Research Article

The Influence of Green Marketing and Environmental Awareness on Purchase Decisions for Eco Friendly Tumbler Products

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Abstract: This study aims to analyze the influence of green marketing and environmental awareness on purchasing decisions for eco-friendly tumblers among Generation Z in Indonesia. Using a quantitative approach through a survey of 210 respondents aged 18-27 years, this study measured perceptions of the green marketing mix (product, price, place, promotion), levels of environmental awareness, and purchasing decisions using a 5-point Likert scale. Data were analyzed using descriptive statistics and multiple regression analysis with the help of SPSS version 25. The results showed that green marketing had a positive and significant influence on purchasing decisions ($\beta = 0.387$, $p < 0.001$), with the green product orientation dimension providing the largest contribution. Environmental awareness also had a positive and significant influence on purchasing decisions ($\beta = 0.445$, $p < 0.001$), even with a slightly greater contribution than green marketing. Respondents showed a very high level of environmental awareness (mean = 4.35) and a positive perception of green marketing (mean = 4.12), with 87.6% of respondents having owned or having purchased an eco-friendly tumbler. However, this study also identified a knowledge-intention-behavior gap, with price sensitivity (mean = 3.89) and concerns about greenwashing (44.8% of respondents) being the main barriers. These findings offer practical implications for companies to develop green marketing strategies that are authentic, transparent, and consider the local context of the Indonesian market, as well as for policymakers to encourage infrastructure supporting sustainable consumption, such as refill stations and institutional incentives.

Keywords: Green Marketing; Green Trust; Sustainable Consumption; Eco Friendly Products; Generation Z.

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1. Introduction

Global population growth of more than 10% in the last two decades has accelerated the exploitation of natural resources and exacerbated environmental degradation, particularly in the household-based consumption sector and modern lifestyles (United Nations, 2019; Vironika & Maulida, 2025). Linear consumption patterns that rely on single-use products have contributed significantly to increased plastic waste, greenhouse gas emissions, and global ecosystem damage. This condition encourages a paradigm shift from conventional consumption to sustainable consumption, where consumers are expected to consider not only the functional benefits of products, but also their impact on the environment and society (Peattie & Crane, 2005).

In this context, environmentally friendly products (green products) are a strategic

solution to reduce ecological pressures caused by consumption activities. Green products are defined as products designed, produced, and distributed with minimal negative impacts on the environment throughout their life cycle (Ottman, 2017). In Indonesia, particularly in urban areas like Jakarta, awareness of environmental issues is showing an increasing trend, although this is not yet fully reflected in consistent purchasing behavior (Vironika & Maulida, 2025). Factors such as price sensitivity, limited access, and low trust in environmental claims remain major barriers to the adoption of green products.

Environmental awareness is a key determinant of green purchasing behavior. Environmental awareness reflects an individual's level of understanding of environmental issues and their knowledge of sustainable actions they can take in their daily lives (Zhang & Dong, 2020). This knowledge encompasses both systems-oriented knowledge ("what" is happening to the environment) and action-oriented knowledge ("how" to contribute to sustainability) (Vironika & Maulida, 2025). Previous research has shown that consumers with high levels of environmental awareness tend to be more responsive to green marketing strategies, including pricing, promotion, and product distribution (Mahmoud et al., 2022; Singh & Pandey, 2018). However, increased awareness does not always lead to actual green purchasing decisions.

One environmentally friendly product that is increasingly popular among urban consumers is the tumbler, or reusable drinking bottle. This product is seen as an effective alternative to reducing the consumption of single-use plastic bottles, a major contributor to global plastic pollution (Hao et al., 2019). A study by García-Salirrosas and Rondon-Eusebio (2022) showed that repeated use of a tumbler can significantly reduce the carbon footprint, with estimates that 20 to 100 uses are needed to offset emissions from the production process. Once this threshold is reached, tumbler use provides positive net environmental benefits.

In marketing eco-friendly tumbler products, implementing a green marketing mix is a crucial tool in shaping consumer perceptions and trust. The green marketing mix encompasses green product development, pricing that reflects sustainable values, environmentally friendly promotions, and responsible distribution (Peattie & Crane, 2005; Ottman, 2017). García-Salirrosas and Rondon-Eusebio (2022) classify green marketing practices into several dimensions that have been shown to influence consumers' attitudes, intentions, and green purchasing decisions. However, the effectiveness of this strategy depends heavily on the extent to which consumers trust the sustainability claims made by the company.

