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Green Consumerism (2000–2024): A TCCM-Guided Review Of Theory And Methods

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Abstract: *The growing environmental consciousness among consumers has increased the demand for sustainable products, and businesses are increasingly adopting eco-friendly practices to cater to this new market segment (Salini & Thomas, 2017a). Researchers have identified several key factors influencing consumers' green purchasing intentions and behaviour, including environmental concern, perceived knowledge of green products, and the impact of marketing strategies (1). Environmental concern, which [1]reflects an individual's worry about ecological problems, is significantly predicted by purchasing intentions (2). In the Indian context, marketers also recognise the importance of green marketing as consumers become more aware of environmental issues and seek to make purchasing decisions that align with their values (3). Green consumption, defined as using products and services that minimise environmental impacts, has gained significant attention from scholars across various disciplines. Despite the growing awareness and favourable attitudes toward green products, the purchase rates remain comparatively low, revealing a persistent gap between consumer intentions and actions. This discrepancy, often called the "attitude-behaviour gap," highlights the complexity of green consumption behaviour and the multifaceted factors influencing it.*

1. INTRODUCTION:

Marketing strategies, such as eco-labels and environmental claims, can also be crucial in shaping consumer perceptions and purchase intentions for sustainable products (1). Businesses must carefully consider the authenticity and transparency of their environmental claims to avoid the risk of "greenwashing," which can undermine [2]consumer trust and credibility(4). Similarly, perceived knowledge about green products, which refers to a consumer's self-assessment of their understanding of eco-friendly products and their attributes, can also shape their purchasing decisions (Salini & Thomas, 2017) (2). Moreover, social factors, such as government policies, media reports, and the influence of environmental organisations, can also shape consumers' green purchasing behaviour (4)

A growing body of studies has sought to identify the factors influencing green consumption. However, the results are frequently inconsistent and differ between socio-demographic groups, product categories, and geographic situations. For example, while some studies imply that highly educated, young female customers are more inclined to buy green products, other research finds contradictory outcomes depending on the product category or regional environment. To resolve these inconsistencies and give a complete analysis of green consumption, this review uses the Theory-Context-Characteristics-Methodology (TCCM) paradigm.

The study's objective is to systematically examine the use of environmental/ecological theories, consumer behaviour /marketing theories and sustainable business theories individually and in integration with other theories in addressing the action gap in green purchasing from 2000 to 2024. By employing the TCCM framework, the research aims to evaluate the theoretical foundations, contextual diversity, and methodological approaches utilised in existing studies, identifying gaps and proposing strategies for advancing sustainable consumer behaviour research.175 Articles were used to analyse the buying behaviour of green consumers from 2000 to 2024 using the TCCM framework. Specifically, the review focuses on the purchase behaviour of green products and seeks to answer the following question:

Research Questions

- How can environmental/ecological theories, consumer behaviour /Marketing Theories, and Sustainable Business Theories enhance understanding of the green consumption gap?
- How are enablers and Barriers associated with green consumer behaviour?

Data Collection: An extensive literature search was performed using Google Scholar to capture studies published between 2000 and 2024. Search queries employed targeted keywords, including “green

purchase intention," "green purchase behaviours," "green consumption," "sustainable consumption," "eco-friendly product," and "green consume*." Green purchase, "environmental psychology"," green marketing", and "behavioural economics." These keywords were applied across the titles, abstracts, and keyword fields of the business and management categories.

2. LITERATURE REVIEW

The Brundtland Report (United Nations, 1987) provides the first definition of green consumption, which states that consumption meets the needs of the present without compromising the ability of future generations to meet their own needs. Since the first definition, many definitions of green consumption have emerged. The concept of green consumption is problematic, as green suggests environmental conservation, while consumption implies using resources.(5). Various factors influence it, which can be seen as an economic, physical, and social process. Individual characteristics, such as nature, circumstances, psychology, and societal aspects, including geography, culture, laws, politics, and infrastructure, shape it. (5).

The literature on green consumption offers valuable insights about eco-friendly products. Eco-friendly products are environmentally friendly products that are designed to benefit the environment throughout their entire lifecycle, including considerations of raw materials and manufacturing processes. These eco-friendly products are priced higher and are generally purchased by high-income and well-educated individuals.(6,7) (6,8–10). Women and young consumers are more likely to purchase eco-friendly products than men. (11–14). Consumers with a green self-identity understand the reciprocal relationship between their activities and the environment.(15,16). This awareness fosters a sense of environmental responsibility. (Chen et al., 2020). It motivates Values related to the concern for others influence their purchasing decision for eco-friendly products. (18). (19)Defined green consumption as being environmentally conscious through the consumption (purchase and use) of greener or environmentally friendly products and following anti-consumption and disposal practices of rejecting, reusing, reducing, and recycling. Quality is also a guiding factor. High-quality, eco-friendly products build trust. (20)While ecolabels enhance purchase intention by indicating minimal environmental impact(21,22)

Sustainable behaviour is a decision to benefit the environment or minimise its negative effects. Many other names, like pro-environment behaviour, environment-friendly behaviour, green behaviour, sustainable behaviour, responsible behaviour, and conservation behaviour, call these behaviours. Sustainable behaviour includes a wide range of activities like energy conservation, waste reduction, recycling, green purchasing, sustainable transportation, and water conservation.

