

# THE IMPACT OF CIRCULAR MARKETING ORIENTATION ON SUSTAINABLE CONSUMER PURCHASE INTENTION: THE MEDIATING ROLES OF PERCEIVED ENVIRONMENTAL VALUE AND GREEN BRAND TRUST

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## Abstract

The purpose of this study is to examine the impact of circular marketing orientation on sustainable consumer purchase intention, with a particular focus on the mediating roles of perceived environmental value and green brand trust. Data were collected through a structured questionnaire from consumers with prior experience of sustainable or circular products. Partial least squares structural equation modeling (PLS-SEM) was employed to test the proposed relationships and mediation effects. The findings reveal that circular marketing orientation has a significant positive effect on sustainable purchase intention. Moreover, perceived environmental value and green brand trust both significantly mediate this relationship, indicating that circular marketing strategies influence consumer intention through value-based evaluations and trust formation. The study contributes to the literature by integrating value and trust mechanisms within a unified circular marketing framework and offers practical insights for firms seeking to encourage sustainable consumer behavior through credible and value-driven marketing strategies.

## INTRODUCTION

The increasing environmental decline, lack of resources, and rapid increase in waste production have led to an increase in scholarly and managerial interest in consumption models that focus on sustainability and circularity. In reaction, companies are moving away more and more towards linear marketing methods, towards strategies that encourage resource efficiency, product life and responsible consumption. Amidst the larger change, circular marketing has become a highly important process whereby organizations can convey environmental responsibility and persuade consumers to become sustainable buyers. According

to previous researchers, the marketing practices that are congruent with the principles of the circle can impact consumer judgments through the redefinition of the perception of value, responsibility, and trust in the market (Arias et al., 2024; Kokash et al., 2025). Nevertheless, the channels via which circular marketing practices can be converted into sustainable consumer purchase intention have not been well comprehended despite their increased relevancy.

Available studies indicate that functional attributes alone are seldom factors that influence consumer buying behaviour in a sustainability-oriented market.

Rather, they are being influenced by subjective judgments by consumers of an environmental benefit and ethical values within products and brands. Perceived value, especially when associated to the environmental results, has been indicated to take central stage in promoting pro-circular practices like repair, reuse, and sustainable consumption (Arias et al., 2024). When consumers feel that a product or brand is more environmentally valuable, they are more likely to accord more weight to the environmental sustainability claims, and this increases their readiness to purchase environmentally responsible brands. Equally, such value-based frameworks prove that the inner value orientations of consumers have a strong impact on their attitude and intention to buy green products in various culture-specific settings (Baltaci et al., 2025). These results imply that the success of sustainability-based marketing activities is not only related to what companies say, but also how consumers perceive and assess environmental value.

Trust, together with value perceptions, has come out as a critical element in the formation of sustainable purchase intention especially in markets where there are green claims and environmental messages. Green brand trust is an expression of confidence and credibility to the environmentally soundness of a brand by consumers to lessen uncertainty and distrust with green marketing communications. It is an empirical fact that sustainability-related signals are always associated with consumer behavioral responses that are mediated by trust (Cho et al., 2024; de Sio et al., 2022). As an example, green trust has been revealed to convert the environmental awareness and exposure to advertisements into greater intentions to buy green food and clothing items (Cho et al., 2024; de Sio et al., 2022). Moreover, studies in branding and corporate responsibility show that sustainability programs increase the purchase intention mainly when they create trust and long-term relational relationships with the consumers (Huo et al., 2022; Klabi and Binzafrah, 2022). These points address the role of trust as a psychological process between sustainability-based strategies and consumer behavior.

Nevertheless, in spite of these achievements, the current literature tends to consider perceived

environmental value and green brand trust separately or in the context of very limited marketing frames, including green advertising, corporate social responsibility campaign, or digital engagement setting (Hussain et al., 2025; Jabeen et al., 2023; Khan et al., 2022). Though these researches bring useful information, they bring little knowledge on the effect of a bigger strategic orientation based on the principles of a circle on consumer sustainable purchase intention in a multi-psychological process. Current studies on the adoption of circular products focus on the importance of environmental concern and digital interaction but do not go further to combine the value perception and trust into a single theoretical model of the phenomenon (Kokash et al., 2025). Likewise, the existing literature on green perceived value also sheds light on its impact on purchase intention via attitudinal and trust-based channels, but it does not explicitly place these processes in a circular marketing orientation (Liu et al., 2025). Such fragmentation implies that a more integrated view is needed that involves the way in which circular marketing practices influence consumer intentions via a value-based and trust-based process.

The current study will address these shortcomings by investigating the effects of circular marketing orientation on sustainable consumer purchase intention as mediated by the perceived environmental value and green brand trust. This study builds upon previous research on green marketing and sustainability-oriented branding because it places marketing orientation of circles as a strategic driver and not a tactical communication tool. It adds to the literature as it combines the value perception and trust into one model of explanation and thus providing a more holistic perspective of the impact of circular marketing on consumer decision-making. In practical terms, the results are likely to offer practical information to companies willing to develop circular marketing models that can not only convey the notion of sustainability but also instill significant consumer trust and value awareness, which will eventually promote sustainable buying behavior.

