	Partial	✓	Partial	Moderate
17	Jia et al. (2023)	✓	✓	✓	✓	High
18	Cg & G (2024)	Partial	Partial	✓	Partial	Moderate
19	Laheri (2025)	✓	✓	✓	✓	High
20	Mancuso et al. (2021)	✓	Partial	✓	✓	Moderate-High

Source: Authors (2025); ✓ = Criterion fully met; Partial = Criterion partially met

F) Data Extraction and Thematic Coding Protocol

Data extraction was guided by a structured extraction form capturing: (1) study context (author, year, country, sector, study design); (2) theoretical framework employed; (3) key constructs and measures; (4) primary findings related to consumer green perceptions; and (5) methodological quality notes. Thematic synthesis proceeded in three stages (Thomas & Harden, 2008): (1) line-by-line open coding of extracted findings from each study; (2) construction of descriptive themes by grouping related codes; and (3) development of analytical themes through interpretive synthesis that moved beyond description to identify theoretical tensions, contradictions, and cross-theme implications. Two independent coders conducted the initial coding of all 20 studies; Cohen’s Kappa was $\kappa = 0.82$ (substantial agreement), and coding disagreements were resolved through structured consensus discussion. Table 4 provides representative examples of the thematic coding protocol, illustrating the progression from extracted evidence to analytical theme.

Table 4: Thematic Coding Protocol: Representative Examples

Extracted Evidence (Paraphrased)	Open Code	Descriptive Theme	Analytical Theme
Green advertising + environmental knowledge → amplifies green purchase intention (Li, 2025)	Knowledge amplifies intention	Eco-knowledge as catalyst	T1: Cognitive Drivers – Knowledge–Behavior Nexus
High environmental knowledge → skepticism/'green fatigue' → weakens attitude-behavior link (Su & Li, 2024)	Knowledge triggers skepticism	Green fatigue paradox	T1: Cognitive Drivers – Knowledge–Behavior Nexus
Fear/guilt appeals → stronger purchase intention than joy/inspiration appeals (Balaskas et al., 2023)	Negative affect drives intent	Negative emotional efficacy	T2: Affective Pathways – Emotional Mobilization
Green altruism + WEF moderate emotional pathways to CE product purchase (Chao & Yu, 2023)	Prosocial motivation mediates	Altruistic–emotional synergy	T2: Affective Pathways – Emotional Mobilization
Cultural context (Poland vs. USA) moderates eco-content → brand attitude (Nabivi, 2025)	Culture moderates the green signal	Cultural conditioning of 'green.'	T3: Social Construction – Cultural–Normative Mediation
Social influence + health consciousness drive green cosmetics adoption in Pakistan (Shah et al., 2024)	Social norm + health belief	Health-social drivers of 'green.'	T3: Social Construction – Cultural–Normative Mediation
Greenwashing → green confusion → boycott intention; brand trust buffers (Nguyen & Duong, 2025)	Deception erodes trust	Greenwashing trust erosion	T4: Trust–Credibility Nexus – Greenwashing Dynamics
Post-purchase core attribute disclosure mitigates skepticism via self-affirmation (Zhang et al., 2025)	Post-purchase disclosure repairs	Trust recovery mechanism	T4: Trust–Credibility Nexus – Greenwashing Dynamics
Environmental habits mediate green behavior more than environmental values (Laheri, 2025)	Habit > values in predicting behavior	Habit formation as a bridge	T5: Structural Gap – Attitude–Behavior Disconnect
Positive green attitudes do not consistently translate into purchase; price/availability are barriers (Busalim et al., 2022)	Structural barriers block conversion	Purchase barrier clusters	T5: Structural Gap – Attitude–Behavior Disconnect

Source: Authors (2025)

V. RESULTS: OVERVIEW OF INCLUDED STUDIES

Following the systematic search and screening process outlined above, 20 studies were included in the final synthesis. The included studies span 12 countries (China, Indonesia, Vietnam, Malaysia, Pakistan, India, Portugal, Brazil, Greece, Taiwan, Slovakia, Italy/Ireland), with the largest concentration from Asian contexts (n = 9), followed by European contexts (n = 7) and multi-country studies (n = 4). Methodologically, 15 studies employed quantitative survey designs, 3 employed systematic/bibliometric review methods, and 2 used mixed methods. The most frequently cited theoretical frameworks were TPB (n = 12), SOR model (n = 6), and Social Practice Theory (n = 3). Table 5 presents the complete SLR summary.