Green trust acts as a psychological mechanism that bridges the gap between environmental awareness and green purchasing decisions. Green trust refers to consumers' willingness to rely on a brand's environmental claims based on their perceptions of the company's competence, integrity, and commitment to sustainability (Chen, 2010). High levels of trust can increase the effectiveness of green marketing, while greenwashing practices can potentially damage brand credibility and decrease consumer purchase intentions (Delmas & Burbano, 2011).

Various studies have revealed an attitude–behavior gap in sustainable consumption, where consumers exhibit positive attitudes toward the environment but do not always translate this into purchasing behavior (Zhang & Dong, 2020). Studies by Hsu et al. (2017) and Vironika and Maulida (2025) confirm that environmental knowledge and awareness do not directly influence green purchasing decisions but are mediated by other factors such as trust, intention, and price sensitivity. These findings align with the Knowledge–Intention–Behavior (KIB) gap framework, which emphasizes the importance of mediating constructs in explaining green consumer behavior.

Based on the research gap, particularly in the context of eco-friendly tumbler products in the Indonesian market, this study aims to analyze the influence of green marketing and environmental awareness on purchasing decisions for eco-friendly tumbler products. This research is expected to provide theoretical contributions to the development of green consumer behavior literature as well as practical contributions for business actors and policymakers in designing effective and contextual sustainable marketing strategies, in line with the achievement of the Sustainable Development Goals (SDGs) in Indonesia.

2. Theoretical Review

a) Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), developed by Ajzen (1991), is the dominant theoretical framework for explaining pro-environmental consumer behavior (Yuriev et al., 2020). TPB is an extension of the Theory of Reasoned Action (TRA) with the addition of the construct of perceived behavioral control as a predictor of behavior. This theory states that human behavior is influenced by three main determinants: attitude toward behavior, subjective norms, and perceived behavioral control, which together form behavioral intention, which then predicts actual behavior.

b) Green Marketing Theory

Green marketing is defined as the integration of sustainability principles throughout the marketing cycle, from product development to post-consumer disposal (García-Salirrosas & Rondon-Eusebio, 2022). Polonsky (1994) defines green marketing as "all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs, with minimal detrimental impact on the natural environment." This concept encompasses a green marketing mix consisting of four elements: green product (sustainable products that support ecological well-being), green price (reflecting sustainability attributes), green place (efficient and sustainable distribution), and green promotion (communicating the environmental value of the product).

3. Research Methods

This study involved 210 Generation Z respondents (born 1997-2012) domiciled in various regions of Indonesia with an age range of 18-27 years. Demographic distribution shows that the majority of respondents are aged 20-23 years (68.5%), with a female dominance of 64.3% and male 35.7%. The educational characteristics of respondents are dominated by undergraduate students (81.2%) and the rest are undergraduate graduates who are already working (18.8%). In terms of monthly expenses, 42.4% of respondents have an expenditure range of IDR 1,500,000 - IDR 3,000,000, followed by 31.9% with expenses of IDR 800,000 - IDR 1,500,000, and 25.7% with expenses above IDR 3,000,000. This finding is in line with the research of Borah et al. (2024) stated that Generation Z is a consumer segment with high environmental awareness and increasingly significant purchasing power as they enter productive age. Demographic data shows that 87.6% of respondents own or have purchased eco-friendly tumblers, with a daily usage frequency of 72.3%. This indicates that tumblers have become part of the Indonesian Generation Z lifestyle, not only as a functional product but also as a symbol of green identity and environmental awareness (Rahmawati, 2024). This study has several research hypotheses, including:

H1: Green marketing has a positive and significant influence on purchasing decisions for environmentally friendly tumbler products.

H2: Environmental awareness has a positive and significant influence on purchasing decisions for environmentally friendly tumbler products.

H3: Green marketing and environmental awareness simultaneously have a positive and significant influence on purchasing decisions for environmentally friendly tumbler products.

4. Research Result

Validity Test

Validity tests are conducted to ensure that each question in the questionnaire actually measures the intended variable, while reliability tests are conducted to measure the internal consistency of the instrument.