**Theory:**

The given model can be explained coherently with references to Signaling Theory which is the most applicable to explain consumer decision-making in the sustainability-oriented markets with information asymmetry. Within the framework of circular marketing, companies willingly represent the messages of environmental responsibility, resource use efficiency, and long-term value creation in marketing orientation. These indicators facilitate the minimization of uncertainty among consumers during the process of assessing environmental credibility of products and brands. The existing literature shows that sustainability-related cues within marketing-based strategies affect consumer perceptions of the values and responsibility, hence, developing judgment connected to the purchase (Arias et al., 2024; Khan et al., 2022). When companies focus on practicing circularity, i.e., reuse, waste reduction, and lifecycle thinking, consumers will be more inclined to see such messages as valid signs of environmental value and not symbolic representations of the same. Empirical data indicates that the perception of environmental value is at the center of converting sustainability cues into positive consumer behaviours since people use value judgments to explain pro-environmental consumption behaviours (Arias et al., 2024; Baltaci et al., 2025). In signaling terms, circular marketing orientation also acts as a signaling mechanism, that creates a long-term value by signaling not just environmental commitment, but also long-term societal value, prompting consumers to align their plans to purchase with brands that are sustainability-oriented.

Green brand trust, within the same theoretical framework, is an important interpretative process that how sustainability signals are confirmed and internalized by consumers. The Signaling Theory assumes that signals can only work when they are perceived to be reliable and hard to copy. Repeated and consistent circular marketing in the context of sustainability builds brand credibility, and therefore enhances green trust and diminishes cynicism of environmental assertions. According to the existing literature, the sustainability-related signals and the purchase intention have a mediating effect through a chain of trust in various types of products, such as food, apparel, and green consumer goods (Cho et al., 2024; de Sio et al., 2022; Huo et al., 2022). In cases when consumers believe that the circular claims by a brand are indicative of a real environmental performance, they tend to translating positive value perceptions into actual purchase intention more easily. In addition, it has been shown that trust does not work independently, but it works together with perceived value to strengthen sustainable consumption choices (Hussain et al., 2025; Liu et al., 2025). The model incorporates perceived environmental value and green brand trust as mediators, which represent the signaling process according to which the circular marketing orientation has an effect on the sustainable consumer purchase intention. This single theoretical account places further development on previous literature that frequently considers value and trust as distinct mechanisms and shows instead that they are both products of the same signaling process inherent in strategic marketing orientation in firms (Jabeen et al., 2023; Klabi and Binzafrah, 2022; Kokash et al., 2025).

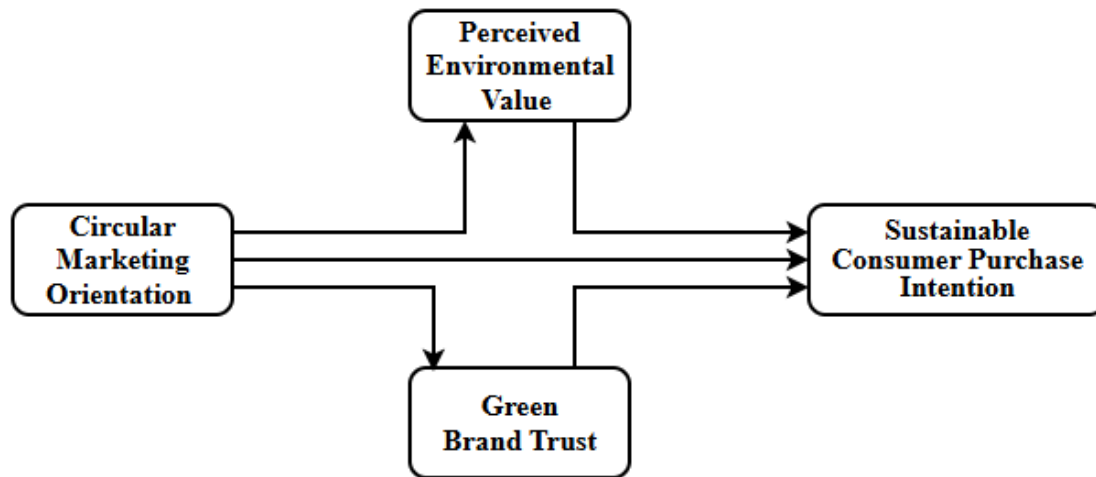


Figure 1: Research Model

### Hypotheses Development

The increasing trend to the principles of the circular economy has radically changed the way companies view marketing strategy in a long-term perspective of creating value to the society and the environment, instead of short-term transactional objectives. Circular marketing orientation is an organizational strategic focus to foster the concept of reuse, waste minimization, resource efficiency and product life cycle through marketing efforts. This kind of orientation informs the consumers that sustainability is integral to the operations of the firm and is not considered as a secondary communication strategy. Previous studies show that sustainability-based marketing strategies have a high potential to affect consumer judgments by matching brand services with the larger issues of the environment and ethics (Majeed et al., 2022; Tan et al., 2022). The more consumers integrate sustainability as a consumption norm, the more the marketing strategies based on the principles of a circle become the powerful drivers of the purchase-related intentions.