Table 5: Summary of Included Studies: Systematic Literature Review

No	Author (Year)	Title	Journal	Country	Index	Q	Type	Main Finding
1	Li (2025)	Impact of green advertisement and environmental knowledge on the intention of	BMC Psychology	China	Scopus, SJR, WoS	Q3	Article	Green advertising, eco-branding, and eco-labeling positively influence green purchase intention; environmental

		consumers to buy green products						knowledge moderates this effect.
2	Nabivi (2025)	The Role of Social Media in Green Marketing: How Eco-Friendly Content Influences Brand Attitude and Consumer Engagement	Sustainability	Multi-country	Scopus, SJR, DOAJ	Q3	Article	Eco-friendly social media content boosts brand attitude; cultural context (Poland vs. USA) moderates consumer engagement responses.
3	Shang et al. (2024)	Understanding the Influences on Green Purchase Intention with Moderation by Sustainability Awareness	Sustainability	China	Scopus, SJR, DOAJ	Q3	Article	Sustainability awareness strengthens attitude→intention; may negatively moderate the perceived behavioral control pathway.
4	Su & Li (2024)	Exploring the Impact of the Green Marketing Mix on Environmental Attitudes and Purchase Intentions	Sustainability	China	Scopus, SJR, DOAJ	Q3	Article	Green mix elements differentially affect attitudes; high environmental knowledge can cause 'green fatigue' and paradoxical skepticism.
5	Duque Oliva et al. (2024)	Green Buying Behavior: An Integrated Model	Sustainability	Colombia/Spain	Scopus, SJR, DOAJ	Q3	Article	Personality traits, altruistic attitudes, environmental commitment, and social influence collectively predict green buying behavior.
6	Simanjuntak & Fitri (2024)	Green Consumption: Behavior of Young Indonesian Consumers	Pertanika Journal of Social Sciences & Humanities	Indonesia	Scopus, SJR	Q3	Article	Environmental knowledge and attitude are the main drivers; environmental responsibility has an indirect effect on Indonesian youth.
7	Ngo et al. (2024)	Factors influencing Generation Z's intention to purchase sustainable clothing in Vietnam	PLOS ONE	Vietnam	Scopus, SJR, WoS	Q3	Article	Green perceived value, quality, social influence, and design mediate Gen Z sustainable purchase intentions through dual attitude pathways.
8	Balaskas et al. (2023)	Impact of Environmental Concern, Emotional Appeals, and Attitude on Intention to Buy Green Products	Sustainability	Greece	Scopus, SJR, DOAJ	Q3	Article	Negative emotional appeals (fear, guilt, disgust) significantly outperform positive appeals; the effect is specific to younger, environmentally concerned consumers.
9	Chao & Yu (2023)	How emotions and green altruism explain consumer purchase intention toward circular economy products	Business Strategy and the Environment	Taiwan	Scopus, SJR, WoS	Q3	Article	Emotions and green altruism jointly drive CE product intentions; willingness to be environmentally friendly (WEF) moderates pathways.
10	Ewe & Tjiptono (2023)	Green behavior among Gen Z consumers in an emerging market	Young Consumers	Malaysia	Scopus, SJR, WoS	Q3	Article	Brand familiarity with eco-products enhances attitude, intention, and WTP; green