Some barriers have also been recognised that hinder the purchase of eco-friendly products. High prices deter consumers who prefer to allocate their budget to multiple ordinary products rather than a few expensive ones. (23,24). Scepticism towards environmental claims and greenwashing negatively impacts purchase intention, as misleading claims undermine trust. (25,26).

The conceptual grounding of green consumption behaviour has evolved significantly over the past two decades, anchored in ecological consciousness, consumer psychology, and sustainability marketing. Initially examined through psychological and behavioural theories, the concept has since expanded to encompass socio-cultural, economic, and technological dimensions(16,27). The integration of interdisciplinary theories such as the Theory of Planned Behaviour (TPB)(28), Value-Belief-Norm (VBN) (Stern, 2000), and Norm Activation Theory (NAT) (Schwartz, 1977) has been instrumental in explaining the antecedents of green purchase intentions.

A considerable body of literature suggests that green purchase behaviour is shaped by individual-level psychological factors such as environmental concern, perceived behavioural control, values, attitudes, and subjective norms. (16,27). These internal motivations are complemented by contextual influences, including socio-demographic characteristics (e.g., age, gender, income), cultural norms, and regulatory frameworks.(29). Moreover, consumer identification with green self-concept and environmental responsibility has been shown to enhance pro-environmental behaviour. (13,30). Studies further confirm that consumers who perceive a strong alignment between their personal values and green brand image are more likely to engage in eco-friendly purchasing.(18).

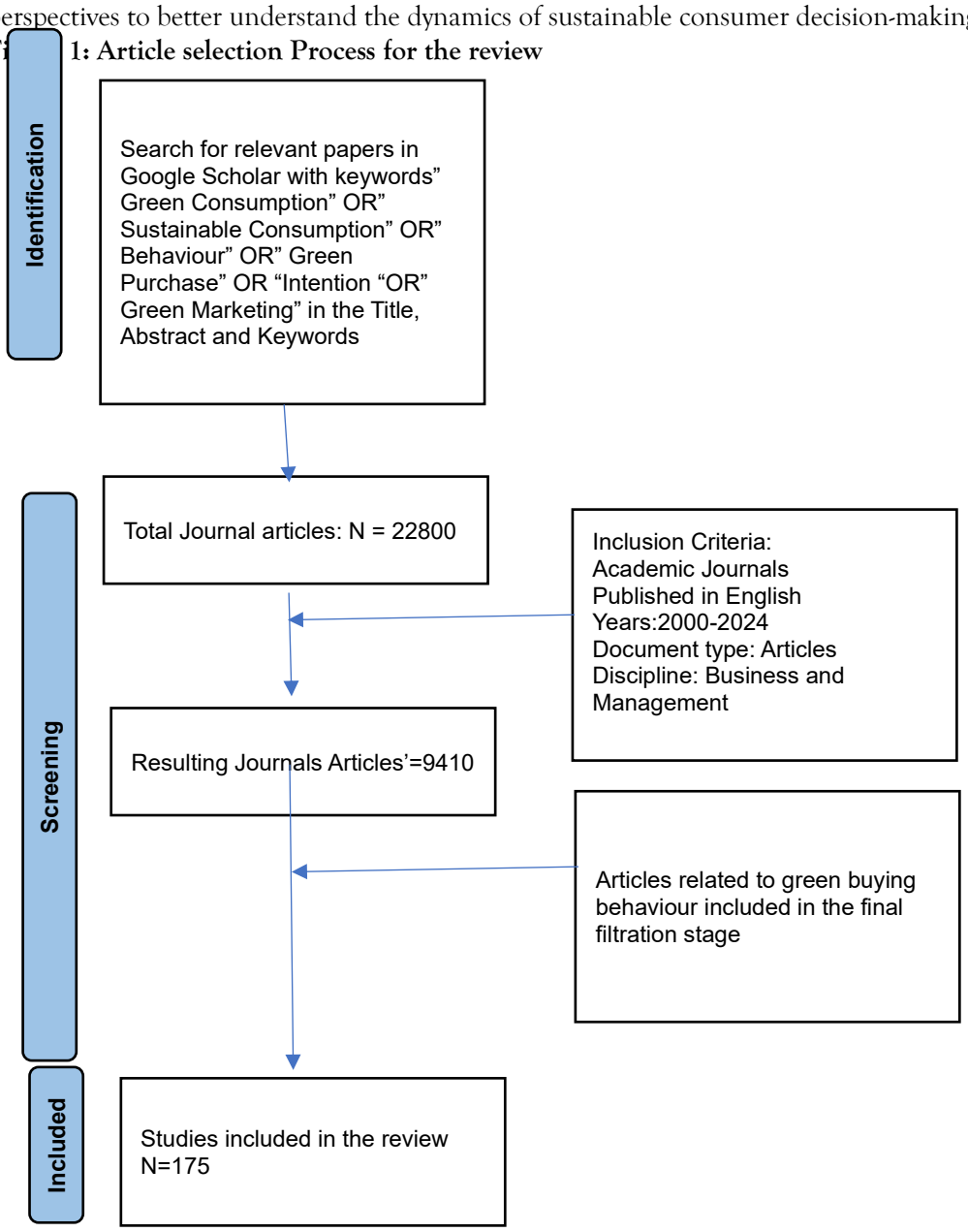
From a marketing and communication perspective, the role of sustainability messaging and eco-labels has been frequently emphasised. Effective green marketing communication, particularly when transparent and credible, has been found to increase green purchase intentions(20,31). Conversely, ambiguous messaging or greenwashing undermines consumer trust and acts as a deterrent to sustainable behaviour. Click or tap here to enter text.(25,26). Other determinants, such as product quality, brand knowledge, and production credibility, further mediate the relationship between attitude and behaviour.(16).

