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RETHINKING CONSUMER STYLE INVENTORY IN THE ESG AND GREENWASHING SCEPTICISM ERA: A STIMULUS ORGANISM RESPONSE LENS

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Abstract:

The increasing significance of Environmental, Social and Governance (ESG) initiatives has transformed consumer markets, where purchasing decisions increasingly incorporate perceptions of corporate responsibility and sustainability performance alongside traditional factors such as price, quality and brand. At the same time, growing concern about greenwashing has increased consumer scrutiny of corporate sustainability claims. The Consumer Style Inventory (CSI) has been widely used to explain consumer decision-making styles but was developed in a market context that predates the widespread prominence of ESG and greenwashing. Its relevance to contemporary sustainability-oriented consumption therefore remains insufficiently explored. This conceptual paper extends the Consumer Style Inventory within the Stimulus–Organism–Response (SOR) framework by incorporating ESG-related market stimuli and greenwashing scepticism. ESG signals represent the Stimulus (S), while consumers' cognitive and emotional evaluation represents the Organism (O), and sustainable consumption behaviour represents the Response (R). Consumer decision-making styles are important to understand how consumers process ESG information, but greenwashing scepticism is conceptualized as a moderating psychological factor that can amplify or diminish consumers' responses to ESG signals and sustainability claims. The framework therefore recognises that ESG information does not automatically translate into sustainable consumption behaviour; its

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effect depends on how consumers evaluate the information and the extent to which they question the credibility of sustainability claims.

The proposed framework contributes by extending CSI to the contemporary ESG and greenwashing context and applying SOR to explain how consumer decision-making styles and greenwashing scepticism shape responses to sustainability information. The framework provides a basis for future empirical testing of sustainable consumer behaviour across retail and service contexts.

Keywords:

Consumer Style Inventory, Consumer Decision Making Styles, Environmental, Social, And Governance (ESG), Greenwashing Scepticism, Sustainable Consumption Behaviour, Stimulus Organism Response Theory.



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Introduction

Sustainability is a strategic imperative that is influencing the practices of corporations and the decisions of consumers. Environmental, Social and Governance (ESG) performance is increasingly being used as a key basis for the assessment of companies, brands and products (White et al., 2019; Giese et al., 2019). Consumers' buying is being influenced by environmental responsibility, ethical production, and transparent governance (Kumar et al., 2021). The importance of ESG has amplified greenwashing, the overstatement, distortion or selective disclosure of sustainability practices in an attempt to improve performance (Delmas & Burbano, 2011). Thus, scepticism about greenwashing has become an important psychological factor in how consumers perceive and judge corporate sustainability claims (Nyilasy et al., 2014).

Despite these developments, established consumer decision-making frameworks have not fully incorporated sustainability-related information or scepticism toward corporate claims. The Consumer Style Inventory (CSI) developed by Sproles and Kendall (1986) conceptualises consumer decision making through eight styles: quality consciousness, brand consciousness, novelty-fashion consciousness, recreational shopping consciousness, price-value consciousness, impulsiveness, confusion by over choice and brand loyalty. Although extensively applied across markets and product categories, the CSI was developed around conventional marketplace attributes such as quality, price, brand and shopping experience, with limited attention to sustainability-oriented consumption.

This limitation is increasingly important as consumers are exposed to growing amounts of ESG information while simultaneously becoming more critical of sustainability claims. ESG signals may function as additional marketplace cues that interact with established consumer decision-making styles. For example, quality-conscious consumers may interpret strong ESG performance as an indicator of organisational competence, while brand-conscious consumers may associate sustainability-oriented brands with legitimacy and prestige. At the same time, greenwashing scepticism may influence whether consumers accept, question or reject such ESG signals. Therefore, understanding consumer responses to ESG requires extending existing decision-making frameworks beyond traditional marketplace attributes.

To address this gap, this study integrates ESG signals, CSI dimensions and greenwashing scepticism within the Stimulus–Organism–Response (SOR) framework (Mehrabian & Russell, 1974). ESG signals represent external stimuli that influence consumers' internal cognitive evaluation processes, while consumer decision-making styles and greenwashing scepticism represent mechanisms through which these signals are interpreted and evaluated. These processes subsequently influence consumer responses toward sustainability-oriented consumption.

Its contribute by extending the CSI framework to the contemporary ESG context and by incorporating greenwashing scepticism as a relevant psychological mechanism in consumer decision making. It also advances the application of SOR theory in sustainability-oriented consumer behaviour and provides a foundation for examining the processing of ESG information across different consumer decision-making styles.

Theoretical Foundation

Consumer Style Inventory

The Consumer Style Inventory (CSI) developed by Sproles and Kendall in 1986 is an important tool for understanding consumer decision making styles. Unlike approaches that only focus on demographic or situational variables that influence purchasing behaviour, the CSI considers consumers to have long lasting mental orientations that guide their decision making in various purchasing situations.

The original framework identified eight styles of consumer decision making. Savvy shoppers want good product performance and they shop around. Brand conscious shoppers assume higher prices and known brands mean better quality. Shoppers who are recreational see shopping as a recreational activity. Shoppers who are price conscious are concerned with value and cost efficiency. Shoppers who are fashion conscious are always looking for innovation and the latest trends. Impulsive consumers are those who make unplanned purchase decisions with little or no forethought. The bewildered consumer has difficulty digesting a great deal of information on the market. Habitual consumers and brand loyal consumers repeatedly buy the known brands based on their previous experiences.

Although the original Consumer Style Inventory has eight decision making dimensions, but this study focuses on five dimensions which are considered as most relevant to ESG evaluation and sustainable consumption behaviour. These dimensions are quality consciousness, brand consciousness, novelty fashion consciousness, recreational shopping consciousness, and price consciousness, and brand loyalty. Impulsiveness and confusion from option overload are ruled

out, as they are less directly related to the cognitive evaluation of information about sustainability and ESG disclosures.