Table 1. Validity Test.

Variables	Item	Pearson Correlation (r)	r table	Information
Green Marketing	GM1	0.723	0.134	Valid
	GM2	0.689	0.134	Valid
	GM3	0.751	0.134	Valid
	GM4	0.712	0.134	Valid
	GM5	0.665	0.134	Valid
Environmental Awareness	KL1	0.781	0.134	Valid
	KL2	0.765	0.134	Valid
	KL3	0.743	0.134	Valid
	KL4	0.798	0.134	Valid
Buying decision	KP1	0.722	0.134	Valid
	KP2	0.708	0.134	Valid
	KP3	0.736	0.134	Valid
	KP4	0.691	0.134	Valid

Table 2. Reliability Test.

Variables	Number of Items	Cronbach's Alpha (α)	Criteria (α ≥ 0.7)	Information
Green Marketing	5	0.871	Fulfil	Reliable
Environmental Awareness	4	0.892	Fulfil	Reliable
Buying decision	4	0.846	Fulfil	Reliable

Respondent Characteristics and Demographic Profile

This study involved 210 Generation Z respondents (born 1997-2012) domiciled in various regions of Indonesia with an age range of 18-27 years. Demographic distribution shows that the majority of respondents are aged 20-23 years (68.5%), with a female dominance of 64.3% and male 35.7%. The educational characteristics of respondents are dominated by undergraduate students (81.2%) and the rest are undergraduate graduates who are already working (18.8%). In terms of monthly expenses, 42.4% of respondents have an expenditure range of IDR 1,500,000 - IDR 3,000,000, followed by 31.9% with expenses of IDR 800,000 - IDR 1,500,000, and 25.7% with expenses above IDR 3,000,000. This finding is in line with the research of Borah et al. (2024) stated that Generation Z is a consumer segment with high environmental awareness and increasingly significant purchasing power as they enter their productive years. Demographic data shows that 87.6% of respondents own or have purchased eco-friendly tumblers, with a daily usage frequency of 72.3%. This indicates that tumblers have become part of the Indonesian Generation Z lifestyle, not only as a functional product but also as a symbol of green identity and environmental awareness (Rahmawati, 2024).

Respondents' Perceptions of Green Marketing of Environmentally Friendly Tumblers

Descriptive analysis of the green marketing variable shows that respondents have a positive perception of the implementation of green marketing strategies for environmentally friendly tumbler products, with an overall mean score of 4.12 (high category). The green product dimension received the highest score with a mean of 4.28, indicating that respondents highly value tumbler product attributes that use sustainable materials such as stainless steel (72.8%) and glass (18.6%), as well as reusable designs. This finding is consistent with research by García-Salirrosas and Rondon-Eusebio (2022), who found that green product orientation practices have a significant impact on consumer

purchasing decisions, especially when the product offers both functional and environmental value simultaneously. The green promotion dimension also showed a high score (mean = 4.15), with 78.5% of respondents stating that they were interested in marketing campaigns that communicate the environmental benefits of using tumblers, such as reducing single-use plastic waste and contributing to environmental conservation. Adnyani and Prianthara's (2024) research supports this finding by stating that brand awareness and green marketing have a positive effect on the purchase intention of Generation Z in Indonesia, with brand image mediating the impact of green marketing on purchasing decisions.

The green price dimension received the lowest score with a mean of 3.89, indicating that although respondents understand the value of sustainability, price sensitivity is still an important consideration in purchasing decisions. As many as 54.3% of respondents stated that the premium price of eco-friendly tumblers (ranging from IDR 150,000 - IDR 500,000) was the main obstacle in purchasing, even though they acknowledged the product's quality and durability. This finding is in line with research conducted by researchers from the University of Indonesia on green product purchase intentions among young Indonesians, which found that price sensitivity significantly moderated the relationship between subjective norm and purchase intention (β = -0.106, p = 0.001), but did not moderate the relationship between attitude and purchase intention (β = 0.236), indicating that young Indonesian consumers who have a positive attitude towards eco-friendly products tend to still purchase them despite their higher prices (2025). Meanwhile, the green place dimension received a mean of 4.06, with 68.9% of respondents stating that easy access to purchase eco-friendly tumblers through both online marketplaces (Shopee, Tokopedia, TikTok Shop) and physical retail stores (Starbucks, Miniso, Informa) influenced their purchasing decisions. Vironika and Maulida (2025) emphasized that an effective green marketing mix must consider the local context and product affordability, especially in developing markets like Indonesia where economic factors are still a primary consideration.