Despite the extensive research on green intention, a consistent intention–behaviour gap persists, wherein positive attitudes do not reliably translate into actual purchase decisions (32,33). Price sensitivity, limited product availability, perceived inconvenience, and lack of trust are among the most commonly cited.(34,35). These constraints highlight the importance of external enablers such as policy incentives, accessibility, and consumer education in promoting behavioural change.

Methodologically, most studies rely on quantitative survey designs, often employing regression analysis or structural equation modelling.(27,31). However, the underrepresentation of experimental, qualitative, and mixed-methods research is frequently noted as a limitation. Scholars advocate for more diverse methodological frameworks, including longitudinal designs and data-driven tools like AI and big data analytics, to improve behavioural prediction and uncover latent variables. (33).

The literature reflects a maturing yet fragmented understanding of green consumption behaviour. While numerous enablers and barriers have been identified, the field would benefit from a more holistic, interdisciplinary synthesis that bridges theoretical models with real-world consumer practice. The present study seeks to contribute to this aim by systematically integrating conceptual, behavioural, and contextual perspectives to better understand the dynamics of sustainable consumer decision-making.

Fi 1: Article selection Process for the review



3. Analysis of the existing literature based on the theory-context-characteristics-methods framework "TCCM Framework "

3.1 TCCM: Theory

The study of green consumption has garnered considerable attention lately, exploring a range of theoretical perspectives to shed light on its effects. Researchers investigating green consumption practices

have frequently employed social psychology-based theoretical frameworks. This paper will examine the extensively examined theories used in green consumption literature.

Environmental/Ecological Theories: Environmental theories offer a framework for comprehending human behaviour and its effects on sustainability. With 42 instances across several research studies, the Theory of Planned Behaviour (TPB) is the most frequently referenced environmental theory, according to the data presented. This dominance suggests that TPB is a crucial model for forecasting pro-environmental behaviour, particularly in domains like recycling, sustainable consumption, and environmentally friendly buying choices. Scholars like (Gupta & Singh, 2020 Kautish et al. (2019 Maheshwari Assistant Professor, 2014) Emphasise how well TPB explains how social influence, attitudes, and perceived behavioural control are factors that drive green behaviours.

The Environmental Kuznets Curve (EKC) Hypothesis (38) Provides an economic perspective, arguing that environmental degradation increases with economic expansion but eventually decreases when societies adopt sustainable practices. Other important ideas are Environmental Citizenship Theory. (40), which emphasises civic responsibility in sustainable development, and Norm Activation Theory (NAT) (Kostadinova, n.d.), which focuses on moral requirements in environmental actions.

TABLE 1 Environmental/Ecological Theories used in green consumption research.