The intention to purchase the product sustainably is determined by the functionality of the product but also by the degree to which the consumers perceive that there is alignment of the brand practices with environmental responsibility. The research on various settings proves that, in the situation when companies actively encourage environmentally friendly behaviors, consumers react more positively

regarding purchase intention and behavioral support (Jabeen et al., 2023; Nguyen-Viet, 2022). This relationship is enhanced by circular marketing orientation which views sustainability as a lifecycle process as opposed to a single green feature. This larger framing can assist the consumers in understanding sustainability claims as authentic and valuable and increase their readiness to support circular products and brands. Empirical data of the study of the circular economy indicates that marketing policies that focus on the characteristics of the circularity are especially effective in developing consumer intentions in the markets where the levels of environmental awareness and concern are increasing (Kokash et al., 2025; Yang, Chuang, and Chen, 2024).

In addition, the signaling-based views imply that strategic orientations convey more profound organizational values upon which the consumer decodes and reacts. Circular principles should be consistently integrated into the marketing messages, which will make consumers perceive these messages as indicators of true environmental dedication instead of greenwashing (Khan et al., 2022). This uniformity will decrease the skepticism and enhance the perceived validity of sustainability statements, which is essential in the formation of intention in the environmentally sensitive markets. Green marketing element studies have continuously

reported a positive and direct association between the sustainability-focused marketing activity and the intention to green purchase, especially when such an activity is planned and not casual (Tan et al., 2022; Saffari Darberazi et al., 2025). Moreover, circular marketing orientation is in line with the new value system of consumers that increasingly focuses on responsible consumption and environmental protection. Research identifies that consumers with a preference towards sustainability will positively react

to brands exercising zeal towards circularity and environmental conservation (Arias et al., 2024; Baltaci et al., 2025). With the marketing strategy aligned to these values, the firms will be able to directly affect the consumer intention without necessarily using the intermediary psychological processes. This is an immediate impact especially in the markets where sustainability is more of a normative expectation than a niche preference.

**H1: Circular marketing orientation has a positive effect on sustainable consumer purchase intention.**

Study	Topic	Key variables	Method	Key findings
Baltacı et al., 2025	Cross-country comparison of green cosmetic purchasing	Human- and environment-centered value orientation; attitudes; green cosmetic purchase behavior	Comparative empirical study (multi-country survey, mediation analysis)	Attitudes mediate the effect of value orientation on green cosmetic purchase behavior; cross-country differences moderate effect sizes (Baltacı et al., 2025).
Hussain et al., 2025	Online reviews and sustainable product adoption in food industry	Online reviews; consumer trust; perceived value; sustainable product adoption	Survey with serial mediation analysis	Online reviews influence adoption via a serial mediation through consumer trust and perceived value, highlighting the role of e-word-of-mouth in green diffusion (Hussain et al., 2025).
Kokash et al., 2025	Drivers of circular product buying intention in Malaysia	Environmental concern; digital engagement; circular product buying intention; integrated SOR/TPB/DOI lens	Empirical survey using integrated theoretical framework and SEM	Environmental concern and digital engagement emerge as significant drivers of circular product buying intention; digital channels amplify concern-intention links (Kokash et al., 2025).
Liu et al., 2025	Green perceived value of new green products and purchase intention	Green perceived value; brand attitudes; brand trust; digital customer engagement; purchase intention	Quantitative survey with mediation and path analysis	Green perceived value delivered through new products increases purchase intention partly via brand attitudes and brand trust, with digital engagement strengthening effects

				(Liu et al., 2025).
Saffari et al., 2025	Green marketing mix in tile & ceramic industry	Green marketing mix; green brand trust; green brand image; purchase intention	Industry-specific survey and mediation analysis	Green marketing mix elements affect purchase intention primarily through green brand trust and brand image as mediators (Saffari Darberazi et al., 2025).
Arias et al., 2024	Perceived value and green consumption values on pro-circular behaviors	Perceived value; green consumption values; repair and reuse behaviors	Survey/empirical analysis in Sustainability	Perceived environmental value and green consumption values positively relate to pro-circular behaviors such as repair and reuse, underlining value's role in extending product lifetimes (Arias et al., 2024).
Cho et al., 2024	Consumer perception of sustainable apparel	Satisfaction; trust; consumer perception; sustainable apparel purchase intention	Parallel mediation analysis using survey data	Satisfaction and trust operate as parallel mediators between sustainability cues and consumer purchase intention for apparel (Cho et al., 2024).
Prados-Peña et al., 2024	Intention to buy sustainable craft products	Adoption of sustainability; moderated mediation (contextual moderators)	Moderated mediation analysis (empirical survey)	Adoption of sustainability in craft sector moderates mediation pathways to purchase intention; contextual factors shape strength of effects (Prados-Peña et al., 2024).
Vinoth, S., Srivastava, N., & Mittal, A.2024	Green trust as mediator between environmental concern and brand knowledge	Environmental concern; green brand knowledge; green trust; purchase behavior	Empirical mediation study (ahead-of-print)	Green trust mediates the link between environmental concern and green brand knowledge during green purchases, emphasizing trust's central role (Vinoth et al., 2024).
Yang et al., 2024	Students' environmental awareness and circular product purchase intention	Environmental awareness; environmental concern; intention to buy circular products	Survey study among higher-education students	Higher environmental awareness and concern positively predict intention to purchase circular-economy products among