								consciousness and regulatory focus moderate effects.
11	Štofejšová et al. (2023)	Sustainability and Consumer Behavior in Electronic Commerce	Sustainability	Slovakia	Scopus, SJR, DOAJ	Q3	Article	Environmental attitude and willingness-to-pay are pivotal in shaping proactive, sustainable purchasing behavior in e-commerce contexts.
12	Busalim et al. (2022)	Consumer behavior in sustainable fashion: A systematic literature review	International Journal of Consumer Studies	Ireland	Scopus, SJR, WoS	Q3	Article	Attitude-behavior gap is a central issue; cognitive dissonance, price perception, and limited availability are primary barriers to green fashion.
13	Skackauskiene & Vilkaite-Vaitone (2022)	Green Marketing and Customers' Purchasing Behavior: A Systematic Literature Review	Energies	Lithuania	Scopus, SJR, WoS, Inspec	Q3	Article	TPB is the dominant framework in green marketing-energy research; attitude and subjective norm are the strongest predictors of green purchasing
14	Bravo et al. (2022)	Origins, Evolution, and Future of Green Products and Consumer Research: A Bibliometric Analysis	Sustainability	Brazil	Scopus, SJR, DOAJ	Q3	Article	Most green research uses purchase intention, rather than actual behavior, as the DV—revealing a persistent intention-behavior gap in the field.
15	Ali (2021)	A social practice theory perspective on green marketing initiatives and green purchase behavior	Cross-Cultural & Strategic Management	Pakistan	Scopus, SJR, WoS	Q3	Article	Organizational green marketing practices interact with environmental knowledge to drive green behavior through social practice mechanisms.
16	Lopes et al. (2024)	Green Purchase Determinants in a Peripheral Region of Europe	Administrative Sciences	Portugal	Scopus, SJR, DOAJ	Q3	Article	Environmental awareness mediates the influence of price perception on green purchases; economic considerations are as important as ecological ones.
17	Jia et al. (2023)	Promoting Responsible Sustainable Consumer Behavior through Sustainability Marketing	Sustainability	China	Scopus, SJR, DOAJ	Q3	Article	CSR and brand image mediate sustainability marketing's effect on consumer behavior; brand legitimacy is critical for sustainability claims
18	Cg & G (2024)	Environmental prosocial attitudes to green consumption values, openness to green communication, and buying behavior	Cogent Business & Management	India	Scopus, SJR, DOAJ	Q3	Article	Environmental prosocial attitudes and green consumption values correlate positively with openness to green communication and green buying.
19	Laheri (2025)	Bridging the Green Gap: Mediating Effects of Environmental Habits and Values on Consumer	Global Business Review	India	Scopus, SJR	Q3	Article	Environmental habits mediate green behavior more strongly than values; habit formation is the key mechanism for bridging the attitude-

		Behavior						behavior gap.
20	Mancuso et al. (2021)	Understanding Purchasing Behavior in Response to Sustainable Marketing Practices	Sustainability	Italy	Scopus, SJR, DOAJ	Q3	Article	Sustainability attention alone does not guarantee brand loyalty in the food sector; effective marketing must actively engage and guide consumers.

Source: Compiled by authors from academic databases (2025)

VI. THEMATIC SYNTHESIS AND CRITICAL DISCUSSION

Thematic synthesis across the 20 included studies produced five analytical themes. Crucially, this section moves beyond article-by-article description to identify theoretical tensions, cross-theme contradictions, and conceptual integrations that constitute the interpretive contribution of this review.

A) *Theme 1: The Knowledge–Behavior Nexus and the Paradox of Green Literacy*

The first and most theoretically complex theme concerns the relationship between environmental knowledge and green consumer behavior. Across the included studies, a consistent but non-linear pattern emerges: environmental knowledge both enables and constrains green purchasing behavior, depending on the level of knowledge, the credibility of marketing claims, and the consumer’s cognitive tolerance for environmental complexity.

The enabling function of knowledge is well-documented. Environmental knowledge amplifies the positive effect of green advertising on purchase intention, helping consumers to differentiate authentic green claims from less credible ones (Li, 2025). It supports the development of pro-environmental attitudes and enhances green consumption habits, particularly among younger consumers who are more receptive to eco-educational messaging (Simanjuntak & Fitri, 2024). Eco-label knowledge specifically strengthens pro-environmental behavior by providing cognitive shortcuts that reduce the effort required to evaluate green product attributes (Hossain et al., 2022).

However, the constraining function of knowledge is equally significant and theoretically underappreciated. Higher environmental knowledge can paradoxically weaken the link between positive environmental attitudes and actual green purchase behavior through a mechanism best described as ‘green fatigue’ (Su & Li, 2024): when consumers are highly knowledgeable, they scrutinize green claims more intensely, increasing the probability that they will perceive inconsistencies or exaggerations and disengage from the purchase. This constitutes a curvilinear rather than linear knowledge–behavior relationship, a theoretical refinement of the standard TPB assumption that knowledge unidirectionally strengthens behavioral intention. For green marketers, this means that educational campaigns must be calibrated to consumer knowledge segments: for low-knowledge consumers, broad environmental education strengthens purchase intent; for high-knowledge consumers, substantive, third-party-verified, and granular environmental claims are necessary to maintain credibility and avoid skepticism.