Category	Theory	Count	Sources
Environmental/Ecological Theories	Theory of Planned Behaviour (TPB)	42	Multiple occurrences across sources, including Maheshwari (2014) - *AIMA Journal of Management & Research*,Gupta & Singh (2020), Marvi, Minbashrazgah, Zarei & Baghini (2020), Rustam, Wang & Zameer (2020), Kautish, Paul & Sharma (2019), Ajzen (1991), Aulina & Yuliati (2017), Vasasiri, Siripipatthanakul, & Phayaphrom (2022), Sharma & Foropon (2019), Lavuri (2021), Kautish & Sharma (2019), Bagaskara & Salim (2023), Chiou (1998), Pancic, SerdaruÅ¡iÄ‡, & Ä†uÄliÄ‡ (2023), Aziz, Md Rami, Zaremohzzabieh, & Ahrari (2021), Jabeen, Khan, Zain, & Atlas (2023), Kaur, Gangwar, & Dash (2022), Dutta & Hwang (2021), Maqsoom et al. (2023), Ali et al. (2022), Xie, Wang, & Gong (2022), Ansu-Mensah (2021), Maichum et al. (2017), Tryphena & Aram (2023), Islam & Khan (2024), Lavuri & Susandy (2020), Sinha & Annamdevula (2022), Kaur et al. (2022), Taufique & Vaithianathan (2018), Jaiswal & Singh (2018), Huang et al. (2024), Lestari et al. (2021), Chikosha & Potwana (2021), Witek & Kuzİlniar (2024), El-Hussain & Arapoglu (2024),Maheshwari (2014)
	Value-Belief-Norm (VBN) Theory	4	Akintunde (2017) - *Journal of Environmental Science and Public Health*; Lin & Niu (2018) - *Business Strategy and the Environment*,L ee, Kim, Kim & Choi (2014), Lin & Niu (2018; ,Majeed et al. (2022)
	Value-Attitude-Behaviour (VAB) Model	2	Kim, Oh, Yoon & Shin (2016), Lee, Kim, Kim & Choi (2014)
	Environmental Attitude Theory	1	Maichum, P., & Peng (2017). - International *Journal of Business Marketing and Management*
	Environmental Kuznets Curve (EKC) Hypothesis	1	Villanthenkodath et al. (2021) - *Journal of Economic Structures*
	Circular Economy Theory	1	Hegab et al. (2023) - *Sustainable Materials and Technologies*
	Environmental Citizenship Theory	1	Hadjichambis et al. (2020) - *Environmental Education Research*
	Environmental Marketing Theory	1	Singal, Garg, & Singla (2013). - International *Journal of Innovations in Engineering and Technology*
	Norm Activation Theory (NAT)	1	Kostadinova (2016) - *Economic Alternatives*

Consumer Behaviour/Marketing Theories: Consumer behaviour and marketing theories provide critical frameworks for understanding purchase decisions, particularly sustainability and green consumption. The Green Marketing Theory (4 citations) is one of the most widely used, emphasising the importance of environmentally responsible branding and consumer interaction (6,8,34,42). This theory emphasises the growing role of sustainability in affecting consumer preferences and corporate strategies. The Stimulus-Organism-Response (S-O-R) Model (4 occurrences) is also important in explaining how external stimuli, such as commercial communications and environmental cues, impact consumer emotions and drive sustainable behaviours.(12,13,43). The Consumer Behaviour Theory (3 occurrences) delves deeper into the psychological and social aspects that influence purchasing decisions, providing insights into the motives behind environmentally sustainable purchases (34, 44, 45). The Social Influence Theory (2 instances) emphasises the influence of peer networks and societal norms on consumer behaviour, reinforcing the importance of social validation in sustainability decisions (46, 47). Additional theories, such as brand trust and communication theory, help explain customers' perceptions of green products and the effectiveness of marketing.

TABLE 2 Consumer Behaviour/Marketing Theories used in green consumption research.

Category	Theory	Count	Sources
Consumer Behaviour and Marketing Theories	Green Marketing Theory	4	Dhanachezhyan & Thanikaivel (2023); Ghodeswar & Kumar (2014); Correia et al. (2023); Rajeswari *& Suganya (2023)*
	Stimulus-Organism-Response (S-O-R) Model	4	Ansu-Mensah (2021); Rusyani et al. (2021) - Sustainability; *Xu et al.* (2020) - Environmental *Science and Pollution Research*
	Consumer Behaviour Theory	3	Sharma & Trivedi (2018); Kumar & *Ghodeswar (2015)* - Marketing Intelligence & Planning,Singh (2017)
	Social Influence Theory	2	Clark et al. (2019) - Journal *of International Consumer Marketing; Kautish, Paul* & Sharma (2019) - *Journal of Cleaner Production*
	Communication Theory	2	Correia et al. (*2023*). - *International Journal* of Environmental Research and Public Health; Ottman (2011)
	Brand Trust Theory	2	Seshadri (2023) - International Journal *for Multidisciplinary Research, Majeed et* al. (2022)
	Socio-Demographic Segmentation Theory	1	Jain & Kaur (2006) - Journal *of International Consumer Marketing*
	Knowledge-Attitude-Behavior Model	1	Sayal & Pant (2023). - International Journal *of Asian Business and* Information *Management*
	Attitude-Behavior Model	1	Sharma, A. P. (2021) - *International Journal* of *Consumer Studies*
	Consumer-based Brand Equity (CBBE)	1	Davari & Strutton (2014) - Journal of *Strategic Marketing*
	Pro-Environmental Reasoned Action (PERA) Model	1	Chin et al. (2018) - *Sustainability*
	Green Marketing Orientation Theory	1	Ghodeswar & Kumar (2014). - International *Journal of Applied Management* Sciences
	Consumer Socialisation Framework	1	Muralidharan et al. (2015) - Journal of *International Consumer Marketing*
	Psycho-economic Model	1	Reina Paz & Vargas (2023) - *Heliyon*