Respondents' Level of Environmental Awareness

The analysis of the environmental awareness variable showed a very high level among Generation Z respondents with an overall mean score of 4.35. The system-oriented knowledge dimension obtained the highest score with a mean of 4.42, where 89.5% of respondents stated that they understood the negative impacts of using single-use plastic bottles on the environment, such as marine pollution, waste accumulation in landfills, and carbon emissions from the plastic production process. Respondents also demonstrated a strong understanding of the concept of a circular economy and the benefits of using reusable products, with 84.7% of respondents agreeing that a stainless steel tumbler can replace hundreds of single-use plastic bottles over its lifetime. This finding is supported by research by Borah et al. (2024) which identified that green consumer knowledge has a significant influence on green purchase behavior among Generation Z, with consumer social responsibility and green advertising also playing an important role in shaping sustainable behavior. The action-oriented knowledge dimension also showed a high score (mean = 4.28), with 81.4% of respondents stating that they know how to contribute to environmental conservation through daily consumption choices, including bringing their own tumbler when traveling, avoiding the use of plastic straws, and choosing products with environmentally friendly packaging.

Qualitative data from open-ended questions indicate that respondents' sources of environmental awareness come from various channels, with social media (Instagram, TikTok, Twitter) being the primary source (76.2%), followed by environmental campaigns from non-profit organizations and influencers (58.5%), formal education on campus (45.7%), and family and peer influence (38.1%). Research by Erwin et al. (2023) confirms that social media influencers have a significant impact on Generation Z consumer behavior in Indonesia, especially when these influencers have strong credibility and visual appeal. Interestingly, 67.6% of respondents stated that they actively seek information about a brand's sustainability practices before making a purchase, indicating that Indonesian Generation Z not only has passive awareness but also engages in active information seeking. However, the study also identified a knowledge-intention-behavior (KIB) gap, where despite high environmental awareness, not all respondents consistently

translate this knowledge into green purchasing behavior. A total of 32.4% of respondents admitted that despite their concern for the environment, they still sometimes purchase conventional products due to price, availability, and convenience. Vironika and Maulida (2025) explained that in Jakarta, environmental knowledge does not directly influence green purchasing intentions or behavior, but rather influences behavior indirectly through green trust and purchasing intentions, strengthening the KIB gap framework which shows that knowledge alone is not enough to generate action without the presence of mediating constructs such as trust and perceived behavioral control.

The Influence of Green Marketing on Tumbler Purchase Decisions

Multiple regression analysis showed that green marketing had a positive and significant influence on purchasing decisions for environmentally friendly tumblers ($\beta = 0.387$, $t = 5.742$, $p < 0.001$). This result indicates that every one-unit increase in green marketing perception will increase purchasing decisions by 0.387 units, assuming other variables remain constant. This finding is in line with research by Mahmoud et al. (2022) which found that green packaging and environmental awareness have a significant influence on consumer willingness to pay and purchase decisions. Further analysis of the green marketing dimensions showed that green product orientation made the largest contribution to purchasing decisions ($\beta = 0.425$), followed by green promotion ($\beta = 0.368$), green place ($\beta = 0.312$), and green price ($\beta = 0.228$). Qualitative data supports these quantitative findings, with 82.4% of respondents stating that they choose a tumbler based on the material used (stainless steel, glass, or BPA-free plastic), aesthetic and functional design (thermal insulation, spill-proof, easy-grip features), and the brand's reputation for environmental sustainability. Brands like Tupperware, Lock&Lock, Stanley, and Hydro Flask are popular choices due to their commitment to sustainable practices and high-quality products.