The CSI framework has demonstrated considerable robustness across diverse cultural contexts, including research in Asia, Europe, North America and emerging markets. Researchers have applied the framework to the study of consumer behaviour in retail, e-commerce, fashion, food consumption, tourism and financial services. Nonetheless, most CSI applications still put more emphasis on traditional market attributes than on sustainability related factors.

As ESG takes ever greater prominence in market dynamics, the role of traditional consumer decision making styles needs to be reconsidered. Quality conscious consumers may perceive ESG initiatives as signs of better product quality and organisational competence. Consumers sensitive to brand reputation may see brands with sustainability focus as prestigious and socially desirable. Consumers who are price sensitive may wonder if the sustainability features are worth the higher prices. Likewise, confused consumers will find it difficult to differentiate true ESG efforts from claims of greenwashing.

These results imply that sustainability related information may interact differently with each dimension of CSI. The CSI framework thus provides significant potential to explain the variation in consumer responses to ESG related stimuli.

Stimulus Organism Response (SOR) Theory

The Stimulus Organism Response (SOR) theory (Mehrabian and Russell, 1974) explains how environmental stimuli lead to internal psychological states of individuals and subsequent behavioural responses. The framework is made up of three parts. Stimuli are the external environmental factors that give information to the individuals. The organism component pertains to the internal mental and emotional processes through which people interpret and appraise stimuli. Ultimately, responses are behavioural outputs of these internal evaluations. The SOR framework has been widely used in the studies of consumer behaviour, retail marketing, hospitality, tourism and e-commerce due to its ability to explain psychological processes behind consumers' decision making (Eroglu et al., 2001; Vieira, 2013). Recently, SOR theory has been used in sustainability research to examine the impact of environmental cues, sustainability labels and corporate responsibility practices on consumer attitude and purchase behaviour.

In this study, ESG disclosures and sustainability communications are market stimuli for the corporate responsibility and ethical behaviour. The organismic mechanisms of consumers' decision-making styles and scepticism to greenwashing are applied to process these stimuli. The behavioural response is the expression of sustainable consumption behaviour. Therefore, the SOR framework offers a theoretically grounded understanding of how information related to ESG affects sustainable consumer behaviour via internal psychological mechanisms.

Scope Of Conceptualisation And Literature Selection

This conceptual research adopted a systematic literature review methodology to identify and synthesise relevant academic literature on Consumer Style Inventory (CSI), Environmental Social and Governance (ESG), greenwashing scepticism, sustainable consumption behaviour and Stimulus Organism Response (SOR) theory.

Major articles were identified using prominent academic databases such as Scopus, Web of Science, ScienceDirect, Emerald Insight and Google Scholar. The keywords used in the search process were “Consumer Style Inventory”, “consumer decision making styles”, “ESG”, “sustainability marketing”, “greenwashing scepticism”, “sustainable consumption behaviour” and “Stimulus Organism Response theory”.

Inclusion Criteria (IC): (1) peer reviewed journal articles, (2) publication period 2000 to 2026, (3) articles published in English, (4) articles that directly address consumer behaviour, sustainability, ESG communication, greenwashing, or decision making. Exclusion criteria were conference abstracts without full papers, non-peer reviewed publications, duplicate studies and irrelevant articles to consumer behaviour or sustainability contexts.

A review of the selected literature identified common theoretical themes, conceptual connections, and research gaps. The findings contributed to the development of the proposed conceptual framework and hypotheses of this study.

Literature Review

ESG As A Contemporary Market Engine

Environmental, Social and Governance (ESG) principles have become the dominant framework for organisations to convey their commitment to sustainability, ethical conduct and responsible governance (Eccles et al., 2014; Li et al., 2021). Initially designed as a tool for investment assessment, ESG has progressively extended its reach to consumer markets, where sustainability performance impacts purchasing choices, brand assessments, and customer loyalty (Giese et al., 2019; Fatemi et al., 2018).

The environmental dimension includes corporate actions on climate change mitigation, carbon emissions reduction, resource efficiency, biodiversity and waste management. The social dimension comprises labour practices, diversity and inclusion, employee welfare and community engagement. Governance covers transparency, accountability, ethical leadership and responsible corporate decisions (Li et al., 2021; Friede et al., 2015). Recent literature indicates that ESG initiatives influence consumer perceptions beyond traditional product attributes such as price and quality.

More and more contemporary consumers are scrutinising organisations on their ethical practices and sustainability performance (especially younger generations that are more concerned with environmental and social issues, White et al., 2019; Kumar et al., 2021). Thus, information related to ESG is now an important market indicator affecting consumer's assessments and purchase decisions (Du et al., 2010).

From a consumer behaviour perspective, the ESG messages are external environmental stimuli. These stimuli give information cues which are analysed by consumers in the firms, brands and product evaluation. It is the internal psychological processes that are key determinants of behavioural outcomes. This is because the effectiveness of the ESG communications depends on the consumers' interpretation and evaluation of these signals.

Scepticism with Greenwashing

While corporate investment in ESG is on the rise, there is also growing concern that sustainability claims are not genuine. Greenwashing has become a major problem in sustainability marketing and corporate communication (Delmas & Burbano, 2011).

Greenwashing is when organisations exaggerate, misrepresent or omit environmental information to create a false impression of their sustainability performance (Delmas & Burbano, 2011). Such practices can undermine consumer trust and reduce the efficacy of sustainability-oriented communication strategies (Chen & Chang, 2013).

Growing consumer awareness of sustainability issues has led to increased scrutiny of organisations' environmental and social claims. This has led to more scepticism towards greenwashing and implies that consumers are more likely to doubt the credibility and authenticity of sustainability communications (Nyilasy et al., 2014; de Freitas Netto et al., 2020).