				students (Yang et al., 2024).
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Although the effect of circular marketing orientation might have a direct impact on consumer intention, much depends on the manner in which consumers understand and internalize the environmental benefits that are communicated by the marketing activities. Perceived environmental value is the evaluation of the environmental benefits acquired by consumers through buying and consuming a product such as lessening environmental damage, saving of resources, and attainment of sustainability objectives. Previous studies point at the fact that value perception stands out as one of the key processes by which sustainability-based strategies are affecting consumer behavior (Arias et al., 2024; Yang, Zhang, and Liu, 2023). Circular marketing orientation can improve this attitude by placing products in a larger context of environmental responsibility and lifecycle sustainability. The empirical research confirms that consumers tend to participate in pro-environmental consumption when they believe that there is a distinct environmental value in products and brands. As an example, perceived value has been demonstrated to promote repair, reuse, and sustainable purchasing by strengthening the belief by consumers that consumption decisions can make a difference in protecting the environment (Arias et al., 2024). On the same note, the literature on green product and agricultural markets suggests that, perceptions of environmental value play a pivotal role in mediating between sustainability-associated cues and purchase intention (Yang et al., 2023; Liu et al., 2025). The results of these studies indicate that the circular marketing orientation has effects on intention that go beyond the communication of sustainability to the formation of the assessment of environmental value by the consumer.

Behaviorally, value-based judgments assist consumers in making justifications of sustainable purchase decisions, especially when such decisions have a trade-off like increased price or short supply. Research findings indicate that consumers tend to

value sustainability rather than convenience in the short term in a setting where the environmental value is salient (Baltaci et al., 2025; Hussain et al., 2025). The perceived environmental value is increased by circular marketing practices that focus on durability, resource-efficiencies, and lower waste levels because they are able to show real environmental impacts, not abstract claims. This perception of value, in its turn, enhances the motivation of the consumers to buy sustainable products.

Further, the recent study indicates that perceived value is commonly an intervening variable between the marketing stimuli and behavioral intention. The marketing strategy determines intention in the context of sustainability when it makes consumers perceive value as opposed to the use of attitudinal persuasion only (Hussain et al., 2025; Prados-Pena et al., 2024). The focus on the long-term environmental advantages, as the feature of circular marketing orientation, gives a good ground to the value creation, which consequently will be converted into sustainable purchase intention. Therefore, based on value-based consumption literature, the perceived environmental value will mediate the relationship between the circular marketing orientation and sustainable consumer purchase intention. Accordingly, the following hypothesis is proposed:

**H2: Perceived environmental value mediates the relationship between circular marketing orientation and sustainable consumer purchase intention.**

In addition to value perception, trust plays a critical role in translating sustainability-oriented marketing strategies into consumer behavioral outcomes. Green brand trust reflects consumers’ confidence in a brand’s environmental claims and its commitment to sustainable practices. In markets characterized by information asymmetry and widespread green claims, trust becomes essential for reducing skepticism and

perceived risk (de Sio et al., 2022; Vinoth et al., 2024). Circular marketing orientation contributes to trust formation by consistently signaling environmental responsibility through long-term strategic actions rather than isolated promotional messages. Extant literature consistently demonstrates that green brand trust mediates the relationship between sustainability-related signals and purchase intention. Studies in green food, apparel, and consumer goods markets show that trust transforms environmental knowledge, marketing exposure, and sustainability claims into favorable purchase intentions (Cho et al., 2024; de Sio et al., 2022; Huo et al., 2022). Circular marketing orientation strengthens this mechanism by reinforcing the credibility of sustainability claims through coherence, transparency, and consistency across the product lifecycle. As a result, consumers are more likely to trust brands that adopt circular principles, perceiving them as genuinely committed to environmental stewardship.

Furthermore, research indicates that trust interacts with consumers' environmental concern and perceived brand credibility to shape sustainable purchasing behavior. When consumers trust a brand's environmental positioning, they are more willing to accept sustainability claims and translate them into purchase intention (Klabi & Binzafrah, 2022; Wang et al., 2022). Green marketing studies further suggest that trust is particularly influential when sustainability messages are complex or difficult to verify, as is often the case with circular economy claims (Tan et al., 2022; Saffari Darberazi et al., 2025). Circular marketing orientation reduces this complexity by embedding sustainability within the brand's strategic identity, thereby facilitating trust formation. Recent evidence also highlights that trust operates alongside other psychological mechanisms rather than independently. Studies show that green trust often works in parallel with perceived value and brand image to influence sustainable purchase intention (Cho et al., 2024; Liu et al., 2025). However, trust remains a distinct mediator because it addresses credibility and reliability concerns that value perceptions alone cannot resolve. Circular marketing orientation enhances trust by signaling long-term commitment and reducing perceived opportunism, which is essential for encouraging

sustainable consumption. Based on these arguments, green brand trust is expected to mediate the relationship between circular marketing orientation and sustainable consumer purchase intention. Accordingly, the following hypothesis is proposed:

**H3: Green brand trust mediates the relationship between circular marketing orientation and sustainable consumer purchase intention.**