B) *Theme 2: Affective Pathways and the Counter-Intuitive Power of Negative Emotional Appeals*

The second theme reveals a theoretically counter-intuitive but empirically robust pattern: negative emotional appeals in green advertising, specifically fear, guilt, and disgust, generate significantly stronger positive attitudes toward green advertisements and higher purchase intentions than positive emotional appeals such as joy, inspiration, or pride (Balaskas et al., 2023). This finding runs counter to the general marketing assumption that positive affect enhances consumer engagement and requires contextual theorization.

The efficacy of negative emotional appeals in green marketing is best explained through a combination of behavioral reasoning theory (negative reasons to maintain the status quo become more salient) and guilt-based prosocial motivation: environmental guilt activates consumers’ sense of moral responsibility and green altruism, driving behavior that resolves the emotional dissonance (Chao & Yu, 2023). Green altruism, the prosocial desire to protect the environment for others and future generations, functions as a key moderator, amplifying the effect of both guilt-based appeals and emotional mobilization strategies.

However, three critical contextual qualifications must be noted. First, the efficacy of negative emotional appeals is most strongly evidenced among younger, environmentally concerned consumers in Greek and Taiwanese contexts (Balaskas et al., 2023; Chao & Yu, 2023); the generalizability to other demographic groups and cultural contexts remains under-investigated. Second, the moderating role of green consumption values (Cg & G, 2024) suggests that consumers who already hold strong pro-environmental values are more receptive to both negative emotional appeals and altruistic messaging, potentially creating an echo-chamber effect. Third, Nabivi (2025) demonstrates that cultural context significantly moderates how eco-content

affects consumer engagement, implying that negative emotional appeals effective in Western or East Asian contexts may be less effective or counterproductive in markets where positive, harmony-oriented appeals are culturally normative.

C) Theme 3: The Social Construction of ‘Green’ – Cultural and Normative Determinants

The third theme reveals that the meaning of ‘green’ is not universally defined but is socially constructed through cultural values, normative systems, and peer influence networks. This finding has profound implications for the universality assumptions embedded in dominant green marketing theories.

Social norms and peer influence are consistent predictors of green purchase behavior across the included studies, with the TPB’s subjective norm component demonstrating robust effects in collectivist cultural contexts such as Vietnam (Ngo et al., 2024) and Malaysia (Ewe & Tjiptono, 2023). In these contexts, brand familiarity functions as a social signal that reduces peer uncertainty about green choices, with familiar eco-brands generating stronger attitude, purchase intention, and willingness-to-pay effects than unfamiliar ones.

Critically, however, the drivers of green behavior vary substantially across cultural contexts, challenging universal theorization. In Pakistani contexts, social influence and health consciousness, rather than ecological concern, are the primary drivers of eco-cosmetics adoption (Shah et al., 2024). In Indonesian youth contexts, environmental responsibility has a weaker-than-expected effect, suggesting that established models like norm activation theory require cultural adaptation (Simanjuntak & Fitri, 2024). Research contrasting ecocentric (nature-centric) and anthropocentric (human-centric) value orientations demonstrates that these fundamental worldviews differentially shape attitudes toward green cosmetics across countries, with ecocentric consumers more consistently motivated by ecological attributes and anthropocentric consumers more motivated by health and safety benefits (Baltacı et al., 2025).

A theoretical tension emerges here: whereas social practice theory (Ali, 2021) emphasizes collective habitual behaviors and normative systems as primary drivers of green behavior, the individualist frameworks dominant in TPB research emphasize personal values and control beliefs. The synthesis of these traditions is underdeveloped in the existing literature and represents a significant theoretical opportunity. This review proposes that the relative primacy of normative versus individualist pathways to green behavior is itself culturally moderated, requiring a ‘cultural calibration’ layer in any comprehensive green consumer behavior framework.

D) Theme 4: The Trust–Credibility Nexus – Greenwashing Dynamics and Trust Recovery

The fourth theme centers on the relationship between green marketing credibility, consumer trust, and the growing threat of greenwashing. A key theoretical insight emerging from synthesis is that trust operates as a cross-theme mediator: it amplifies the positive effects of knowledge (Theme 1), moderates the emotional pathways (Theme 2), and interacts with social norms (Theme 3) to determine whether green marketing communications translate into purchase behavior.