Research shows that scepticism about greenwashing has a strong impact on consumers' information processing. Consumers with high scepticism are more likely to examine sustainability claims, seek additional information and question corporate narratives about ESG performance (Chen & Chang, 2013). Such scepticism can damage trust, diminish purchase intentions and weaken the effectiveness of sustainability communications.

In today's markets, scepticism about greenwashing has become a significant psychological factor in how consumers interpret ESG related signals. Thus, knowing their relation with consumer decision making styles is an important progress of existing consumer behaviour theories.

Consumer Style Inventory in Modern Markets

The Consumer Style Inventory (CSI) of Sproles and Kendall (1986) remains a major paradigm in understanding decision making styles of consumers. In contrast to demographic approaches that rely on age, income, or education, CSI considers consumers as having relatively stable mental orientations that reflect purchasing behaviour across different marketplace settings (Sproles & Kendall, 1986).

The original framework identified eight decision making styles: quality consciousness, brand consciousness, novelty fashion consciousness, recreational shopping consciousness, price consciousness, impulsiveness, confusion by over choice, and habitual brand loyalty (Sproles & Kendall, 1986). Its resilience and versatility are reflected in the many studies that have supported the framework in different countries and cultural contexts (Bakewell & Mitchell, 2003; Hanzae & Aghasibeig, 2008).

However, much of the research on CSI was conducted before the time when ESG considerations were widely recognised as important determinants of consumer behaviour. As the relevance of sustainability related information increases, consumer decision making styles are expected to influence the perception and evaluation of ESG signals (White et al., 2019; Kumar et al., 2021).

Different consumer behaviours can influence the processing of ESG information. For quality conscious consumers, ESG initiatives may be seen as signals of enhanced organisational competence. For brand conscious consumers, brands that promote sustainability may be a prestige symbol and social status. Price sensitive consumers may consider if the benefits of sustainability are worth the additional cost.

Consumers confused about what is real sustainability and what is greenwashing could have a harder time distinguishing the two. Such observations suggest that CSI dimensions might be important psychological mechanisms through which ESG stimuli affect sustainable consumption behaviour.

Sustainable Consumption Practices

Sustainable consumption behaviour is referred to as buying, usage and disposal practices that reduce negative environmental and social impacts and promote long term sustainability goals (Peattie & Peattie, 2009; White et al., 2019). This includes not only the use of eco-friendly products, but also ethical sourcing, responsible consumption, reduction of waste, and support for socially responsible organisations (Testa et al., 2021).

Despite increased awareness of sustainability, a number of scholars have observed the attitude behaviour gap whereby consumers hold positive attitudes towards sustainability but fail to translate these attitudes into actual purchasing behaviour (Auger & Devinney, 2007; White et al., 2019).

This gap suggests that there are underlying psychological mechanisms affecting sustainable consumption choices. Understanding the psychological mechanisms underlying sustainable consumption is still a major research challenge. Differences in sustainable consumption behaviour may be explained by consumer decision making styles and scepticism of greenwashing.

Theoretical Framework And Research Gaps

The Consumer Style Inventory (CSI) was developed by Sproles and Kendall (1986) at a time when Environmental, Social and Governance (ESG) considerations and greenwashing were not major consumer concerns. Consequently, the original CSI framework focuses on conventional marketplace attributes such as quality, brand, price, novelty, shopping enjoyment and information overload, without accounting for sustainability-related information or consumer scepticism toward corporate sustainability claims. Although subsequent research has extensively examined CSI, ESG, greenwashing scepticism and Stimulus–Organism–Response (SOR) theory, these streams have largely developed independently. The key theoretical gap is therefore the lack of an updated CSI framework that explains how contemporary ESG signals are processed by consumers and how greenwashing scepticism conditions their responses.

The first gap concerns the CSI literature. Existing CSI research has primarily examined consumer decision-making styles in relation to traditional marketplace characteristics, including quality, brand, price and shopping experience. Despite its broad validation in countries and product categories, the CSI has been used relatively little for sustainability-oriented consumption. Research has not sufficiently explored how the eight CSI dimensions react to ESG-related market signals, in particular. This suggests a need to extend CSI beyond

its original conventional consumption context to reflect the sustainability information increasingly encountered by contemporary consumers.

The second gap concerns the ESG literature. Existing studies have extensively examined ESG in relation to corporate performance, investment decisions, corporate reputation and consumer perceptions. However, relatively limited attention has been given to how consumers established decision-making styles influence the processing and evaluation of ESG information. Treating consumers as homogeneous recipients of ESG signals may therefore overlook important differences in how sustainability information is interpreted across consumer decision-making styles.

The third gap concerns greenwashing scepticism. Research has established that perceived greenwashing can undermine consumer trust and the credibility of sustainability claims. However, less is known about whether and how greenwashing scepticism changes the relationship between ESG signals and consumer responses across different decision-making styles. This is particularly relevant because consumers may not respond to the same ESG information uniformly; their responses may depend on both their decision-making style and their level of scepticism toward sustainability claims.

The fourth gap concerns the application of Stimulus–Organism–Response (SOR) theory. SOR has been widely applied to explain consumer responses in retail, tourism, hospitality and digital environments. Yet, its application within the framework of ESG-oriented consumption is still under-investigated, particularly in terms of explicating the translation of external sustainability-related stimuli into sustainable consumption responses through the mediating role of individual consumer decision-making traits.

This study proposes an integrated SOR-based framework linking ESG signals, CSI dimensions, greenwashing scepticism and sustainable consumption behaviour to fill these gaps. In the proposed model, the Stimulus (S) is the ESG signals, which represent sustainability-related information that consumers get in the marketplace. The CSI dimensions are the Organism (O) which captures individual differences in how consumers process and evaluate these signals. Greenwashing scepticism is proposed as a moderating psychological factor, influencing the strength of the relationship between ESG signals and consumer responses. Sustainable consumption behaviour represents the Response (R) resulting from these processes.