Sustainable Business Theories: Sustainable business theories provide critical frameworks for incorporating environmental, social, and economic factors into corporate strategies. The Capability Approach (3 occurrences) emphasises the importance of individual and organisational capacity in achieving sustainability (40,48)Largely, the Sustainable Development Theory (3 events) emphasises the importance of economic progress without jeopardising future generations' ability to meet their demands (Voruganti, 2014; Garg & Sharma, 2017)). The Triple Bottom Line (TBL) Theory (Pomering, 2017) takes a comprehensive approach to balancing people, the environment, and profit. In contrast, the Corporate Shared Value (CSV) Theory (Ardhan & Affandi, 2022) advocates business strategies that provide both economic and social advantages. Stakeholder Theory (two occurrences) emphasises addressing multiple stakeholder interests (Braik et al., 2023).

TABLE 3 Sustainable Business Theories used in green consumption research.

Category	Theory	Count	Sources
Sustainable Business Theories	Capability Approach	3	Seckler & Volkert (2021). - Ecological *Economics*; Leßmann & Rauschmayer (2012) - UFZ *Discussion Paper*; Robeyns (2005) - Journal *of Human Development*
	Sustainable Development Theory	3	Voruganti (2014); Garg & Sharma (2017); Kinoti (2011)
	Societal Marketing Concept	2	Rastogi & Dutta (2023). Singh & Pandey (2012). - Integral *Review - A Journal of Management*
	Co-creation Theory	1	Palakshappa & Dodds (2020) - *Marketing Intelligence & Planning*
	Triple Bottom Line (People, Planet, Profit)	1	Powering (2017) - *Australasian Marketing Journal*
	Corporate Shared Value (CSV) Theory	1	Ardhan & Affandi (2022). - Proceedings *of the European International Conference on Industrial Engineering and Operations Management*
	Green Product Development Theory	1	Dangelico (2017) - *Business Strategy and the Environment*
	Sustainable Marketing Theory	1	Hota (2024) - *International Journal of Multidisciplinary Research & Reviews*
	Resource-Based View (RBV)	1	Alzghoul et al. (2024) - *Cogent Business & Management*
	Knowledge-Based View (KBV)	1	Sahoo et al. (2023) - *Business Strategy and the Environment*
	Dynamic Capabilities Theory	1	Mukonza & Swarts (2019) - *Business Strategy and the Environment*
	Social Responsibility Theory	1	Al-Dmour et al. (2023) - *Social Responsibility Journal*
	Service-Dominant Logic (S-D Logic)	1	Lim (2015) - *Marketing Theory*
	Institutional Theory	1	Braga et al. (2024) - *RAUSP Management Journal*
	Stakeholder Theory	2	Braik, Saleh & Jaaron (2023); Shabbir & Wisdom (2020)
	Corporate Social Responsibility (CSR) Theory	1	Caruana & Crane (2008) - *Organisation Studies*
	Carroll's CSR Pyramid	1	Singh & Sharma (2023) - *IIMT Journal of Management*
	ESG Impact Analysis	1	Frey et al. (2023) - *McKinsey & NielsenIQ report*
	Circular Bioeconomy Framework	1	Otto et al. (2021) - *Journal of Agricultural and Environmental Ethics*

3.2 TCCM: Characteristics

Enablers of Green Consumption: The consolidated analysis of enablers driving green consumer behaviour and sustainable consumption, derived from 175 studies, provides valuable insights into the multifaceted nature of this area. Understanding the primary enablers of buying behaviour is critical for closing the gap between consumer intention and actual purchasing decision.

Psychological and Value-Based Drivers: Environmental concern (18 studies) emerges as the most significant facilitator, indicating that consumers who value sustainability are more likely to buy green products. (Ellen et al., 1991; K. Gupta & Singh, 2020; Jones & Dunlap, 1992; Khan et al., 2020; Minton & Rose, 1997; Saleem et al., 2021; Saxena et al., 2008; Sustainable Efforts & Environmental Concerns Around the World, 2011a; Sustainable Efforts & Environmental Concerns Around the World, 2011b). Values and psychological characteristics (8 research), such as personal beliefs and eco-friendly attitudes, significantly impact green consumption behaviour (68,69). Trust (9 research) is crucial in fostering

sustainable purchasing, as customers favour firms that show authenticity in their sustainability claims (18,70–72).