Greenwashing, deceptive or exaggerated environmental claims, generate green confusion that mediates the pathway from greenwashing exposure to consumer boycott intentions (Nguyen & Duong, 2025). Strong green brand equity and established brand trust partially buffer these negative effects (Hazarika et al., 2025), but this buffering capacity is not unlimited: once consumers perceive systematic deception, brand trust erosion is difficult to reverse. The growing body of evidence on greenwashing (Persakis et al., 2025) calls for stricter regulatory oversight and more transparent sustainability communications at both firm and institutional levels.

A particularly nuanced finding concerns post-purchase dynamics: the disclosure of core green attributes such as eco-friendly materials composition or verified carbon-reduction claims after purchase can mitigate initial consumer skepticism and enhance positive attitudes through self-affirmation processes, particularly when consumers have already committed to the purchase and are motivated to resolve cognitive dissonance (Zhang, Zhang, et al., 2025). This finding challenges the conventional assumption that green marketing persuasion occurs exclusively pre-purchase, and suggests that post-purchase communication is an underutilized trust-building mechanism. Furthermore, Worakittikul et al. (2024) revealed an unexpected semiotic paradox: conventional eco-symbols and green visual elements, assumed to signal Sustainability universally, can generate negative consumer perceptions in emerging markets, potentially because they trigger suspicion of greenwashing among increasingly sophisticated consumers.

E) Theme 5: Structural Drivers of the Attitude–Behavior Gap

The fifth and perhaps most practically consequential theme concerns the systematic gap between positive consumer environmental attitudes and actual green purchasing behavior. The attitude–behavior gap is the most frequently cited challenge across the included studies (Busalim et al., 2022; Bravo et al., 2022; Megha, 2024), yet its underlying structural drivers are insufficiently theorized to enable actionable interventions.

The synthesis reveals a cluster of interacting structural barriers that collectively sustain the gap: (1) price premium sensitivity, where perceived higher cost of green products prevents purchase despite positive attitudes (Lopes et al., 2024); (2) limited availability and accessibility of green options in mainstream retail contexts; (3) psychological skepticism triggered by greenwashing exposure, which weakens the attitude–intention link even among positively disposed consumers; and (4) competing situational priorities that displace environmental considerations at the moment of purchase decision.

Critically, Laheri (2025) introduces an important mediating mechanism: environmental habits mediate the attitude–behavior relationship more strongly than environmental values, suggesting that behavior change interventions must target habit formation rather than merely attitude cultivation. Consumers who have formed green behavioral routines habitually choosing eco-friendly options, reusing containers, selecting certified products by default, are significantly more likely to exhibit consistent green purchasing behavior regardless of moment-to-moment attitudinal activation. Shang et al. (2024) provide complementary nuance: while sustainability awareness strengthens the attitude–intention pathway, it simultaneously reduces perceived behavioral control, potentially because more aware consumers recognize the complexity and difficulty of truly sustainable consumption. This finding suggests a paradox of awareness: greater environmental consciousness heightens motivation but may also heighten the perceived difficulty of acting, creating a motivational tension that marketing interventions must carefully navigate.

VII. THEORETICAL CONTRIBUTIONS

A) Multi-Dimensional Green Consumer Perception Framework

Building on the five thematic findings and their cross-theme theoretical tensions, this study proposes the Multi-Dimensional Green Consumer Perception Framework (MD-GCPF). This novel conceptual model integrates the cognitive, affective, social-cultural, and structural dimensions of consumer green perceptions into a coherent, actionable architecture. The framework advances beyond prior models (TPB, SOR) by: (1) explicitly incorporating a trust mediation layer that operates across all other dimensions; (2) introducing cultural moderation as a structural feature rather than a contextual footnote; and (3) recognizing the non-linear (curvilinear) relationship between knowledge and behavior. Table 6 presents the framework’s architecture.