Accordingly, the proposed framework does not simply combine four established constructs; it updates the application of CSI for the contemporary ESG and greenwashing environment. The model addresses the specific theoretical problem that the original CSI was developed before sustainability information became a prominent component of consumer decision making. The identified gaps are summarised in Table 1.

Table 1. Literature Gap Identification

Existing literature stream	Primary focus	Specific limitation/gap
Consumer Style Inventory (CSI)	Consumer decision-making styles, including quality, brand, novelty-fashion, recreational, price-value, impulsiveness, confusion by over choice and brand loyalty	Developed before ESG and greenwashing became major consumer concerns; limited incorporation of sustainability-related market stimuli
ESG studies	Corporate sustainability, ESG performance, corporate reputation and consumer perceptions	Limited examination of how established consumer decision-making styles influence the processing of ESG information
Greenwashing scepticism studies	Consumer trust, credibility and responses to sustainability claims	Limited integration with CSI dimensions and limited understanding of how scepticism conditions responses to ESG signals
Stimulus Organism Response (SOR) studies	Psychological processes underlying consumer responses across retail, tourism, hospitality and digital contexts	Limited application to ESG driven consumption and sustainability-oriented consumer responses
Proposed study	Integration of ESG signals, CSI dimensions, greenwashing scepticism and sustainable consumption behaviour within SOR	Addresses the need to extend CSI to the contemporary ESG and greenwashing context and explains how consumer decision-making styles and scepticism shape responses to ESG signals

Source: Developed by author (2026).

The proposed framework contributes to the literature in four ways. First, it extends the CSI framework from its original setting of the conventional marketplace to the setting of ESG-related market signals. Second, it contributes to ESG research by investigating the effect of individual consumer decision making styles on sustainability information processing. Third, it introduces greenwashing scepticism as a moderating psychological factor that may strengthen or weaken consumers' responses to ESG signals. Finally, it extends SOR theory by applying it to ESG-driven and sustainability-oriented consumer behaviour.

Overall, the framework addresses a central limitation in existing consumer decision-making research: the original CSI was developed in a pre-ESG and pre-greenwashing context, whereas contemporary consumers increasingly make decisions in an environment characterised by extensive sustainability information and growing scepticism toward corporate

claims. Extending CSI through an SOR framework therefore provides a theoretically relevant basis for understanding contemporary sustainable consumption behaviour.

Stimulus Organism Response Theory

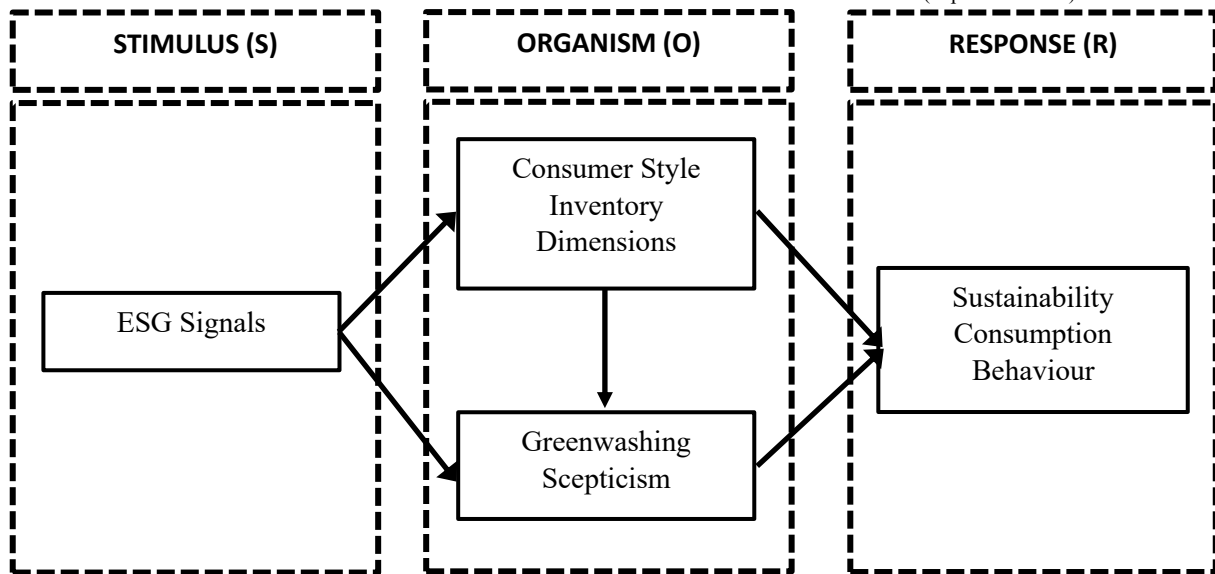
The Stimulus Organism Response (SOR) framework developed by Mehrabian and Russell (1974) is a useful theoretical framework to understand consumer responses to sustainability related market stimuli. The SOR theory states that environmental stimuli affect internal cognitive and emotional states which in turn determine behavioural responses (Mehrabian & Russell, 1974).

The framework has been applied extensively in the retail, hospitality, tourism, ecommerce and sustainability marketing fields (Eroglu et al., 2001; Vieira, 2013). The Stimulus (S) in this study are the ESG signals, because they provide external information to consumers about a company's environmental, social and governance practices. Then the consumer processes and interprets these signals internally and constructs the Organism (O). Such internal evaluation is influenced by their consumer decision-making styles and scepticism toward greenwashing which in turn influence the way consumers interpret ESG information and evaluate the credibility of sustainability claims. The evaluation that follows influences sustainable consumption behaviour which is the Response (R).

