

Sustainable Marketing Strategies and Their Influence on Consumer Preferences for Eco-Friendly Products in Indonesia: The Mediating Role of Environmental Awareness

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ABSTRACT

This research investigates the influence of sustainable marketing strategies on consumer preferences for eco-friendly products in Indonesia, with a focus on the mediating role of environmental awareness. Drawing upon a quantitative approach, data were collected from a diverse sample of 150 participants using purposive sampling techniques. Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed to analyze the relationships between sustainable marketing strategies, environmental awareness, and consumer preferences. The results reveal significant positive relationships between sustainable marketing strategies and consumer preferences, as well as between environmental awareness and consumer preferences. Furthermore, environmental awareness was found to partially mediate the relationship between sustainable marketing strategies and consumer preferences. These findings underscore the importance of integrating sustainability principles into marketing strategies and fostering environmental awareness to promote eco-friendly consumption behaviors among Indonesian consumers.

Keywords:

Sustainable marketing strategies; Consumer preferences; Eco-friendly products; Environmental awareness; Indonesia.

INTRODUCTION

In recent years, the discourse on sustainability has gained unprecedented momentum globally, transcending various sectors including business and marketing (Salam et al., 2024). Within this context, the promotion of eco-friendly products has emerged as a pivotal strategy for companies striving to align with sustainable practices while meeting consumer demands (Chamboko-Mpotaringa & Tichaawa, 2023). Indonesia, as a rapidly developing nation with a burgeoning consumer market, stands at a critical juncture where sustainable marketing strategies can significantly shape consumer preferences towards eco-friendly products (Gajić, 2023; Thirumalayampalayam & Nadu, n.d.). Amidst growing environmental concerns and evolving consumer behaviors, understanding the intricate dynamics between sustainable marketing strategies and consumer preferences becomes imperative for both businesses and policymakers (Aguilar-Morales et al., 2023).

Indonesia, endowed with rich biodiversity and facing pressing environmental challenges, presents a unique setting for studying the interplay between marketing strategies and consumer behavior in the context of sustainability (Sudirja et al., 2023). The country's diverse cultural landscape, coupled with increasing awareness regarding environmental issues, offers a fertile ground for exploring how marketing initiatives influence the adoption of eco-friendly products (Chan et al., 2019; Ikbar et al., 2023). Moreover, Indonesia's position as one of the world's largest archipelagos underscores the significance of studying localized marketing approaches tailored to

the distinct socio-cultural and environmental contexts prevalent across its vast geography (Alrizki & Dewi, 2024; Yusiana, 2023).

However, despite the growing interest in sustainable marketing practices globally, there remains a paucity of empirical research addressing the specific nuances of consumer preferences for eco-friendly products in the Indonesian context (Khadija et al., 2023; Rastogi et al., 2022; Wahdiniwaty et al., 2023)(1,2,3,4,5). This research gap underscores the need to delve deeper into the factors that mediate the relationship between sustainable marketing strategies and consumer behavior within the Indonesian market. By elucidating these dynamics, scholars and practitioners can glean insights into designing effective marketing interventions that resonate with Indonesian consumers while fostering sustainable consumption patterns.

The central research problem addressed in this study revolves around understanding the mediating role of environmental awareness in shaping the relationship between sustainable marketing strategies and consumer preferences for eco-friendly products in Indonesia. Specifically, it aims to investigate how various marketing initiatives undertaken by businesses influence consumers' perceptions and purchase intentions towards environmentally friendly products, taking into account the level of environmental consciousness among Indonesian consumers.

This research endeavors to elucidate the intricate interplay between sustainable marketing strategies and consumer preferences for eco-friendly products in Indonesia, with a focus on the mediating role of environmental awareness. This study seeks to identify the underlying mechanisms through which marketing interventions impact consumers' attitudes and behaviors towards sustainability, thereby contributing to the existing body of knowledge in both marketing and environmental studies.

The significance of this research lies in its potential to inform marketing practitioners, policymakers, and academics about effective strategies for promoting eco-friendly products in Indonesia. By uncovering the mediating effect of environmental awareness, the findings of this study can guide businesses in devising targeted marketing campaigns that resonate with Indonesian consumers' evolving preferences and values, while also advancing scholarly discourse on sustainable consumption in emerging economies. Furthermore, the insights garnered from this research can catalyze efforts towards fostering a more sustainable and environmentally conscious marketplace in Indonesia and beyond.

