

Evaluating the Relationship Between Sustainable Marketing Practices and Consumer Perception

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ABSTRACT

This study examined the influence of sustainable marketing practices on consumers' purchasing decisions by assessing awareness of eco-friendly packaging, energy-efficient operations, green advertising, and waste reduction. Using a descriptive-correlational quantitative design, data were collected from 200 middle-income consumers aged 18–60 through a validated survey questionnaire and analyzed using descriptive statistics and multiple linear regression with bootstrapping. The study found that consumers were moderately aware of sustainable marketing practices and frequently engaged in sustainable purchasing behaviors. Waste reduction emerged as the strongest predictor of purchasing decisions, followed by eco-friendly packaging and energy-efficient operations, while green advertising showed no significant influence. The findings highlight the importance of visible sustainability initiatives in promoting consumer trust and environmentally responsible purchasing behavior.

INTRODUCTION

Sustainable marketing has become an essential component of modern business strategies as environmental concerns such as climate change, pollution, and resource depletion continue to intensify. Businesses are increasingly expected to operate responsibly and demonstrate genuine commitment to environmental sustainability. As a result, organizations have adopted various sustainable marketing practices, including eco-friendly packaging, energy-efficient operations, waste reduction initiatives, recycling programs, and sustainability-focused communication. These practices not only help minimize environmental impact but also strengthen consumer trust, enhance brand reputation, and promote long-term customer loyalty (White, 2025; Wang & Lin, 2023).

The growing environmental awareness among consumers has significantly influenced purchasing behavior. Consumers are becoming more conscious of the environmental consequences of their consumption choices and are increasingly inclined to support businesses that demonstrate environmental responsibility. For instance, during the pandemic, student-consumers showed awareness on environmental sustainability (Asio, 2021; Asio & Obispo, 2021). Consequently, companies across different industries have integrated sustainability into their products, services, and marketing activities. Sustainable marketing has evolved from a competitive advantage into a strategic necessity as consumers increasingly evaluate products based on their environmental and social impacts.

In many developing economies, sustainable business practices have become more visible in everyday commercial activities. Businesses have introduced initiatives such as reusable shopping bags, eco-friendly packaging materials, refillable product systems, and waste management programs to address environmental concerns and meet changing consumer expectations. Previous studies have shown that consumers are becoming more aware of sustainability issues and are more willing to support environmentally responsible brands, indicating the growing relevance of sustainable marketing in influencing consumer behavior (Perono et al., 2022).

Despite increasing support for sustainability, a gap often exists between consumers' environmental attitudes and their actual purchasing behavior. This phenomenon, commonly referred to as the attitude-behavior gap, occurs when consumers express positive attitudes toward environmentally responsible products but ultimately choose alternatives based on factors such as price, convenience, or familiarity. Studies have found that although consumers value sustainability, economic considerations frequently influence final purchasing decisions (Bautista & Santos, 2023). Understanding the factors that encourage consumers to translate environmental awareness into actual purchasing behavior remains an important area of research.

This study contributes to the growing body of knowledge on sustainable marketing by examining how awareness of sustainable marketing practices influences consumer purchasing decisions. Specifically, it investigates the effects of eco-friendly packaging, energy-efficient operations, green advertising, and

waste reduction on buying intention, product preference, willingness to pay, and purchase frequency. Asio (2026; 2023) mentioned that students had a moderate idea of SDG information source. By identifying which sustainability initiatives have the strongest influence on consumer behavior, the study provides empirical evidence that may assist businesses in developing more effective sustainability strategies. The findings also contribute to the achievement of Sustainable Development Goal 12 (Responsible Consumption and Production) and Sustainable Development Goal 13 (Climate Action) by promoting environmentally responsible consumption and supporting sustainable business practices (United Nations, 2015). Accordingly, this study seeks to determine the extent to which awareness of sustainable marketing practices influences consumers' purchasing decisions and to identify the sustainability initiatives that most strongly predict consumer behavior.