Within the Organism stage consumer decision-making styles and greenwashing scepticism influence the processing and evaluation of ESG information. Decision-making styles reflect individual differences in how consumers process information in the marketplace. Greenwashing scepticism is the scepticism of consumers toward the veracity of sustainability claims. Therefore, the proposed framework suggests that ESG signals do not necessarily lead to sustainable consumption behaviours. Alternatively, consumers first process and evaluate ESG information, which is moderated by their decision-making styles and greenwashing scepticism. The internal evaluation that affects their sustainable consumption behaviour is as follows:

SOR COMPONENT	ROLE IN THIS STUDY
STIMULUS (S)	ESG signals, external sustainability-related information communicated by companies
ORGANISM (O)	Consumer cognitive and emotional evaluation, shaped by consumer decision-making styles and greenwashing scepticism
RESPONSE (R)	Sustainable consumption behaviour resulting from the consumer's evaluation of ESG information

Source: Developed by author (2026).



Source: developed by author (2026)

The framework therefore suggests a sequential process: ESG signals are the catalyst; consumers evaluate the information both cognitively and affectively, with their decision-making styles and scepticism toward greenwashing playing a role; and this leads to sustainable consumption behaviour.

Hypotheses Development

ESG Indicators and Consumer Decision Making Approaches

The Environmental, Social and Governance (ESG) information has increasingly become a key market signal influencing consumers' product and company evaluation. Consumers are known to rely on external cues of information when making judgements about product quality and organisational credibility in situations of information asymmetry (Spence, 1973). ESG initiatives serve as signals that the organisation is responsible, ethical, transparent and has a long-term outlook and this can improve consumer perceptions.

Consumers often associate sustainability initiatives with product quality and operational efficiencies (White et al., 2019; Kumar et al., 2021). Through ESG initiatives, companies are perceived to care about the environment, their employees and their governance and this can improve the perceptions of the companies' reliability and excellence. Accordingly, discerning consumers are expected to see ESG disclosures as signals of better product effectiveness.

H1: ESG indicators have a positive impact on quality consciousness.

Brand conscious consumers tend to consider well-known brands as symbols of prestige, social status and trustworthy (Sproles & Kendall, 1986). Participation in ESG activities can help to improve the reputation of the company by showing its commitment to corporate responsibility and ethical leadership (Du et al., 2010). Sustainability initiatives have been shown to boost brand equity and have a favourable impact on consumers' perception of the company (Fatemi et al., 2018; Kumar et al., 2021). Consequently, ESG indicators are expected to support brand conscious decision-making approaches.

H2: ESG indicators have a positive impact on brand consciousness.

The fashion conscious and novelty seeking consumers are always looking for the new products and the new market trends (Sproles & Kendall, 1986). Sustainability has become a recent trend that impacts consumer preferences, especially among younger generations (White et al., 2019). Often, sustainable products, environmentally friendly packaging and ethically produced goods are considered as innovative market offerings. Thus, ESG related information could be a significant driver for consumers who are attracted to novelty and innovation.

H3: ESG indicators positively affect novelty fashion consciousness.

Recreational shoppers view shopping as a fun activity and often seek significant experiences in consumption (Bakewell & Mitchell, 2003). Ethical fulfilment, environmental impact and social accountability of products progressively offer experiential value of sustainable orientation (Peattie & Peattie, 2009). Purchasing products associated with positive social and environmental outcomes may provide psychological benefits to consumers. This suggests that ESG information may increase recreational shopping behaviour.

H4: ESG indicators positively influence recreational shopping consciousness.

Price sensitive consumers are concerned with receiving good quality for their money and keeping their purchase cost at a low level (Sproles & Kendall, 1986). Sustainability based products are usually connected with a higher price point because of ethical sourcing, environmentally friendly production processes, and following sustainability standards (White et al., 2019). However, ESG initiatives tend to add value to products (Amelung et al., 2020). Therefore, ESG information may increase consumers' awareness of price factors as they need to evaluate whether the extra sustainability benefits are worth the higher costs. Cost has been previously identified as a major barrier to sustainable consumption behaviour (Auger & Devinney, 2007; Testa et al., 2021).

H5: ESG indicators positively affect price consciousness.

Brand loyal consumers buy consistently based on past trust and positive experiences (Sproles & Kendall, 1986). Better ESG performance increases the organizational legitimacy and trust of consumers (Du et al., 2010). If organizations communicate their sustainability efforts in a consistent and authentic way, they can build long term consumers' relationships and develop loyalty behaviour. Thus, ESG signals are hypothesised to positively influence brand loyalty behaviours.

H6: ESG indicators positively influence brand loyalty consciousness.

The Moderating Role of Greenwashing Scepticism

With increased ESG communication, so does the greenwashing concern, and thus, scepticism among consumers (Delmas & Burbano, 2011). Greenwashing scepticism is the tendency of consumers to question the authenticity and trustworthiness of sustainability claims (Nyilasy et al., 2014).

Consumers develop cognitive mechanisms to recognise potentially deceptive marketing communications (Friestad & Wright, 1994), based on the persuasion knowledge theory. Those who are highly sceptical about greenwashing are more likely to question ESG claims, search for additional information and critically review corporate sustainability communications (Chen & Chang, 2013). Consequently, scepticism may impair the effectiveness of ESG signals in consumer decision making.

H7: Greenwashing scepticism moderates the relationship between ESG signals and consumer decision making styles such that the positive effects of ESG signals are weaker among consumers with higher levels of greenwashing scepticism.

Consumer Decision Making Styles and Sustainable Consumption Behaviour

Consumer decision making styles are defined as the stable cognitive orientation towards the way consumers process information and make decisions concerning purchases (Sproles & Kendall, 1986). These decision-making styles are expected to influence sustainable consumption behaviour.