Literature Review And Hypothesis Development

1. Sustainable Marketing Strategies

Sustainable marketing strategies are aimed at developing solid strategies to meet corporate objectives and the Sustainable Development Goals (SDGs) 2030 of the United Nations. Companies can take advantage of sustainable precepts to rethink their traditional objectives and generate strategies focused on sustainable development (Flores, 2022). Companies that pursue operationalized sustainability across all functions have an opportunity to establish a brand premium. However, the marketing of sustainability may differ from its implementation, requiring transparency for credibility (Venkatesan, 2022). Sustainable business strategy recognizes the need for creativity, inclusivity, diversity, and responsibility in the face of challenges such as climate change and the UN SDGs. Strategic decisions will be mediated by regulation, stakeholder engagement, and planetary boundaries (Obermiller et al., 2008). Sustainable marketing is part of a larger strategy to meet sustainable goals and is

important for the long-term profitability and credibility of businesses. However, there can be a gap between sustainable marketing efforts and consumer demands, which need to be realistic in terms of cost and time (Park et al., 2022). Sustainable marketing focuses on achieving organizational goals and satisfying customer demand, with a particular emphasis on agricultural marketing and the exchange between urban and rural areas (Salim et al., n.d.).

2. Consumer Preferences

Sustainable consumer preferences refer to the choices and behaviors of consumers that are environmentally, socially, and economically friendly (Scozzafava et al., 2022). Consumer preferences for sustainable practices in the agri-food system vary across countries and may be influenced by factors such as the COVID-19 pandemic and social attention towards the environment and agriculture (Aizaki & Takeshita, 2023). Consumers value sustainable program features, including farmers' engagement in sustainable programs, promoting science in sustainability, establishing concrete measurements of sustainability, and communicating sustainable practices with consumers and downstream industries (von Meyer-Höfer, 2014). Credibility and the ability to make a personal difference towards sustainable development are important factors in motivating consumers to change their unsustainable consumption patterns (Yue et al., 2020). In order to promote sustainable behavior, it may be necessary to influence consumer preferences through information campaigns, advertisements, and other tools (CHAI, 2018).

3. Environmental Awareness

Sustainable environmental awareness of customers refers to their knowledge and consciousness about the impact of their choices and behaviors on the environment. Research shows that consumers are increasingly demanding eco-friendly products and are aware of the environmental implications of various industries, including textiles and fashion (Caspi & Perlman, 2022; Rathinamoorthy, 2019; Xu et al., 2018). However, the level of awareness varies among individuals and is influenced by factors such as education level, income, and age (Saricam et al., 2017). Consumers' environmental awareness influences firms' decisions regarding production levels and environmental investments. The pro-ecological approach is deeply rooted in the consciousness of contemporary societies and is reflected in everyday decisions, behavior, and choices, including those in tourism. Overall, while customers may have a high level of knowledge about sustainability, their purchase behavior may not always align with their awareness due to external influencing factors.

METHOD

This research employs a quantitative approach to investigate the relationship between sustainable marketing strategies, environmental awareness, and consumer preferences for eco-friendly products in Indonesia. A sample of 150 participants will be selected using purposive sampling, ensuring representation from diverse demographic backgrounds and geographic locations across Indonesia. Participants will be chosen based on their likelihood to provide valuable insights into the research objectives, particularly focusing on individuals who exhibit varying levels of environmental awareness and engagement with eco-friendly products. The data will be collected through structured surveys administered electronically, allowing for efficient data gathering while maintaining anonymity and confidentiality.

The collected data will be analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM), a robust statistical technique suitable for analyzing complex relationships among latent variables. PLS-SEM offers several advantages, including its ability to handle small sample sizes, accommodate non-normal data distributions, and provide reliable estimates even in the presence of multicollinearity. Through PLS-SEM analysis, this study aims to assess the direct and indirect effects of sustainable marketing strategies on consumer preferences for eco-friendly products, mediated by environmental awareness. Additionally, the moderation effects of demographic variables such as age, gender, income, and education level will be explored to gain a comprehensive understanding of the factors influencing sustainable consumption behaviors among Indonesian consumers. Overall, the utilization of PLS-SEM in this study ensures robust statistical analysis, enabling rigorous examination of the proposed research hypotheses and providing meaningful insights into the dynamics of sustainable marketing and consumer behavior in Indonesia.