LITERATURE REVIEW

This study is anchored on the Theory of Planned Behavior (TPB) developed by Ajzen (1991). The theory explains that human behavior is primarily influenced by behavioral intention, which is shaped by attitudes, subjective norms, and perceived behavioral control. According to TPB, individuals are more likely to engage in a behavior when they possess favorable attitudes toward the behavior, perceive social support for performing it, and believe that they have the ability to perform it successfully.

In the context of sustainable marketing, awareness of environmentally responsible business practices may influence consumers' attitudes toward sustainable products and brands. Consumers who recognize eco-friendly packaging, energy-efficient operations, green advertising, and waste reduction initiatives are more likely to develop positive perceptions of environmentally responsible products. These perceptions contribute to stronger behavioral intentions, which may ultimately influence purchasing decisions.

Several studies support the relationship between sustainable marketing practices and consumer purchasing behavior. Müller et al. (2023) found that sustainability communication enhances consumer trust when companies are transparent about their environmental impact. Khandai et al. (2023) reported that clear sustainability messaging improves brand credibility and customer loyalty. Damberg (2024) further revealed that consumers are more likely to purchase environmentally friendly products when sustainability information is credible and easy to understand. Similarly, Jia et al. (2023) found that consumers value sustainable products for both their environmental benefits and overall product performance.

In the Philippine context, Perono et al. (2022) reported that Filipino consumers are becoming increasingly aware of sustainability issues and are more willing to support environmentally responsible brands. However, Bautista and Santos (2023) found that price remains an important consideration despite positive attitudes toward sustainable products. Ramirez (2025) also emphasized that consumers prefer businesses that communicate sustainability efforts clearly and honestly, while Bajar (2024) highlighted the role of environmental awareness and social responsibility in shaping purchasing decisions.

H1: *Awareness of sustainable marketing practices significantly influences consumers' purchasing decisions.*

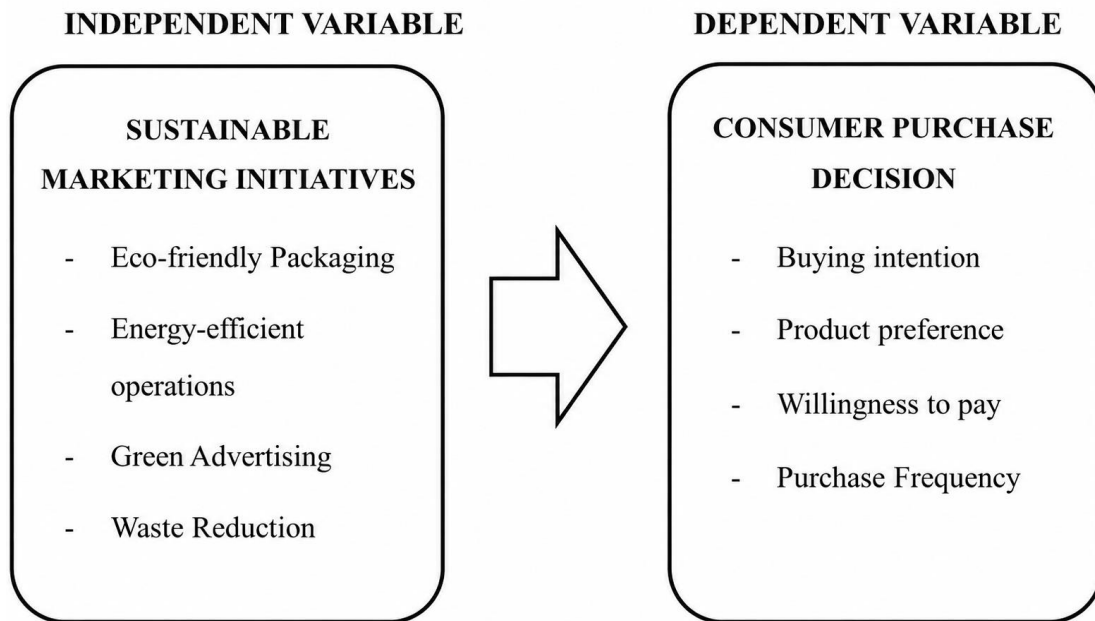


Figure 1. Conceptual Framework

The study adopts an Independent Variable–Dependent Variable (IV–DV) framework. The independent variable is awareness of sustainable marketing practices, measured through eco-friendly packaging, energy-efficient operations, green advertising, and waste reduction. The dependent variable is consumers' purchasing decisions, measured through buying intention, product preference, willingness to pay, and purchase frequency.