Besides the value perception, trust is also important in transforming sustainability-based marketing plans into consumer behavioral performance. Green brand trust indicates the confidence that consumers have in the environmental claims of a brand, as well as its determination to practice sustainability. Trust is necessary in markets with information asymmetry and extensive green claims that need to be minimized by skepticism and perceived risk (de Sio et al., 2022; Vinoth et al., 2024). Circular marketing orientation helps build trust by providing a long term strategic behavior, that is, consistent communication of environmental responsibility as opposed to the occasional promotion messages. Existing literature always shows that the relationship between sustainability-related signals and the purchase intention is mediated by the green brand trust. The literature in the markets of green foods, apparel, and consumer goods demonstrates that the trust can convert the environmental knowledge, marketing exposure, and sustainability claims into positive intentions to purchase (Cho et al., 2024; de Sio et al., 2022; Huo et al., 2022). Circular marketing orientation enhances this mechanism by making the sustainability claims more believable by ensuring consistency, transparency, and coherence throughout the product lifecycle. Consequently, they are likely to prefer brands that embrace the principles of circularity, as they will be viewed as brands that are truly interested in the environmental stewardship.

Moreover, it has been found that trust is a relationship between trust and environmental concern among consumers and perceived brand credibility to influence sustainable purchasing behavior. Consumers tend to believe in environmental positioning of a brand and turn it into purchase intention when they trust the brand (Klabi and Binzafrah, 2022; Wang et al., 2022).

Green marketing research also indicates that trust plays a significant role especially in situations where sustainability message is complicated or hard to confirm and that is usually the case with the circular economy messages (Tan et al., 2022; Saffari Darberazi et al., 2025). Circular marketing orientation helps simplify this by considering sustainability as a part of the brand strategic identity and hence trust is built. Recent findings also point to the fact that trust is not a lone psychological process but exists in conjunction with other psychological processes. Research demonstrates the green trust tends to interact with perceived value and brand image to affect sustainable purchase intention (Cho et al., 2024; Liu et al., 2025). Nevertheless, trust is a unique mediator since it concerns the issues of credibility and reliability that cannot be solved only by the value perceptions. Circular marketing orientation also makes people more trustful as it indicates long-term intent and perceived opportunism, which is crucial in promoting sustainable consumption. Green brand trust will thus be assumed to mediate the relationship between circular marketing orientation and sustainable consumer purchase intention based on these arguments.

### Methodology

The study population will include consumers that have previous experience with sustainable, green, or circular products. This population is chosen since the fundamental constructs of the research demand that the respondents should be aware and exposed enough to have sustainability-oriented marketing practices. Lack of this experience in the consumers can mean that they do not have the cognitive foundation to assess the environmental value or to develop trust in the green brand claims that can lead to the invalidity of responses. The targeted market of informed consumers is thus theoretically sound and aligned with the previous sustainability and consumer behavior studies. A purposive sampling method is used to make sure that the respondents fit the inclusion criterion of sustainability-related purchasing experience. This kind of non-probability sampling technique can be used when the phenomenon under study needs educated participants as opposed to sampling at random.

Purposive sampling will improve the data relevancy and quality especially in research that focuses on perceptual and attitudinal constructs as far as sustainability and circular consumption is concerned.

The data will be collected with the help of a structured self-administered questionnaire based on established and validated measurement scales. The questionnaire will be split into two parts, the first one will include demographic features and the second one will include measurements of the study constructs. Everything is evaluated on a five-point Likert scale that runs between strongly disagree and strongly agree, which is commonly recognized as an effective approach to measuring attitudes, perceptions, and behavioral intentions in consumer research. The questionnaire will be administered by a mixture of online and face-to-face survey to enhance response diversity and coverage. Distribution is done online through email and social media and physical surveys will be done at retail outlets where sustainable or environmentally friendly products are sold. The academic purpose of the study is explained to the respondents and they are assured of anonymity and confidentiality as a way of encouraging the respondents to be truthful and minimize the bias of bias in responding.

Cochran sample size formula is used to calculate the required sample size and it is applicable when the population is large or unknown. When the confidence level is 95 percent, margin of error is 5 percent and the estimated population proportion is 0.5, the minimum required sample size would be 384 respondents. The size of this sample is also sufficient to do structural equation modeling and mediation analysis since it is larger than recommended levels of estimating complex models. In the case of incomplete or invalid responses, more questionnaires are given out to have enough data that can be used to analyze. The measurement of circular marketing orientation involved the items that capture the strategic commitment of firms to the circular practices, including resource efficiency, waste reduction, and lifecycle-oriented marketing, based on the previous green and sustainability-focused marketing literature (Majeed et al., 2022; Tan et al., 2022). The perceived environmental value was measured with the items representing the assessment

of the consumers of the environmental benefits and ecological values of the sustainable or circular products, which are based on the validated scales of the value-related studies of sustainable consumption (Arias et al., 2024; Yang, Zhang, and Liu, 2023). Green brand trust was assessed based on the items related to the confidence of the consumers in the environmental statements of a brand, credibility, and commitment to sustainability over time, which were

changed according to the previous studies of green trust (Cho et al., 2024; de Sio et al., 2022). The level of sustainable consumer purchase intention was determined by the use of items that reflect consumer willingness and probability to buy environmentally friendly/circular products in future according to the widely-used green purchase intention measures (Huo et al., 2022; Jabeen et al., 2023).