Savvy consumers focus on product superiority and lasting value. Sustainable products are believed to be of better quality with respect to their ethical manufacturing processes and premium materials (White et al., 2019). Consequently, more aware consumers are more likely to adopt sustainable purchase decisions.

H8: Quality consciousness positively influences sustainable consumption behaviour.

Brand conscious consumers are more prone to rely on the brand reputation to make purchase decisions. Brands with strong ESG reputation generally have higher degree of consumer trust and positive brand associations (Fatemi et al., 2018). Therefore, brand conscious consumers are more likely to support brands that promote sustainability.

H9: Brand consciousness positively influences sustainable consumption behaviour.

Fashion consumers are attracted to innovation and emerging consumption trends. Sustainability is a growing market trend associated with innovation, environmental responsibility and social consciousness (White et al., 2019). These consumers may therefore be more receptive to sustainable products in order to stay in line with the latest consumption trends.

H10: Novelty fashion consciousness positively influences sustainable consumption behaviour. Good organisations often have long term relationships with brand loyal consumers. Reputable brands actively participate in ESG initiatives, which makes loyal consumers more likely to support sustainable products and make purchasing decisions aimed at sustainability (Du et al., 2010).

H11: Brand loyalty positively influences sustainable consumption behaviour.

Greenwashing Scepticism and Sustainable Consumption Behaviour

Consumer behaviour in the sustainability market is now heavily driven by scepticism about greenwashing. While a healthy degree of scepticism can be beneficial, as it can prompt consumers to critically evaluate what companies are saying, too much scepticism can have a negative effect on trust in sustainability communication in general (Chen & Chang, 2013).

If consumers are very sceptical of the sustainability claims, then their willingness to buy environmentally friendly, marketed products may be lower, as they believe that these claims are misleading or exaggerated (de Freitas Netto et al., 2020). Hence, scepticism towards greenwashing may reduce sustainable consumption behaviour.

H12: Greenwashing scepticism negatively influences sustainable consumption behaviour.

Mediating Role of Consumer Decision Making Styles

The Stimulus Organism Response (SOR) framework suggests that environmental stimuli affect behavioural outcomes indirectly through internal psychological mechanisms (Mehrabian & Russell, 1974). In the present study, the external stimuli are ESG signals and the organismic mechanisms are consumer decision making styles.

Sustainability information alone may not directly motivate sustainable consumption behaviour. First, consumers decode ESG signals through their established decision-making styles. These internal assessments then impact on buying behaviour. Thus, consumer decision making styles are expected to mediate the relationship between ESG signals and sustainable consumption behaviour.

H13: Consumer decision making styles mediate the relationship between ESG signals and sustainable consumption behaviour.

Moderated Mediation Effect of Greenwashing Scepticism

The integration of the SOR theory and the greenwashing literature suggest that the effectiveness of ESG communication is contingent upon decision making styles and the level of consumers' scepticism toward sustainability claims. Low sceptical consumers are more likely to believe ESG signals and consequently translate them into sustainable behavioural outcomes through their decision-making styles. On the other hand, consumers who are very sceptical may ignore ESG information and this would have a negative impact on the mediation process.

Recent research on sustainability finds scepticism to be a boundary condition that affects the effectiveness of sustainability communication (Nyilasy et al., 2014; de Freitas Netto et al., 2020). It is hypothesised that the indirect effect of ESG signals on sustainable consumption behaviour through consumer decision making styles varies at the level of greenwashing scepticism.

H14: Greenwashing scepticism moderates the indirect relationship between ESG signals and sustainable consumption behaviour through consumer decision making styles, such that the mediation effect becomes weaker under higher levels of greenwashing scepticism.

ESG initiatives often reflect an organisation's ability, transparency and commitment to sustainable value creation (Eccles et al., 2014). Sustainability efforts are often perceived by consumers as indicators of higher product quality and reliability (White et al., 2019; Kumar et al., 2021). Quality conscious consumers are especially attuned to signals that lower perceived risk and signal superiority. Thus, ESG signals could increase the consumers' tendency to quality-based decision making.

Development of the Proposed Framework

The proposed conceptual framework was developed by integrating insights from four major streams of literature: Consumer Style Inventory (CSI), ESG communication, greenwashing scepticism, and Stimulus Organism Response (SOR) theory. The framework positions ESG signals as external market stimuli that influence consumers' internal psychological processes. These internal processes consist of consumer decision making styles represented by CSI dimensions and scepticism toward greenwashing.

Hypotheses H1 to H5 establish the direct influence of ESG signals on specific consumer decision making styles. Hypothesis H6 introduces greenwashing scepticism as a moderating mechanism influencing how ESG information is interpreted. Hypotheses H7 to H10 propose that consumer decision making styles subsequently shape sustainable consumption behaviour. Hypothesis H11 further recognises the direct effect of greenwashing scepticism on behavioural outcomes. Finally, H12 and H13 integrate mediation and moderated mediation mechanisms, demonstrating that the effect of ESG signals on sustainable consumption behaviour operates indirectly through CSI dimensions and varies according to consumers' level of scepticism toward greenwashing.

By combining these relationships within a single SOR framework, the proposed model offers a comprehensive explanation of how contemporary consumers process ESG information and translate sustainability related evaluations into behavioural responses.