The framework proposes that increased awareness of sustainable marketing practices influences consumers' purchasing decisions. Consumers who are more aware of sustainability initiatives are expected to demonstrate stronger buying intentions, greater product preference, higher willingness to pay, and more frequent purchases of environmentally responsible products.

METHODOLOGY

This study utilized a quantitative descriptive-correlational research design to examine the relationship between sustainable marketing practices and consumer perception. The descriptive approach was employed to assess consumers' awareness of sustainable marketing practices, while the correlational approach was used to determine the relationship between sustainable marketing practices and consumer perception. Data were collected through a structured survey questionnaire administered to qualified respondents. The gathered responses were subsequently organized, coded, and prepared for statistical analysis.

The target population of this study consisted of consumers aged 18 to 60 years old who belong to the middle-income bracket, with a monthly income ranging from PHP 24,060 to PHP 144,360. A purposive sampling technique was employed to select respondents who met the established criteria and were

capable of providing relevant information regarding the variables under investigation. A minimum sample size of 200 respondents was utilized to ensure adequate representation and to support the statistical requirements of the study.

The collected data were analyzed using appropriate statistical tools. Frequency and Percentage Distribution were utilized to describe the demographic profile of the respondents. Mean was used to determine the level of awareness of sustainable marketing practices and consumer perception. The Shapiro-Wilk Test was conducted to assess the normality of the data distribution. Furthermore, Regression Analysis with Bootstrapping was employed to examine the relationship between sustainable marketing practices and consumer perception and to identify significant predictors influencing consumer behavior. These statistical techniques provided a reliable basis for interpreting the findings and addressing the objectives of the study.

RESULTS

Data are presented using descriptive statistics (mean and interpretation) and inferential statistics (multiple regression analysis). Tables and figures are organized according to the sequence of the research problem.

Table 1: Level of Consumer Awareness Regarding Sustainable Marketing Practices

Indicator	Mean	Interpretation
Awareness of Eco-Friendly Packaging	3.24	Moderately Aware
Awareness of Energy-Efficient Operations	3.09	Moderately Aware
Awareness of Green Advertising	3.22	Moderately Aware
Awareness of Waste Reduction	3.23	Moderately Aware
Composite Mean	3.19	Moderately Aware

Legend: 3.25–4.00 = Highly Aware; 2.50–3.24 = Moderately Aware; 1.75–2.49 = Slightly Aware; 1.00–1.74 = Not Aware.

Table 1 presents the level of consumer awareness regarding sustainable marketing practices. Overall, respondents were found to be moderately aware of sustainable marketing practices, as indicated by the composite mean of 3.19. Among the indicators, Awareness of Eco-Friendly Packaging obtained the highest mean score (3.24), suggesting that consumers are more familiar with sustainability initiatives that are visible and directly associated with the products they purchase. In contrast, Awareness of Energy-Efficient Operations recorded the lowest mean score (3.09), indicating that consumers are less aware of internal environmental practices that are not easily observed. These findings imply that consumers tend to recognize more tangible sustainability efforts, while less visible initiatives receive less attention. Therefore, businesses should continue promoting sustainable practices while improving communication about their internal environmental efforts to enhance consumer awareness and support sustainable consumption.

Table 2: Consumer Purchasing Decisions

Indicator	Mean	Interpretation
Buying Intention	3.14	Frequently
Product Preference	3.18	Frequently
Willingness to Pay	3.05	Frequently
Purchase Frequency	3.08	Frequently
Composite Mean	3.11	Frequently

Legend: 3.25–4.00 = Always; 2.50–3.24 = Frequently; 1.75–2.49 = Rarely; 1.00–1.74 = Never.