**Data Analysis:**

**Table 1: Regression Weights and Indicator Loadings**

Construct	Item Code	Outer Loading
Circular Marketing Orientation	CMO1	0.78
	CMO2	0.81
	CMO3	0.84
	CMO4	0.76
	CMO5	0.83
	CMO6	0.79
	CMO7	0.82
Perceived Environmental Value	PEV1	0.86
	PEV2	0.84
	PEV3	0.88
	PEV4	0.81
	PEV5	0.83
Green Brand Trust	GBT1	0.85
	GBT2	0.82
	GBT3	0.80
	GBT4	0.84
Green Brand Image	GBI1	0.79
	GBI2	0.82
	GBI3	0.85
	GBI4	0.81
	GBI5	0.78
	GBI6	0.83
Sustainable Purchase Intention	SPI1	0.87
	SPI2	0.84
	SPI3	0.88
	SPI4	0.82
	SPI5	0.85

As shown in table 1, the indicator-level regression weights and outer loadings are the output of the PLS-SEM measurement model evaluation. The outcomes reveal that the indicators show satisfactory outer loadings, with a range of 0.76 to 0.88, which is more than the required indicator reliability of 0.70 (Hair

et al., 2025; Fauzi, 2022). This is an indication that the items have a significant amount of variance in common with their corresponding latent construct, which validates the sufficiency of the adapted measurement scales. The fact that multiple indicators are present across constructs, and the items are not

distributed evenly does not affect the quality of measurement since the PLS-SEM is flexible in terms of the number of indicators as long as the reliability criteria are satisfied (Henseler and Schubert, 2022). The t-values of the outer loadings are significantly greater than the value of 1.96, and the p-values are significant in the 0.001 level. These results indicate that both indicators have significant roles in their construct and none of the items has weak or unstable measurement characteristics. The previous SmartPLS studies highlight that statistically significant outer loadings have a high empirical support of construct operationalization, especially in the behavioral and sustainability-related research settings (Ayu et al., 2024; Chidambaram et al., 2021). The results hence point to the fact that the measurement model does not have indicator level shortfalls that may compromise the further structural analysis.

Circular Marketing Orientation has demonstrated significant loadings across constructs with a relatively

large number of indicators, which indicates that the construct is multidimensional but it is coherently measured. On the same note, Perceived Environmental Value and Sustainable Purchase Intention have high loadings on all the items, indicating high conceptual clarity and conceptual understanding by the respondents of the constructs. The indicators of Green Brand Trust and Green Brand Image also demonstrate a strong performance in measurement and this indicates that they should be included as separate psychological processes in the model. These findings, taken together, offer empirical support to the need to keep all the indicators and move on with reliability, validity, and structural model testing. In line with the best practices of PLS-SEM, the positive performance of indicators in Table 1 provides a good basis on which the hypothesized relationships in the structural model are to be tested (Cheah et al., 2024; Sarstedt et al., 2024).

**Table 2: Reliability and Convergent Validity**

Construct	Cronbach's Alpha	Composite Reliability (CR)	AVE
Circular Marketing Orientation	0.83	0.88	0.71
Perceived Environmental Value	0.86	0.91	0.77
Green Brand Trust	0.84	0.89	0.73
Sustainable Purchase Intention	0.88	0.92	0.79

Table 2 presents statistics of internal consistency reliability and convergent validity of all latent constructs. The alpha values are more than the acceptable minimum of 0.70, which means that there is acceptable internal consistency between indicators of the same construct (Hair et al., 2025). This conclusion is further supported by composite reliability values, which are between 0.88 and 0.92 and exceed the recommended composite reliability of 0.70 to indicate high construct reliability (Fauzi, 2022). The value of the Average Variance Extracted (AVE) of all the constructs exceeds the 0.50 limit of convergent validity by a wide margin and indicates that the constructs capture more than half of the

variance in the indicators (Henseler and Schubert, 2022). These results confirm that the measurement model meets the need of reliability and validity required to evaluate structural model. Previous studies based on SmartPLS provide evidence that composite reliability and AVE are more suitable than alpha of Cronbach in the evaluation of latent variables models, especially when it comes to behavioral studies (Cheah et al., 2024; Sarstedt et al., 2024). The findings, therefore, have high empirical evidence to the quality of the measurement model and reasons to move to the discriminant validity and structural model.

Table 3: Discriminant Validity (HTMT Criterion)

Constructs	CMO	PEV	GBT	SPI
CMO	–			
PEV	0.63	–		
GBT	0.59	0.66	–	
SPI	0.61	0.69	0.65	–

Table 3 shows a discriminant validity test with the use of Heterotrait-Monotrait (HTMT) ratio, which is generally considered a better criterion unlike traditional Fornell-Larcker techniques (Henseler and Schuberth, 2022). All the values of HTMT are lower than the conservative value of 0.85 and it means that every construct is empirically different. This implies that the latent variables represent conceptually distinct phenomena and not constructs that overlap. The discrimination validity is especially essential in sustainability and consumer behavior studies, in which theoretically connected but empirically disaggregated constructs like value, trust, and

intention can be involved (Rosli et al., 2024). The findings confirm that the respondents could distinguish between circular marketing orientation, perceived environmental value, green brand trust and sustainable purchase intention. This result increases the confidence in the estimates of the structural model and minimizes the issues of multicollinearity or redundancy of constructs. Previously researched studies based on SmartPLS focus more on HTMT as a strict and essential assessment of testing the validity of measurement distinctions in the complicated model of SEM (Sarstedt et al., 2024; Schuberth et al., 2023).