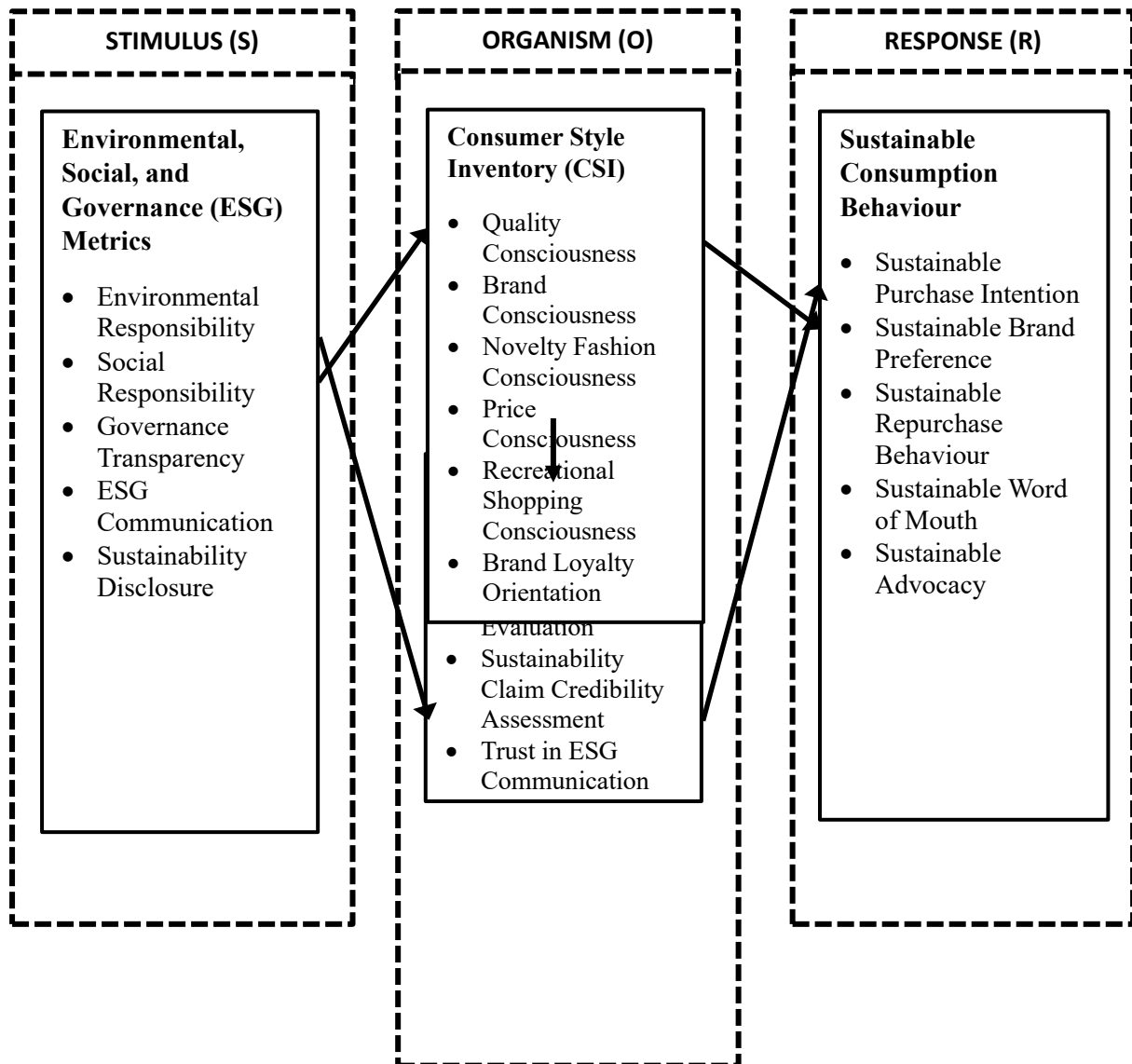


Figure 1. Proposed Research Framework

Source: developed by author (2026)

Greenwashing Scepticism also moderates the relationship between ESG Signals and CSI dimensions.

Theoretical Implications

The study extends the Consumer Style Inventory to modern markets with ESG orientation and contributes to the literature. CSI continues to be one of the most popular frameworks of consumer decision making, but was originally developed before sustainability issues became key in marketplace considerations (Sproles & Kendall, 1986). Hence, the suggested framework includes the enhancement of CSI by the ESG related stimuli and sustainability oriented behavioural consequences.

Moreover, the current study integrates ESG, CSI and greenwashing scepticism in a single theoretical framework, linking the domains of sustainability marketing and consumer decision making research (Delmas & Burbano, 2011; White et al., 2019). The integration helps to have a better knowledge of how customers perceive sustainability information and react to efforts linked to ESG.

Finally, the study expands the scope of SOR theory by illustrating how ESG related stimuli affect sustainable purchase behaviour through consumer decision making styles and sceptical assessments of sustainability promises (Mehrabian & Russell, 1974; Vieira, 2013).

Consumer Style Inventory's Extension in the Age of Sustainability

The first theoretical contribution of this study is to examine and extend the Consumer Style Inventory (CSI) in the context of contemporary sustainability-oriented marketplaces. As introduced by Sproles and Kendall (1986), CSI is one of the most popular frameworks to study consumer decision making styles. But the original paradigm was designed at a time when sustainability concerns, ESG disclosures, climate change knowledge and green consumption were not yet prominent drivers of marketplace behaviour.

The present marketplace is vastly different from the setting in which CSI was first conceived. Consumers are deluged with ESG reports, sustainability claims, environmental certifications and corporate responsibility messaging. These advancements have shifted purchase decisions from a simply economic examination to a multi-dimensional evaluation that includes ethical, environmental and social factors.

This study thus extends CSI theory by suggesting that classic consumer decision making methods still exist but operate differently when sustainability information becomes a key marketplace cue. Rather than replacing CSI, this paradigm modernises it by integrating ESG related stimuli into consumer decision making processes. Hence, the study helps to retain the theoretical relevance of CSI in today's sustainability-oriented consumption situations.