Table 6: Multi-Dimensional Green Consumer Perception Framework (MD-GCPF)

Dimension / Layer	Core Constructs	Theoretical Anchor	Implications for Green Marketers
Layer 1: Cognitive	Environmental knowledge, eco-label literacy, green fatigue paradox	TPB (Ajzen, 1991); SOR model	Provide substantive, differentiated claims; avoid overclaiming; educate without overwhelming.
Layer 2: Affective	Negative emotional appeals, green altruism, willingness to be environmentally friendly (WEF)	Behavioral Reasoning Theory; Emotional Contagion	Leverage guilt/fear messaging selectively by cultural context; embed altruistic appeals in campaigns.
Layer 3: Social–Cultural	Subjective norms, peer influence, cultural value orientation (ecocentric vs. anthropocentric)	Social Practice Theory (Ali, 2021); TPB	Tailor messaging to cultural context; integrate social proof and normative endorsements by segment.
Layer 4: Structural–Behavioral	Habit formation, structural barriers (price, availability), attitude-behavior gap	Theory of Planned Behavior; Behavioral Economics	Lower switching costs; design green loyalty programs; nudge habit formation through eco-convenience
Cross-Layer Mediator	Trust, credibility, greenwashing skepticism, brand equity	Signaling Theory; Brand Trust Theory	Invest in certified eco-labels; disclose core green attributes proactively; build resilient brand equity.

Source: Authors (2025)

B) Five-Profile Green Consumer Taxonomy

The second theoretical contribution is a Five-Profile Green Consumer Taxonomy derived from the thematic synthesis, advancing beyond conventional attitudinal segmentation (great vs. low environmental concern) toward behavioral profiling that accounts for the mechanisms by which different consumer types engage with green marketing. This taxonomy is grounded in the five analytical themes and designed to be actionable for green marketing strategy. Table 7 presents the full taxonomy.

Table 7: Five-Profile Green Consumer Taxonomy

Profile Type	Defining Characteristics	Primary Driver	Marketing Strategy	Supporting Evidence
Type I: Knowledge-Critical Consumer	High environmental knowledge; high scrutiny of claims; eco-label literate; skeptical of vague green messaging	Cognitive evaluation; substantive evidence-seeking	Provide certified eco-labels, LCA data, third-party verification; avoid peripheral green claims	Li, 2025; Su & Li, 2024; Hossain et al., 2022
Type II: Emotion-Driven Altruist	Responds strongly to guilt/fear appeals; high green altruism; prosocial orientation; WEF-motivated	Affective mobilization; prosocial values	Deploy negative emotional messaging; emphasize collective environmental harm; link purchase to altruistic identity.	Balaskas et al., 2023; Chao & Yu, 2023; Cg & G, 2024
Type III: Social Conformist	Norm-driven; peer-influenced; brand-familiar; responds to social proof; collectivist cultural orientation.	Subjective norms; social identity	Use eco-influencers; normative messaging ('most people choose green'); build brand community around Sustainability.	Ewe & Tjiptono, 2023; Ngo et al., 2024; Nabivi, 2025
Type IV: Habitual Sustainer	Habit-formed green behavior; eco-routines embedded in daily life; values consistency over novelty	Behavioral habit; environmental routine	Reinforce existing green habits; design loyalty programs; make green the default option (nudge architecture)	Laheri, 2025; Skackauskiene & Vilkaite-Vaitone, 2022
Type V: Intention-Blocked Consumer	Positive environmental attitudes; structural barriers block action; price-sensitive; limited access to green options	Structural constraints; economic rationality	Reduce the price gap; improve access to green products; offer green financing or incentives.	Busalim et al., 2022; Bravo et al., 2022; Lopes et al., 2024

Source: Authors (2025); derived from thematic synthesis of included studies.

C) Theoretical Refinements

Beyond the two primary contributions, this review proposes three theoretical refinements to existing frameworks. First, the standard TPB assumption of a linear knowledge–intention relationship requires revision toward a curvilinear (inverted-U or threshold) model: knowledge enhances intention up to a point, beyond which it may paradoxically diminish intention through skepticism and green fatigue (Su & Li, 2024). Second, the SOR model in green marketing contexts requires the explicit inclusion of a cultural moderation layer between Stimulus (green marketing communications) and Organism (consumer psychological states), given consistent evidence that cultural value orientation significantly shapes how green stimuli are processed and interpreted (Nabivi, 2025; Baltacı et al., 2025). Third, Social Practice Theory’s focus on collective habitual behaviors is supported by Laheri’s (2025) finding that habits outperform values as predictors of green behavior, suggesting that habit-formation interventions (e.g., convenience design, default green options, eco-loyalty programs) should be theoretically foregrounded rather than treated as secondary to attitude-change strategies.