Informational and awareness-based enablers: Environmental awareness (12 studies) helps consumers make better decisions by enhancing their ability to evaluate green products (50, 73, 74). Eco-labels (12 studies) are important informative tools that give customers product credibility, considerably influencing buying behaviour (21,22,44,52,75). Green marketing communication (15 studies) is a powerful facilitator that influences consumer perceptions through effective message tactics (36, 76). Social and cultural influences: Social norms and external influences (7 studies) show that peer behaviour and societal trends influence consumer decisions (15,46,64,77). Media and peer effects (5 studies) increase sustainability awareness, reinforcing buying decisions through exposure to environmentally conscious messaging (10,78,79).

Structural and economic enablers: Corporate social responsibility (8 studies) builds consumer trust and loyalty by demonstrating long-term sustainability commitments (59,80,81). Economic incentives and growth (3 studies) influence the pricing and accessibility of green products, which drives purchasing behaviour(38).

Green product innovation (6 studies) increases consumer acceptance by improving the functionality and aesthetics of sustainable products (38,82,83).

According to statistics, personal beliefs, knowledge availability, social influence, and economic variables all impact consumer purchasing behaviour. Effective green marketing communication, eco-labelling, and company sustainability activities can help to boost consumer trust and encourage sustainable purchase decisions.

TABLE 4 Single Variable Enablers to the purchase of green products.

Enabler	No. of Studies	References
Recycling initiative	1	Ardhan & Affandi (2022)
Green marketing communication	15	Maheshwari (2014); Rustam, Wang & Zameer (2020); Correia et al. (2023); Mukonza & Swarts (2019); Juwaheer et al. (2012); Kinoti (2011); Pancic et al. (2023); Hota (2024); Mukonza & Swarts (2019); Al-Dmour et al. (2023); Ottman (2011); Green Awareness Impact Study (2021); Sustainability Strategies (2023); Communication Framework (2022); Green Communication (2023)
Eco-label	12	Sharma & Trivedi (2018); D'Souza et al. (2006); Vázquez et al. (2023); Prakash & Pathak (2016); Lavuri & Susandy (2020); Salini & Thomas (2023); Panopoulos et al. (2023); Green Purchase Awareness Study (2021); Sustainable Consumption Study (2023); Lavuri & Foropon (2019); Sharma et al. (2021); Consumer Labeling Framework (2023)
Green product innovation	6	Rao (2017); Kinoti (2011); Sahoo et al. (2023); Ghodeswar & Kumar (2014); Seshadri (2023); Innovation Strategies in Green Marketing (2023)
Green marketing strategies	12	Voruganti (2014); Garg & Sharma (2017); Mukonza & Swarts (2019); Hegab et al. (2023); Demessie & Shukla (2023); Juwaheer et al. (2012); Sharma & Foropon (2019); Rajeswari & Suganya (2023); Communication Framework (2023); Green Strategy Trends (2023); Mukonza et al. (2023); Role of Strategies in Consumer Adoption (2024)
Social norms and external factors	7	Clark et al. (2019); Cheung & To (2019); Otto et al. (2021); Business Strategy and the Environment; Why Do Consumers Make Green Purchase Decisions? (2019); Behavioral Model of Green Marketing (2021); Lin & Niu (2018)

Corporate social responsibility	8	Shabbir & Wisdom (2020); Singh & Sharma (2023); Jabeen et al. (2023); Mukonza & Swarts (2019); Al-Dmour et al. (2023); Constructing Consumer Responsibility (2021); Implementation of SDGs Study (2023); CSR during COVID-19 (2023)
Environmental concern	18	Gupta & Singh (2020); Lavuri & Susandy (2020); Rustam et al. (2020); Vania & Ruslim (2023); Maichum et al. (2017); Bagaskara & Salim (2023); Shukla (2019); Khan et al. (2020); Chiou (1998); Dangelico et al. (2021); Young Consumers' Intention (2016); Lin & Niu (2018); Examining Environmental Concerns (2023); Behavioral Model for Decision-Making (2023); Heo & Muralidharan (2017); Environmental Behavior Gaps (2022); Xie et al. (2022); Hegab et al. (2023)
Brand knowledge	7	Gautam & Pokhrel (2023); Lakchan & Samaraweera (2023); Vasasiri et al. (2022); Nurapni et al. (2024); Palakshappa & Dodds (2020); Aulina & Yuliati (2017); Brand Knowledge Framework (2021)
Advertising	4	Sayal & Pant (2023); Buil et al. (2013); Mukonza & Swarts (2019); Advertising Impact Study (2023)
Media and peer effect	5	Alghamdi & Agag (2024); Lavuri & Susandy (2020); Tryphena & Aram (2023); Peer Influence Study (2023); Consumer Behavior Influences (2023)
Trust	9	Gil & Jacob (2018); Correia et al. (2023); Guan et al. (2024); Mostafa (2007); Frey et al. (2023); Seshadri (2023); Majeed et al. (2022); Green Decisions Study (2023); Impact of Trust on Brand Equity (2023)
Values and psychological variables	8	Zhuang et al. (2021); Eco-Friendly Purchase Behavior (2023); Bravo et al. (2022); Drivers to Green Consumption (2021); De Silva et al. (2020); Lee et al. (2014); Essiz et al. (2023); Lavuri (2021)
Environmental knowledge	11	Kamalanon et al. (2022); Ali et al. (2022); Green Product Awareness Effect (2021); Jaiswal & Singh (2018); Drivers to Green Consumption (2021); Young Consumer's Green Purchasing Behavior (2023); Heo & Muralidharan (2017); Kamalanon et al. (2022); Green Knowledge Adoption Study (2023); Rusyani et al. (2021); Sustainability Education Research (2023)
Environmental knowledge	12	Kamalanon et al. (2022); Ali et al. (2022); Green Product Awareness Effect (2021); Jaiswal & Singh (2018); Drivers to Green Consumption (2021); Young Consumer's Green Purchasing Behavior (2023); Heo & Muralidharan (2017); Kamalanon et al. (2022); Green Knowledge Adoption Study (2023); Rusyani et al. (2021); Sustainability Education Research (2023)
Educational level	5	Singh & Pandey (2012); Tryphena & Aram (2023); Hadjichambis et al. (2020); Sustainable Education Initiatives (2023); Impact of Educational Awareness (2023)
Economic growth and incentives	3	Economic Structure and Environmental Kuznets Curve (2021); Economic Incentive Study (2023); Villanthenkodath et al. (2023)
Big data and analytics	1	Two Decades of Research on Consumer Behavior (2022)