Integrating ESG and Consumer Decision Making Literature

The second contribution is to link two largely separate streams of writing. Current ESG studies have largely examined financial performance, company governance, investor behaviour, stakeholder involvement and organisational legitimacy. On the other hand, CSI research is

largely focused on consumer purchasing behaviour without a specific emphasis on the marketplace signals on sustainability.

This study combines ESG signals with CSI dimensions creating a new theoretical convergence between sustainability marketing and consumer decision making research. The concept suggests the mediation effect of underlying decision styles on the impact of ESG information on consumer behaviour and that ESG information does not act as an isolated predictor of purchase behaviour.

This integration has contributed to a more holistic understanding of the impact of sustainability related information on consumers and underscores the need to include psychological variation when researching ESG related behavioural outcomes.

Greenwashing Scepticism as a Contemporary Psychological Mechanism

The final contribution concerns the integration of greenwashing scepticism into the CSI framework. While awareness of greenwashing scepticism is growing in the sustainable marketing literature, the phenomenon has rarely been studied in combination with consumer decision making patterns.

The study indicates that greenwashing scepticism is a current psychological lens, through which consumers interpret information on environmental, social, and governance (ESG). Consumers are no longer passive on sustainability claims. Instead, they engage in active questioning, interrogation and evaluation of sustainability communication by organisations. This research contributes to the literature by incorporating greenwashing criticism in CSI that depicts a more realistic picture of the current consumer behaviour and captures the rising worry of the public about the legitimacy of business sustainability.

An Extended Stimulus Organism Response Theory

The fourth contribution addresses the use of Stimulus Organism Response (SOR) theory. Previous SOR research has mostly focused on retail settings, online shopping experiences, hotel services, and digital marketing settings. Limited research applies SOR theory to sustainability-oriented consumer decision making.

The proposed framework expands SOR theory by conceptualising ESG signals as external stimuli, CSI dimensions and greenwashing scepticism as organismic mechanisms and sustainable consumption behaviour as the behavioural reaction. This extension extends the applicability of SOR theory in sustainability marketing and enhances the understanding of ESG driven customer behaviour.

Practical Implication Of The Study

Implications for Managers of Corporate Sustainability

The results of this framework imply that organisations should not assume that all consumers respond in the same way to ESG activities. Different consumer decision making styles are likely to alter the interpretation of information linked to sustainability. If ESG initiatives are used as a proxy for better product quality, then quality conscious

consumers may respond favourably to ESG initiatives. Consumers concerned about brands could be attracted to sustainability statements that promote prestige and brand image. Consumers with pricing concerns may need to see proof that sustainability benefits exceed the greater cost. Hence, sustainability communication strategies should be customised to specific consumer niches instead of generic ESG messaging.

Implications for Brand Managers

Brand managers need to know that ESG is no longer about corporate responsibility but is increasingly a tool for brand distinction. Consumers typically consider sustainability performance as a proxy indicator of organisational competency, reliability and trustworthiness. Organisations should consequently embed ESG narratives into wider branding initiatives. Having a consistent and coherent sustainability message across websites, social media channels, packaging, advertising campaigns and customer engagement initiatives is critical.

Implications for Policy

Policymakers should be cognizant of the growing impact of greenwashing suspicion on consumer behaviour. If left unaddressed, the prevalence of false or misleading environmental claims could lead to increased scepticism that undermines public trust in sustainability efforts. Regulatory bodies should consider strengthening sustainability reporting standards, environmental certifications and corporate disclosure practices to improve market transparency and bolster consumer confidence.

Implications for Retailers

Retailers can strategically leverage sustainability information to influence purchasing decisions. The use of ESG labelling environmental certifications, carbon footprint disclosures, and ethical sourcing information can assist consumers in making more informed choices. Providing transparent sustainability information can alleviate consumer concerns and boost confidence in sustainable product options.

Imminent Research Agenda

A multitude of opportunities arises from the given framework. Secondly, the subsequent studies should empirically validate the concept using structural equation modelling techniques for different businesses and countries. Thirdly, the researchers should investigate whether the effects of ESG signals differ among the demographic categories such as generation cohorts, economic classes, educational levels and cultural domains. Fourthly, the subsequent studies may explore other variables such as environmental concern, sustainability literacy, trust tendency, perceived consumer effectiveness and ethical ideology. Fifthly, longitudinal studies are required to explore the changing nature of greenwashing scepticism over time as consumers are exposed to ESG related information progressively. Sixthly, the researchers should test whether some dimensions of CSI have a greater impact on sustainable consumption behaviour than others. These findings can contribute to the CSI framework in sustainability contexts. Finally, future research can examine ESG driven decision making in developed and emerging economies to understand contextual differences in sustainability-oriented consumption behaviours.

Conclusion

This research revisits the Consumer Style Inventory within the framework of contemporary sustainability focused markets characterized by increased ESG communication and growing consumer scepticism towards sustainability claims. Using Stimulus Organism Response theory, the study proposes a conceptual framework integrating ESG signals, consumer decision making styles, greenwashing scepticism and sustainable consumption behaviour. The paradigm suggests that the impact of ESG practices is due to external market stimuli that influence consumer judgments through pre-existing decision-making processes. At the same time, scepticism about greenwashing acts as a contemporary psychological mechanism that influences the perception and evaluation of sustainability information. These biological mechanisms then influence sustainable consumption behaviour.

This study contributes to consumer behaviour theory by proposing the CSI framework as a new application for a marketplace context that is vastly different from the original development setting of the framework. It adds to the literature on sustainability marketing by synthesising consumer decision making styles and cynicism about greenwashing into a comprehensive explanatory framework.

As sustainability becomes increasingly relevant to competitive advantage and customer expectations, understanding the way consumers perceive ESG information is crucial. The proposed approach establishes a basis for forthcoming empirical research and offers practical direction for organisations aiming to formulate effective sustainability communication strategies.

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