VIII. DISCUSSION

A) Implications for Green Marketing Practice

For practitioners, the MD-GCPF and Five-Profile Taxonomy provide actionable segmentation tools. Marketing campaigns should be differentiated by consumer profile: Knowledge-Critical Consumers require substantive, third-party-verified claims and will be alienated by peripheral or vague green messaging; Emotion-Driven Altruists are most effectively reached through guilt- and fear-based appeals that activate prosocial motivation; social conformists respond to normative messaging, peer endorsement, and eco-brand community building; habitual Sustainers need environmental convenience design and behavioral nudges rather than persuasive advertising; and intention-blocked consumers require structural interventions price subsidies, enhanced accessibility, and green financing options to convert positive attitudes into purchase behavior.

B) Policy Implications

For policymakers, the findings support: (1) stronger regulatory oversight of green claims to combat greenwashing, aligned with the EU green claims directive and Indonesia's BPOM Regulation No. 12 of 2020; (2) development of harmonized eco-labeling systems that are recognizable, trusted, and culturally calibrated across regional markets; (3) consumer environmental education programs that build genuine eco-literacy without overwhelming citizens to the point of green fatigue; and (4) structural market interventions green product subsidies, default eco-options in retail, and circular economy infrastructure to reduce the structural barriers sustaining the attitude–behavior gap.

C) Limitations and Future Research Directions

This study has several limitations. First, as a qualitative SLR, it synthesizes evidence without quantifying effect sizes, limiting precision in comparative claims about driver magnitudes. Second, the 20-study sample, while sufficient for saturation, represents a focused rather than exhaustive view of the field. Third, the qualitative synthesis is subject to interpretive judgment, which, while constrained by dual-coder protocols ($\kappa = 0.82$), cannot be eliminated. Future research should address: (1) longitudinal qualitative studies tracking how consumer perceptions of 'green' evolve over time and across purchase cycles; (2) cross-cultural experimental designs testing whether the Five-Profile Taxonomy holds across collectivist and individualist cultural contexts; (3) post-purchase attitude dynamics and trust recovery mechanisms following greenwashing exposure; (4) the semiotic paradox of eco-symbols and its implications for green visual branding; and (5) mixed-methods studies combining deep qualitative profiling with behavioral economics experiments to validate and extend the MD-GCPF.

IX. CONCLUSION

This qualitative systematic literature review synthesized 20 peer-reviewed studies (SJR Q3, 2020–2025, indexed in Scopus, SJR, WoS, DOAJ, and Inspec) to examine what 'green' means to consumers in environmental marketing contexts and the factors that shape those perceptions. Following PRISMA guidelines, with dual-coder thematic synthesis achieving Cohen's $\kappa = 0.82$, five analytical themes were identified: (1) the Knowledge–Behavior Nexus and the paradox of green literacy; (2) affective pathways and the counter-intuitive power of negative emotional appeals; (3) the social construction of 'green' through cultural and normative determinants; (4) the trust–credibility nexus and greenwashing dynamics; and (5) structural drivers of the attitude–behavior gap.

The study makes three primary theoretical contributions. First, the Multi-Dimensional Green Consumer Perception Framework (MD-GCPF) integrates cognitive, affective, social-cultural, and structural layers of green perception with trust as a cross-layer mediator and culture as a structural moderator. Second, the five-profile green consumer taxonomy (Knowledge-Critical, Emotion-Driven Altruist, Social Conformist, Habitual Sustainer, Intention-Blocked) advances beyond attitudinal segmentation toward actionable behavioral profiling. Third, three theoretical refinements are proposed: the curvilinear knowledge–behavior relationship in TPB; the cultural moderation layer needed in the SOR model; and the foregrounding of habit formation in social practice theory applications to green marketing.

These contributions are not merely academic. As green marketing matures into a global strategic imperative driven by regulation (EU Packaging and Packaging Waste Regulation 2025/40; Indonesia's Regulation No. P.75/2019), competitive pressure, and escalating consumer expectations, the ability to understand what 'green' genuinely means to different consumers will determine the difference between authentic sustainability leadership and costly, credibility-damaging greenwashing. Companies and policymakers that invest in differentiated, contextually calibrated, and trust-anchored green marketing strategies will be better positioned for long-term success in an increasingly eco-conscious global marketplace.

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