TABLE 5 Multi-Variable Enablers use in green consumption research

Multiple Enablers	No. of Studies	References

Environmental concern & knowledge	8	Kamalanon et al. (2022); Maichum et al. (2017); Bagaskara & Salim (2023); Jaiswal & Singh (2018); Young Consumers' Intention (2016); Lin & Niu (2018); Rusyani et al. (2021); Khan et al. (2020)
Social norms & external factors	6	Clark et al. (2019); Cheung & To (2019); Why Do Consumers Make Green Purchase Decisions? (2019); Otto et al. (2021); Lin & Niu (2018); Behavioral Model for Decision-Making (2023)
Values & psychological variables	7	Zhuang et al. (2021); De Silva et al. (2020); Bravo et al. (2022); Drivers to Green Consumption (2021); Lavuri (2021); Essiz et al. (2023); Lee et al. (2014)
Trust & brand knowledge	6	Gil & Jacob (2018); Correia et al. (2023); Seshadri (2023); Majeed et al. (2022); Brand Knowledge Framework (2021); Vasasiri et al. (2022)
Eco-label & recycling initiative	4	Lavuri & Susandy (2020); Panopoulos et al. (2023); Sharma & Foropon (2019); Sustainability Consumption Study (2023)
Green marketing strategies & CSR	6	Voruganti (2014); Garg & Sharma (2017); Mukonza & Swarts (2019); Al-Dmour et al. (2023); CSR during COVID-19 (2023); Implementation of SDGs Study (2023)
Media, peer effects & educational level	4	Alghamdi & Agag (2024); Lavuri & Susandy (2020); Hadjichambis et al. (2020); Impact of Educational Awareness (2023)
Environmental knowledge & peer effects	4	Heo & Muralidharan (2017); Tryphena & Aram (2023); Kamalanon et al. (2022); Peer Influence Study (2023)
Green product innovation & technological impact	5	Ghodeswar & Kumar (2014); Sahoo et al. (2023); Lavuri (2021); Technological Role in Green Products (2023); Consumer Technology Impact Study (2024)
Advertising, brand trust & awareness	5	Sayal & Pant (2023); Buil et al. (2013); Mukonza & Swarts (2019); Green Advertising Impact Study (2023); Trust and Awareness Study (2023)
Eco-label, environmental concern & values	6	D'Souza et al. (2006); Prakash & Pathak (2016); Salini & Thomas (2023); Zhuang et al. (2021); Drivers to Green Consumption (2021); Consumer Labeling Framework (2023)
Consciousness & recycling intentions	3	Lavuri & Foropon (2019); Consciousness Impact Study (2023); Sustainability Awareness (2023)
Economic growth, CSR & environmental concern	4	Economic Structure and Environmental Kuznets Curve (2021); CSR during COVID-19 (2023); Villanthenkodath et al. (2023); Sustainability and CSR Study (2023)
Social appeal, attitude & norms	5	Clark et al. (2019); De Silva et al. (2020); Taufique & Vaithianathan (2018); Behavioral Model for Decision-Making (2023); Attitude and Social Norms Framework (2023)

Barriers to Green Consumption:

Promoting sustainable consumption requires a balanced approach, emphasising enablers while addressing barriers to ensure impactful and long-lasting change. Enablers such as green marketing communication, eco-labels, and technological innovation have been widely recognised for their role in fostering consumer trust, raising awareness, and enabling access to sustainable products. For example, clear communication about eco-friendly practices and visible certifications builds confidence in green products, while innovations in green technology enhance product accessibility and corporate environmental performance.