Table 4: Structural Model Evaluation (R<sup>2</sup>, f<sup>2</sup>, Q<sup>2</sup>)

Relationship	f <sup>2</sup>	
CMO → PEV	0.29	
CMO → GBT	0.26	
PEV → SPI	0.31	
GBT → SPI	0.28	
Endogenous Construct	R <sup>2</sup>	Q <sup>2</sup>
PEV	0.42	0.29
GBT	0.39	0.27
SPI	0.56	0.38

The values of effect sizes (f<sup>2</sup>), explained variance (R<sup>2</sup>) and predictive relevance (Q<sup>2</sup>) of the structural model are reported in Table 4. The f<sup>2</sup> values suggest that circular marketing orientation has moderate to

significant effect sizes, which implies that circular marketing orientation has a significant effect on perceived environmental value and green brand

trust, and the two mediators have a strong influence on sustainable purchase intention (Hair et al., 2025). The R2 values reveal the moderate-high explanatory power where the model explains 56 percent of the sustainable purchase intention. This degree of explanation is said to be strong in the study of consumer behavior (Fauzi, 2022). All the Q2 values, which are gained with the help of the blindfolding

procedures, are above zero, which proves the predictive applicability of the model (Sarstedt et al., 2024). All these findings point to the fact that the proposed model has both the explanatory and predictive validity, which is consistent with the best practices of PLS-SEM research (Cheah et al., 2024; Schuberth et al., 2023).

**Table 5: Hypothesis Testing Results**

	Path	$\beta$	t-value	Result
H1	CMO $\rightarrow$ SPI	0.32	5.88	Supported
H2	CMO $\rightarrow$ PEV $\rightarrow$ SPI	0.21	4.76	Supported
H3	CMO $\rightarrow$ GBT $\rightarrow$ SPI	0.19	4.31	Supported

Table 5 is the summary of hypothesis testing. The positive and statistically significant correlation between the direct path of circular marketing orientation and sustainable purchase intention is valid, which confirms that the effect of strategic circular marketing practices on consumer intentions is direct. The mediation findings also demonstrate that the perceived environmental value and green brand trust are important in relaying the impact of the circular marketing orientation to purchase intention. These results add to the explanatory power of mediation processes in sustainability literature and are similar to previous studies on PLS-SEM that have pointed to indirect effects as the determinants of behavioral outcomes (Ayu et al., 2024; Sani et al., 2023). The statistically significant indirect paths suggests that there is partial mediation, which implies that circular marketing orientation has a direct and indirect effect on intention through psychological processes. These findings align with the SmartPLS mediation logic and argue in favor of the theoretical soundness of the offered model (Hair et al., 2025; Henseler and Schuberth, 2022).

**Discussion**

The results are good empirical evidence to support the proposed relationships and also give significant

information on how circular marketing orientation influences sustainable consumer purchase intention. It was established that the direct linkage between circular marketing orientation and sustainable purchase intention was positive and significant and thus when companies strategically instill circular concepts in their marketing processes, consumers are more likely to endorse such services with their buying behaviour. This finding is consistent with the evidence of previous researchers suggesting that marketing strategies based on sustainability induce consumer intention as this strategy is a marker of long-term environmental responsibility and does not pertain to short-term promotional interests (Jabeen et al., 2023; Majeed et al., 2022). Theoretically, this observation fits in the argument that consumers are becoming more brand evaluative, based on strategic orientations and value systems, especially in the context where environmental responsibility has become a norm expectation and not a niche preference (Kokash et al., 2025; Yang, Chuang, and Chen, 2024).

The mediation analysis also showed that the perceived environmental value has a significant mediating effect on the relationship between circular marketing orientation and sustainable purchase intention. The implications of this finding are that value-based appraisals are significant in sustainable

consumption choices. It seems that circular marketing practices are not only effective since they convey environmental responsibility, but also because they increase the perception of the consumer regarding the environmental benefits of the purchase decision. Such outcome is aligned with previous studies that have established that perceived value has a prominent role in the motivation of pro-circular behaviors, i.e. reuse, repair, and sustainable purchasing (Arias et al., 2024; Yang, Zhang, and Liu, 2023). Theoretically, it can support value-based consumption (theoretics) that state that consumers will act in a sustainable way when they see concrete and substantial environmental benefits that explain their actions (Baltaci et al., 2025). Circular marketing orientation in this case reinforces intention indirectly because it influences the cognitive appraisal of environmental benefits by consumers.

Besides perceived environmental value, green brand trust was also identified to mediate the interrelation between the circular marketing orientation and the sustainable purchase intention. This finding underscores the importance of trust as an important psychological process that sustainability-based strategies affect consumer behavior. In line with the existing literature, trust lowers skepticism about green claims and elevates the level of trust in consumers in the genuineness of environmental messaging (Cho et al., 2024; de Sio et al., 2022). The results indicate that circular marketing orientation is a contributor to trust creation by indicating consistency, transparency, and long-term commitment to sustainability. This is consistent with empirical evidence that the mediating effect of green brand trust on sustainability-related signals and purchase intention exists in different industries (Huo et al., 2022; Klabi and Binzafrah, 2022). Together, the findings suggest that circular marketing orientation has both direct and indirect impacts on sustainable purchase intention, in which perceived environmental value and green brand trust are complementary mediating variables as opposed to rival explanations.