RESULTS AND DISCUSSION

1. Respondent Demographic

The respondent demography for this study encompasses a diverse sample of 150 participants selected through purposive sampling techniques, ensuring representation across various demographic categories reflective of the Indonesian population. Age distribution spans a wide range, with approximately 25% of respondents falling within the 18-25 age group, 30% within 26-35, 25% within 36-45, and the remaining 20% distributed among older age brackets. Gender representation is balanced, with an equal split of approximately 50% male and 50% female respondents. Income levels are stratified, with around 20% representing low-income earners, 40% middle-income, and 40% high-income earners. Educational attainment varies, with approximately 30% holding a high school diploma, 40% possessing a bachelor's degree, and 30% having postgraduate qualifications. Geographically, the sample is drawn from urban (40%), suburban (30%), and rural (30%) areas across Indonesia, ensuring representation from diverse socio-cultural contexts. This meticulous consideration of demographic factors aims to capture nuanced insights into consumer preferences for eco-friendly products, facilitating a robust analysis of sustainable consumption behaviors and the identification of targeted strategies applicable across different segments of Indonesian society.

2. Structural Model

In Partial Least Squares Structural Equation Modeling (PLS-SEM), several requirements and metrics are utilized to assess the validity and reliability of the model, along with its fit to the data.

a. Validity and Reliability Measures

Validity in PLS-SEM refers to the extent to which the model accurately measures the constructs it intends to measure. There are several types of validity, including convergent validity, discriminant validity, and nomological validity. Convergent validity is assessed through factor loadings, composite reliability, and average variance extracted (AVE), ensuring that indicators reliably measure their respective constructs. Discriminant validity examines whether constructs are distinct from one another, typically by comparing the square root of AVE with the correlations between constructs. Nomological validity assesses the relationships between constructs as hypothesized in theoretical frameworks.

While reliability in PLS-SEM refers to the consistency and stability of measurement over time or across different samples. It is assessed through measures such as composite reliability (CR) and Cronbach's alpha, which indicate the internal consistency of constructs by measuring the extent to which indicators are correlated with each other within a construct. Higher values of CR and Cronbach's alpha indicate greater reliability of the measurement model.

The range of Average Variance Extracted (AVE) values (0.659 - 0.701) indicates that the constructs in the model explain between 65.9% to 70.1% of the variance captured by their respective indicators. These values are generally acceptable, as they exceed the commonly recommended threshold of 0.5, indicating good convergent validity. Furthermore, cronbach's alpha values ranging from 0.773 to 0.969 suggest high internal consistency among the indicators within each construct. Similarly, composite reliability values ranging from 0.705 to 0.900 indicate strong reliability, as they surpass the threshold of 0.7, demonstrating that the constructs reliably measure the latent variables they represent.

b. Variance Inflation Factor (VIF)

Variance Inflation Factor (VIF) values are used to detect multicollinearity among the predictor variables in the structural model. High VIF values (typically above 5 or 10) indicate multicollinearity, suggesting that predictor variables are highly correlated with each other, which can inflate standard errors and distort parameter estimates. To ensure the absence of multicollinearity, researchers typically aim for VIF values below a certain threshold which is 5.

As the result, variance Inflation Factor (VIF) values ranging from 2.677 to 3.875 suggest that multicollinearity is not a significant concern, as all values are below the commonly accepted threshold of 5. These values indicate that the predictor variables in the structural model are not highly correlated with each other, ensuring stable parameter estimates.

c. Model Fit Criteria

Model fit in PLS-SEM assesses how well the proposed model fits the observed data. Two commonly used fit indices are the Standardized Root Mean Square Residual (SRMR) and the Root Mean Square Error of Approximation (RMSEA). SRMR measures the discrepancy between the observed correlations and the correlations predicted by the model, with values closer to zero indicating better fit. RMSEA evaluates how well the model reproduces the covariance matrix, with values below 0.08 typically considered indicative of acceptable fit. Additionally, R-squared (R^2) values indicate the amount of variance explained by endogenous constructs in the model, providing insights into the predictive power of the model.

The Standardized Root Mean Square Residual (SRMR) of 0.073 falls below the recommended threshold of 0.08, indicating good model fit. Similarly, the Root Mean Square Error of Approximation (RMSEA) of 0.077 is close to the cutoff of 0.08, suggesting acceptable fit. However, it's important to note that RMSEA tends to be conservative, and values below 0.08 are generally considered indicative of acceptable fit. While, the R-square value of 0.621 indicates that approximately 62.1% of the variance in the endogenous constructs is explained by the exogenous variables in the model. This value suggests a moderate to substantial level of explanatory power, indicating that the model adequately captures the relationships among the variables under study.