Table 2 presents the level of consumer purchasing decisions among the respondents. The results indicate that respondents frequently demonstrate purchasing decisions, as reflected by the composite mean of 3.11. Among the indicators, Product Preference obtained the highest mean score (3.18), suggesting that consumers' purchasing decisions are primarily influenced by their preference for specific products, including their perceived quality, features, and suitability to their needs. In contrast, Willingness to Pay recorded the lowest mean score (3.05), indicating that while respondents generally exhibit positive purchasing behavior, they remain cautious regarding the amount they are willing to spend. These findings imply that product-related factors play a more significant role in shaping consumer purchasing decisions than financial commitment, highlighting the influence of economic considerations and other external factors on consumer behavior.

Table 3 *The Influence of Sustainable Marketing Initiatives on Consumer Purchase Decision*

Variable	B Coefficients	SE	Sig.	95% Confidence Interval		Conclusion
				Lower	Upper	
(Constant)	.377	.119	.002	.143	.609	Significant
Eco-Friendly Packaging	.229	.077	.004	.071	.377	Significant
Energy-Efficient Operations	.179	.063	.005	.057	.303	Significant
Green Advertising	.124	.094	.191	-.057	.310	Not Significant
Waste Reduction	.324	.095	<.001	.134	.512	Significant

In Table 3, it reveals the result of the linear regression analysis with bootstrapping. The findings indicate that sustainable marketing initiatives have varying levels of influence on consumer purchase decisions. Eco-friendly packaging, energy-efficient operations, and waste reduction all show significant positive effects, suggesting that these factors meaningfully contribute to shaping

consumer behavior, with waste reduction emerging as the strongest predictor among the significant variables. In contrast, green advertising does not show a significant effect, indicating that promotional messages alone may not strongly influence purchasing decisions compared to more tangible and visible sustainability practices. Overall, the results suggest that consumers are more responsive to concrete environmental actions implemented by businesses rather than purely marketing-based sustainability claims. The table also outlined that sustainable marketing approaches have substantial influence on purchasing decisions. Eco-friendly packaging, energy-efficient processes, and waste reduction were discovered to be significant predictors, with waste reduction emerging as the strongest. In comparison, green advertising had no meaningful effect. This suggests that practical and observable sustainability measures have a stronger influence on customer behavior than advertising methods alone.

Awareness of sustainable marketing practices significantly influenced consumers' purchasing decisions. Eco-friendly packaging, energy-efficient operations, and waste reduction demonstrated significant effects, whereas green advertising did not significantly predict purchasing decisions.

DISCUSSION OF FINDINGS

Based on the findings, respondents are generally moderately aware of sustainable marketing practices. Among these, consumers are most familiar with sustainability efforts that are visible and directly experienced during purchase, particularly eco-friendly packaging and waste reduction. Green advertising is also recognized but to a slightly lesser extent, while energy-efficient operations are the least noticed. This suggests that consumers tend to be more aware of sustainability practices that they can easily observe, while less visible environmental efforts receive less attention. This finding is consistent with previous studies which emphasize that sustainable packaging is among the most noticeable environmental cues for consumers, as it is directly encountered at the point of purchase and can shape perceptions of product responsibility and buying intention (Oloyede & Lignou, 2021; d'Astous & Labrecque, 2021).

In terms of consumer behavior, respondents frequently demonstrate sustainable purchasing patterns across different aspects such as product preference, buying intention, purchase frequency, and willingness to pay. This indicates that sustainability plays a meaningful role in shaping consumer decisions. However, while consumers show positive attitudes toward sustainable products, their willingness to pay more for such items is relatively weaker, suggesting that price considerations still strongly influence actual buying behavior. This finding is supported by studies showing that although consumers generally express favorable attitudes toward sustainable products, their willingness to pay a premium remains conditional and is often affected by cost considerations and perceived value (Cammarelle et al., 2021; Chen et al., 2021).

The results further show that awareness of sustainable marketing practices has a significant influence on consumers' purchasing decisions. Among the different sustainability dimensions, waste reduction has the strongest impact, followed by eco-friendly packaging and energy-efficient operations. In contrast,

green advertising does not significantly influence purchasing decisions, implying that promotional messages about sustainability are not enough on their own to affect consumer behavior if they are not supported by actual environmental practices. This aligns with prior research suggesting that consumer awareness and trust in visible sustainability initiatives positively influence purchase intention, especially when these practices are concrete and directly verifiable (d'Astous & Labrecque, 2021). On the other hand, the limited effect of green advertising may be explained by the fact that consumers tend to respond more positively to green promotions only when the information is perceived as truthful, useful, and credible (Wang & Li, 2022).