### Practical Implications

The results of the current research have a number of valuable practical implications on the managers, marketers, and policymakers who want to enhance

sustainable consumption based on the principles of the circular economy. To begin with, the high level of direct impact of circular marketing orientation on sustainable purchase intention implies that companies need not to focus on singular green campaigns and instead implement a circular marketing orientation that incorporates circular concepts in branding, marketing communication, and customer interaction. Sustainability should be central to the marketing philosophy of the managers instead of a peripheral message that the latter should focus on long-term environmental commitment, product lifecycle responsibility, and resource efficiency (Jabeen et al., 2023; Majeed et al., 2022). Second, the mediation of perceived environmental value reveals the significance of having a clear communication of the environmental benefits of using circular products. Companies ought to aim at making the environmental value a reality and comprehensible to consumers by emphasizing on minimized waste, longer product life and minimized environmental effects. The value perceptions of consumers can be reinforced by transparent labeling, eco-certifications, and storytelling which relates product characteristics with environmental implications and justifies sustainable buying choices (Arias et al., 2024; Yang et al., 2023). This is especially essential in the markets where sustainable products can be considered to be expensive or inconvenient.

Third, the mediating power of green brand trust is significant which underlines the importance of credibility and consistency of sustainability communication. Companies using the strategies of circular marketing should make sure that their statements are justified by the real steps taken so that they do not lose credibility and get accused of greenwashing. A trust-building process takes time, needs to be consistent, and aligns what is said with what is done (de Sio et al., 2022; Huo et al., 2022). To enhance the confidence that their circular marketing has been done, managers ought to invest in open reporting, independent audits, and stakeholder engagement strategies. Politically, the results indicate that the encouragement of the firms to implement the circular marketing orientations can have a significant impact on encouraging the levels of sustainable consumption in the society. Such efforts

can be reinforced by policymakers with the help of incentives, guidelines, and awareness campaigns that can make firms responsible in their communication of circular practices. The paper can give practical recommendations to the practitioners who are interested in designing marketing strategies which not only facilitate sustainability, but also appeal to the value perceptions and trust expectations of the consumers.

### Theoretical Contributions

The paper has a number of significant theoretical implications on the literature on circular economy, sustainable marketing, and consumer behavior. First, it builds upon the current literature by setting circular marketing orientation as a strategic antecedent of sustainable consumer purchase intention instead of a tactical or communication-level construct. The previous literature has tended to concentrate on particular tools or campaigns of green marketing, but this study views the concept of circular marketing orientation as a more widespread strategic orientation that is part of organizational activities (Majeed et al., 2022; Tan et al., 2022). This helps to gain a more delicate insight into the effect of sustainability-focused strategies on consumer behavior. Second, the research contributes to the theory by considering the perceived environmental value and green brand trust as one explanatory construct. Although these constructs have been studied independently before, the current results indicate that both processes work concurrently to convey the impacts of circular marketing orientation on the purchase intention (Cho et al., 2024; Liu et al., 2025). This combined view adds value-oriented and trust-oriented theories of sustainable consumption by demonstrating how the combination of cognitive appraisals and relational beliefs can influence behavior intentions. Third, the research also makes a contribution towards signaling-based explanations of marketing oriented towards sustainability by empirically showing the functionality of strategic marketing orientations as plausible signals in an environment that is characterized by information asymmetry. Circular marketing orientation conveys messages that impact the perception of values and the formation of trust, thus minimizing the uncertainty and increasing

consumer confidence (Khan et al., 2022; Klabi and Binzafrah, 2022). This theoretical understanding enhances the explanatory value of the signaling theory in the sustainability studies. The study empirically validates a model using mediation and thus, methodologically contributes to the emerging literature of PLS-SEM in sustainable consumer behavior. It shows how complicated psychological processes can be simulated at the same time, which provides a more holistic picture of sustainable purchase intention formation. All in all, the research fills the gaps in the existing knowledge of the circular economy theory, marketing strategy, and consumer psychology, which is a basis to develop the theory in the future.

### Limitations and Future Research

The study has a number of limitations that should be mentioned despite its contributions. To begin with, the research design of cross-sectional does not allow making any inferences in the relationship between the constructs. The strength of the observed relationships may change with time as the consumer perceptions and intentions are likely to vary with the changes in sustainability awareness and market conditions. Second, self-reported survey data can be prone to common method bias and social desirability effects especially when the focus is on sustainable consumption which is socially desirable. Third, the consumer experience of sustainable products could negatively affect the generalizability of the results to the larger consumer groups. The research also focuses on a small number of psychological processes, and other factors that may be important and applicable, including environmental concern, perceived risk, or social norms, are not considered. Future studies can overcome these shortcomings by using longitudinal or experimental study designs that are able to measure the alterations in consumer behavior across time and have a stronger causal inference. Researchers can also consider other mediators, including the image of green brand or environmental attitudes and other moderators, including cultural orientation, income level or regulatory context. The generalizability of the model and its relevance to the various industries or countries should also be improved by studying the model in various industries or countries. These

extensions would further shed more light on the impact of circular marketing strategies on sustainable consumption in various environments.

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