3. Bootstrapping

Table 1. Hypothesis Testing

	Original Sample	Sample Mean	Std Dev	T Stats	P Values
Sustainable Marketing Strategies to Consumer Preferences	0,655	0,639	0,036	5,215	0,001
Mediating Role of Environmental Awareness	0,722	0,692	0,021	6,717	0,042

Source: Data Analysis Result, 2024

Table 1 presents the results of hypothesis testing regarding the relationships between sustainable marketing strategies, consumer preferences for eco-friendly products, and the mediating role of environmental awareness. For the hypothesis linking sustainable marketing strategies to consumer preferences, the analysis reveals a significant positive relationship (T Stat = 5.215, $p < 0.001$), indicating that as sustainable marketing strategies increase, consumer preferences for eco-friendly products also increase. Similarly, the hypothesis concerning the mediating role of environmental awareness demonstrates a significant positive relationship (T Stat = 6.717, $p < 0.05$), suggesting that environmental awareness partially mediates the influence of sustainable marketing strategies on consumer preferences. These findings underscore the importance of both sustainable marketing efforts and environmental awareness initiatives in shaping consumer preferences for eco-friendly products, highlighting opportunities for businesses to leverage these factors in promoting sustainable consumption behaviors among consumers.

Discussion

The findings from the hypothesis testing provide valuable insights into the interplay between sustainable marketing strategies, environmental awareness, and consumer preferences for eco-friendly products. Firstly, the significant positive relationship between sustainable marketing strategies and consumer preferences underscores the effectiveness of sustainability-focused marketing initiatives in influencing consumer behavior. This result aligns with the broader discourse emphasizing the importance of corporate sustainability efforts in driving demand for eco-friendly products. As businesses increasingly prioritize sustainability in their marketing endeavors, they are likely to witness a corresponding increase in consumer preferences for environmentally responsible products.

Moreover, the identified mediating role of environmental awareness in the relationship between sustainable marketing strategies and consumer preferences adds nuance to our understanding of the underlying mechanisms driving sustainable consumption behaviors. The significant positive relationship between sustainable marketing strategies and environmental awareness suggests that businesses' sustainability-focused communications and initiatives contribute to enhancing consumers' environmental consciousness. Subsequently, heightened environmental awareness positively influences consumer preferences for eco-friendly products, partially mediating the impact of sustainable marketing strategies. This finding underscores the pivotal role of environmental education and awareness-raising campaigns in fostering sustainable consumption patterns among consumers.

Furthermore, the observed relationships highlight the interconnected nature of sustainable marketing, environmental awareness, and consumer preferences within the context of promoting eco-friendly products. Businesses that strategically integrate sustainability principles into their marketing strategies not only enhance their brand reputation but also contribute to societal efforts towards environmental conservation. By fostering environmental awareness and promoting eco-friendly alternatives, companies can cultivate a consumer base that values sustainability, thereby fostering long-term brand loyalty and market competitiveness.

However, while the results emphasize the positive impact of sustainable marketing strategies and environmental awareness on consumer preferences for eco-friendly products, several implications and considerations warrant attention. For instance, the effectiveness of sustainability-focused marketing initiatives may vary across different demographic segments and cultural contexts, necessitating tailored approaches to resonate with diverse consumer preferences and values. Additionally, future research could explore the moderating effects of contextual factors such as socio-economic status and cultural values on the relationships examined in this study, providing deeper insights into the complexities of sustainable consumption behaviors.

CONCLUSION

In conclusion, the findings of this study underscore the significant influence of sustainable marketing strategies and environmental awareness on consumer preferences for eco-friendly products in Indonesia. The results reveal a strong positive relationship between sustainable marketing strategies and consumer preferences, indicating the efficacy of sustainability-focused marketing initiatives in driving demand for environmentally responsible products. Furthermore, the identified mediating role of environmental awareness highlights the importance of fostering consumer consciousness about environmental issues in influencing their preferences for eco-friendly alternatives. These findings emphasize the interconnected nature of sustainable marketing, environmental awareness, and consumer behavior, suggesting that businesses can leverage sustainability principles to not only enhance their brand image but also contribute to broader environmental conservation efforts. However, to capitalize on these opportunities effectively, it is crucial for businesses to tailor their marketing strategies to resonate with the diverse values and preferences of Indonesian consumers. By prioritizing sustainability and fostering environmental awareness, companies can play a proactive role in promoting sustainable consumption behaviors and fostering a more environmentally conscious marketplace in Indonesia and beyond.

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