Overall, the findings suggest that consumers respond more positively to sustainability initiatives that are concrete, visible, and verifiable. Practices such as waste reduction and eco-friendly packaging are more effective in building consumer trust and encouraging sustainable purchasing behavior. On the other hand, sustainability claims communicated through advertising are less effective when not backed by real and observable environmental actions. This supports the argument that consumers are more likely to trust and act on sustainability efforts that they can personally observe, rather than on promotional claims alone (Oloyede & Lignou, 2021; Wang & Li, 2022).

CONCLUSION AND RECOMMENDATION

The findings of the study indicate that consumers demonstrate a moderate level of awareness of sustainable marketing practices, particularly in terms of eco-friendly packaging, waste reduction, green advertising, and energy-efficient operations. Among these dimensions, eco-friendly packaging and waste reduction are the most recognized, whereas energy-efficient operations remain the least observed. Furthermore, consumers exhibit sustainable purchasing behaviors as reflected in their product preferences, purchase intentions, purchase frequency, and willingness to pay, suggesting that sustainability considerations are integrated into consumer decision-making despite the continued influence of price sensitivity.

The results also reveal that awareness of sustainable marketing practices significantly influences consumer purchasing decisions. Waste reduction emerged as the strongest predictor of purchasing behavior, followed by eco-friendly packaging and energy-efficient operations. In contrast, green advertising was found to have no significant effect on purchasing decisions, implying that promotional sustainability messages alone are insufficient unless supported by tangible and observable environmental practices. Overall, sustainable marketing is effective in promoting environmentally responsible consumer behavior when grounded in credible and visible sustainability initiatives.

In light of these findings, businesses are encouraged to prioritize the strengthening of waste reduction initiatives such as recycling systems, reusable packaging, and proper waste segregation, given their strong influence on consumer behavior. The visibility of eco-friendly packaging should also be enhanced through clear environmental labeling, certifications, and informative

product communication. Additionally, organizations should improve the dissemination of information regarding energy-efficient operations through sustainability reports, digital platforms, and awareness campaigns to increase consumer awareness of such practices.

Moreover, businesses are advised to ensure that green advertising claims are substantiated by actual sustainability practices in order to enhance credibility and build consumer trust. Marketing strategies should place greater emphasis on the tangible environmental benefits of products, including waste reduction, recyclability, and resource conservation. It is further recommended that local businesses implement sustainability education initiatives to promote environmentally responsible consumption. Collaboration between local government units and business organizations is also encouraged to strengthen sustainable practices through incentives, certifications, and environmental awareness programs. Finally, future researchers are encouraged to examine additional variables influencing sustainable purchasing behavior, such as environmental values, social influence, income level, and demographic factors, and to conduct similar studies in different contexts to enhance generalizability.

ADVANCED RESEARCH

This study contributes to the growing body of knowledge on sustainable marketing by examining how awareness of sustainable marketing practices influences consumers' purchasing decisions. The findings provide insights into the relationship between environmental sustainability initiatives and consumer behavior within a business context.

For Business Owners and Marketers, the study offers evidence-based information on which sustainable marketing practices most strongly influence purchasing decisions. It may guide organizations in developing sustainability strategies that effectively attract and retain environmentally conscious consumers.

For Consumers, the study enhances awareness of sustainable consumption and emphasizes the importance of supporting businesses that implement environmentally responsible practices.

For Local Government Units and Policymakers, the results may serve as a basis for formulating programs, incentives, and policies that encourage sustainable business operations and responsible consumption.

For Educational Institutions, the study may serve as a reference for discussions and future research related to sustainability, marketing, consumer behavior, and environmental management.

For Future Researchers, the findings provide a foundation for further studies on sustainable marketing, consumer perception, environmental awareness, and purchasing behavior across different industries and settings.

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