However, focusing solely on enablers without addressing barriers can limit progress. Barriers such as distrust in green labels, price sensitivity, and perceived risk directly undermine consumer adoption of sustainable behaviours. Scepticism towards greenwashing and the high cost of eco-friendly products often deters even environmentally conscious consumers. Similarly, structural challenges like the lack of technical innovation, educational gaps, and awareness deficits restrict the scalability and inclusivity of green practices.

TABLE 6 Barriers to the purchase of green products.

Barrier	No. of Studies	References
Lack of external stimuli	1	Shabbir & Wisdom (2020)
Distrust in green labels	3	D'Souza, Taghian, & Lamb (2006); International Journal of Consumer Studies; Business Strategy and the Environment
Educational gap	1	Singal, Garg, & Singla (2013)
Greenwashing	2	Australian Journal of Management; Environment: Science and Policy
Lack of green products awareness	6	Maheshwari (2014); Essiz, Yurteri, Mandrik & Senyuz (2023); Ottman (2011); Rustam, Wang & Zameer (2020); Kinoti (2011); Pancic, Serdarušić, & Ćučić (2023)
Lack of technical innovation	1	Lim (2015)
Perceived risk	1	Zhuang, Luo, & Riaz (2021)
Price	5	Dhanachezhyan & Thanikaivel (2023); Braik, Saleh & Jaaron (2023); Buil, de Chernatony, & Martínez (2013); Prakash & Pathak (2016); Sharma, A. P. (2021); D'Souza, Taghian, & Khosla (2007)
Skepticism	1	Electronic Green Journal

Barrier	No. of Studies	References
Lack of external stimuli	1	Shabbir & Wisdom (2020)
Distrust in green labels	3	D'Souza, T., & Lamb (2006). International Journal of Consumer Studies; Business Strategy and the Environment
Educational gap	1	Singal, Garg, & Singla (2013)
Greenwashing	2	Australian Journal of Management; Environment: Science and Policy
Lack of green product awareness	6	Maheshwari (2014); Essiz, Yurteri, Mandrik & Senyuz (2023); Ottman (2011); Rustam, Wang & Zameer (2020); Kinoti (2011); Pancic, Serdarušić, & Ćučić (2023)
Lack of technical innovation	1	Lim (2015)
Perceived risk	1	Zhuang, Luo, & Riaz (2021)
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Skepticism	1	Electronic Green Journal

4. RESULTS AND DISCUSSION:

The findings of this review underscore the interdisciplinary nature of green consumption behaviour, integrating theoretical perspectives from environmental psychology, behavioural economics, and marketing. Environmental and ecological theories emphasise the importance of values, social norms, and attitudinal influences in shaping pro-environmental behaviours. Concurrently, consumer behaviour and marketing theories examine the psychological, social, and demographic determinants that influence sustainable purchasing decisions. In contrast, sustainable business theories emphasise the role of corporate strategies, eco-innovation, and green marketing communications in fostering sustainable consumption.

A key challenge identified is the purchase intention-behaviour gap, wherein consumers exhibit favourable attitudes toward green products but encounter barriers such as perceived cost, scepticism toward green claims, and lack of awareness, which prevent actual purchasing behaviour. Addressing this gap necessitates strategic interventions, including enhanced consumer education, greater corporate transparency, and policy-driven incentives, to encourage and sustain environmentally responsible consumption.

The results of this interdisciplinary review suggest that an intricate interplay of psychological, emotional, and economic factors influences green consumption behaviour. By integrating environmental psychology with behavioural economics, researchers can better understand the attitude-behaviour gap in sustainable consumption.

Key Research Recommendations:

- Expanding geographic scope to include underrepresented and developing regions.
- Exploring underexamined sustainable product categories, such as green energy and circular economy models.
- Incorporating emotional and economic models to enhance understanding of motivational drivers behind sustainable purchasing behaviour.

5. CONCLUSION AND FUTURE RESEARCH DIRECTIONS:

This review highlights the significance of an interdisciplinary approach integrating environmental psychology, behavioural economics, and marketing to understand green consumption behaviour comprehensively. By leveraging insights from multiple disciplines, sustainability research can address the complex interplay of consumer attitudes, motivations, and external influences that shape purchasing decisions.

Future research should expand the use of experimental designs and mixed-method approaches to enhance methodological rigour and empirical depth. Incorporating longitudinal studies can offer deeper insights into the evolution of sustainable behaviours over time, while interdisciplinary collaborations can facilitate a more holistic analysis of sustainability-related decision-making. Additionally, advancements in technology-driven methodologies, such as AI, big data analytics, and real-time behavioural tracking, can provide more precise and dynamic insights into green consumer behaviour.

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