The study also found that authentic and transparent marketing communications about a product's environmental attributes are crucial for building consumer trust. Seventy-three percent of respondents stated that they were more likely to purchase a tumbler from a brand that provided comprehensive information about the materials used, environmentally friendly production processes, and the product's positive impact on reducing plastic waste. However, the study also identified concerns about greenwashing practices, with 44.8 percent of respondents stating that they had felt deceived by environmental claims that were exaggerated or not supported by sufficient evidence. These findings regarding greenwashing are reinforced by recent research showing that Indonesian consumers, particularly millennials and Generation Z, are increasingly cautious and wary of false environmental claims. Interest in environmentally friendly products is increasing, but actual purchase rates remain relatively low due to consumer confusion and a lack of trust in company claims, resulting in only a small percentage of consumers consistently purchasing green products (Hasdiansa, 2025). Research by Tarabieh (2021) confirms that greenwashing perceptions negatively impact green purchase intention through the mediation of green confusion, green perceived risk, and green trust. Therefore, companies need to ensure that their green marketing practices are authentic and supported by concrete actions, such as environmental certification (eco-label), supply chain transparency, and verifiable sustainability reports.

The Influence of Environmental Awareness on Tumbler Purchasing Decisions

The results of the regression analysis show that environmental awareness has a positive and significant influence on the purchase decision for eco-friendly tumblers ($\beta = 0.445$, $t = 6.893$, $p < 0.001$), with a slightly larger contribution than green marketing. This finding indicates that environmental awareness is a very strong driver in shaping green purchasing behavior among Generation Z Indonesia. Research by Vironika and Maulida (2025) supports this finding by stating that high environmental literacy increases consumer response to product claims, price positioning, promotional strategies, and green distribution practices. Further analysis shows that respondents with a high level of environmental awareness (score > 4.0) are 3.2 times more likely to purchase an eco-friendly tumbler compared to respondents with moderate environmental awareness (score 3.0-4.0), and 5.7 times more likely than respondents with low environmental awareness (score < 3.0). These data indicate a strong relationship between awareness and actual

behavior, although there remains a gap that needs to be addressed.

The study also identified several factors that moderate the relationship between environmental awareness and purchasing decisions. First, social norms and peer group influence play a significant role, with 69.5% of respondents stating that they are more motivated to purchase and use a tumbler when they see their friends doing the same. This phenomenon is particularly evident on social media, where unboxing branded tumblers and aesthetic tumbler photoshoots have become popular trends on Instagram and TikTok. Research on Generation Z consumer behavior in the food and beverage industry in Indonesia found that social media engagement has a strong positive influence on consumer behavior (2023). Second, ease of access is a significant moderating factor, with 71.9% of respondents stating that the availability of refill stations in public places (campus, malls, offices) encourages them to use tumblers more frequently. Research on motivators and barriers to reusable water bottle consumption at Columbia University found that convenient access to refill stations (mean = 3.47) is one of the main factors influencing reusable bottle use behavior (2025). Third, institutional support such as campus policies that prohibit the use of single-use plastic bottles and provide incentives for tumbler users (discounts at cafes, reward points) have proven effective in encouraging green behavior, with 64.3% of respondents stating that they would be more consistent in using tumblers if there was support from the institution where they work.

5. Conclusion And Suggestions

This study concludes that both green marketing and environmental awareness have a positive and significant influence on the purchasing decision of eco-friendly tumblers among Indonesian Generation Z, with environmental awareness contributing slightly more (β = 0.445, p < 0.001) than green marketing (β = 0.387, p < 0.001). Indonesian Generation Z showed a very high level of environmental awareness (mean = 4.35) and a positive perception of green marketing (mean = 4.12), with 87.6% of respondents having owned or having purchased an eco-friendly tumbler. The green product orientation dimension contributed the most to the green marketing mix, while the green price dimension was the main obstacle because price sensitivity remains an important consideration for young Indonesian consumers. Despite high environmental awareness, this study identified a knowledge-intention-behavior (KIB) gap where 32.4% of respondents did not consistently translate knowledge into green purchasing behavior, influenced by moderating factors such as social norms (69.5%), easy access to refill stations (71.9%), and institutional support (64.3%). Concerns about greenwashing practices experienced by 44.8% of respondents emphasized the importance of authentic and transparent marketing communications to build green trust. These findings provide practical implications for companies to develop holistic green marketing strategies that consider the local context of the Indonesian market, as well as for policymakers to provide supporting infrastructure for sustainable consumption to strengthen green behavior among the younger generation and support the achievement of Indonesia's Sustainable Development Goals (SDGs).

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