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Green Awareness as a Mediator of Green Marketing and Green Brand Image on Green Customer Loyalty in Botanical Products

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Abstract: This study analyzes the effect of green marketing and green brand image on green customer loyalty, with green awareness as a mediating variable among consumers of Botanical Essential products in Indonesia. This research employed a quantitative approach through a survey of 200 respondents selected using purposive sampling, namely consumers who had purchased or used the products at least twice within the past year. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 3. The findings indicate that green marketing has a positive and significant effect on green awareness and green customer loyalty. Green brand image is also proven to have a positive and significant effect on green awareness and green customer loyalty. Green awareness had the strongest effect on green customer loyalty ($\beta = 0.542$, $p < 0.001$) and fully mediated the relationships between green marketing, green brand image, and green customer loyalty. These findings affirm that green customer loyalty is shaped by green marketing, green brand image, and green awareness as a mediating mechanism.

Keyword: Green Awareness, Green Brand Image, Green Customer Loyalty, Green Marketing.

INTRODUCTION

Environmental degradation, particularly climate change, industrial pollution, global warming, and plastic waste, has become a critical issue in sustainable development (Issock et al., 2019; Han et al., 2025). In Indonesia, environmental problems related to water, soil, and air pollution are closely associated with human and business activities, especially the excessive use of plastic materials and inadequate waste management practices (Kinasih et al., 2023). This issue is increasingly relevant because Indonesia is recognized as one of the major contributors to plastic waste, including non-biodegradable and difficult-to-recycle plastics (Genoveva & Tanardi, 2022; Arasyi & Kusumawati, 2023; Fazmi & Imaningsih, 2024). In

response to these conditions, consumers have become more attentive to environmental issues and increasingly consider sustainability aspects in their purchasing decisions, encouraging companies to develop environmentally friendly products and adopt more responsible business practices (Martinez, 2015; Liao et al., 2020; Junarsin et al., 2022; Khan et al., 2022; Zhang et al., 2023).

In this context, green marketing has emerged as a strategic approach that integrates environmental considerations into product development, production processes, advertising, packaging, eco-labeling, and communication with consumers (Fatmawati & Alikhwan, 2021; Khan et al., 2022; Kinasih et al., 2023). Rather than merely functioning as a promotional tool, green marketing reflects a company's commitment to reducing ecological impact while satisfying consumer needs and supporting sustainable consumption (Martinez, 2015; Suki et al., 2016; Majeed et al., 2022; Rehman et al., 2025). Green marketing refers to organizational activities that satisfy consumer needs while minimizing environmental impacts, targeting and connecting companies with environmentally conscious consumers (Butt et al, 2016; Osman et al, 2016; Khan et al, 2022). Rather than merely functioning as a promotional tool, green marketing reflects a company's commitment to reducing ecological impact while satisfying consumer needs and supporting sustainable consumption (Martinez, 2015; Suki et al., 2016; Majeed et al., 2022; Rehman et al., 2025). GM aims to enhance environmental awareness of issues such as global warming and pollution, as well as to promote environmentally friendly products in order to achieve sustainable growth and create a positive brand image (Liao et al, 2020; Junarsin et al, 2022). At the same time, green marketing has become increasingly popular due to the growing public awareness, particularly among Generation Z, who are responsive to strong ethical and environmental awareness and show particular interest in products such as cosmetics, toiletries, and hybrid cars (Martinez, 2015; Bashir et al, 2020; Riyanto & Pangaribuan, 2025). The implementation of the GM concept in operational processes (Kinasih et al, 2023) shapes customers' perceptions of brand image (Jabeen et al, 2023), strengthens brand image and reinforces trust among consumers (Widyastuti et al, 2019; Fatmawati & Alikhwan, 2021), and reflects a commitment to sustainability that ultimately enhances consumer loyalty (Rehman et al, 2025). Effective implementation of green marketing can strengthen consumers' perceptions of a brand's environmental responsibility, enhance trust, and contribute to the formation of a favorable green brand image (Widyastuti et al., 2019; Fatmawati & Alikhwan, 2021; Jabeen et al., 2023).

Green brand image refers to consumers' perceptions of a brand as environmentally responsible, sustainable, and committed to ecological values (Doszhanov & Ahmad, 2015; Majeed et al., 2022; Khoirala & Alfansi, 2024; Nguyen-Viet et al., 2024). Many companies now offer organic products to increase consumer acceptance and maintain a positive business image (Junarsin et al, 2022). Green brand image reflects consumers' perceptions of a brand's commitment to environmental sustainability in its practices and marketing strategies (Khoirala & Alfansi, 2024). Green brand image is viewed as an associative network theory that explains outcome variables such as preference, trust, loyalty, and corporate image related to green brands (Bashir et al, 2020). A positive green brand image enables companies to build credibility, differentiate their products from competitors, and encourage stronger consumer attachment to environmentally friendly brands (Alamsyah et al., 2020; Kinasih et al., 2023; Rehman et al., 2025). Previous studies have shown that green brand image is closely related to consumer trust, purchase intention, willingness to pay more, positive recommendations, and customer loyalty toward green products (Lin et al., 2017; Çavuşoğlu et al., 2020; Watson et al., 2022; Arasyi & Kusumawati, 2023). a positive GBI strengthens corporate reputation and credibility, builds consumer trust, and encourages greater consumer adoption of environmentally friendly products (Doszhanov & Ahmad, 2015; Majeed et al, 2022; Jabeen et al, 2023; Nguyen-Viet et al, 2024). It also increases customer loyalty (ÇavuĢoğlu et al,

2020; Watson et al, 2022), positive consumer behavior toward the environment (Butt et al, 2016), concern for and purchase motivation toward environmental brands (Fatmawati & Alikhwan, 2021), purchase intention and purchasing decisions (Rehman et al, 2025), revisit intention, positive recommendations, and willingness to pay more (Lin et al, 2017; Arasyi & Kusumawati, 2023; Khoirala & Alfansi, 2024). An effective marketing strategy for building a positive brand image is therefore key to attracting customers and fostering loyalty (Doszhanov & Ahmad, 2015).

Alongside green marketing and green brand image, green awareness also plays an important role in shaping environmentally responsible consumer behavior. Green awareness reflects consumers' knowledge, concern, and personal commitment toward environmental issues and the ecological impact of the products they consume (Alamsyah et al., 2020; Genoveva & Tanardi, 2022). Green awareness predicts consumers' purchase decisions, as consumers who are concerned about environmental responsibility tend to choose green products, while also reflecting their ability to recognize and recall a brand as an environmentally friendly product (Junarsin et al., 2022; Doszhanov & Ahmad, 2015). Green awareness encourages consumers to replace conventional consumption with environmentally friendly products that have positive impacts on both themselves and the environment, while also considering price and brand image (Dewi & Syauki, 2023; Butar et al, 2024). GA reflects shifts in consumer perspectives and recommendations for environmentally friendly products (Alamsyah et al, 2020), consumer behavior and opinions (Fazmi & Imaningsih, 2024), support for and enhancement of environmental values (Genoveva & Tanardi, 2022), knowledge of green products, lifestyle changes, and consumer behavior in using and selecting environmentally friendly products, as well as understanding their impacts on the environment (Butar et al, 2024). Consumers with higher green awareness tend to recognize environmentally friendly brands more easily, consider ecological consequences in purchasing decisions, and show stronger preferences for products that support sustainability (Junarsin et al., 2022; Dewi & Syauki, 2023; Butar et al., 2024). Therefore, green awareness can strengthen the effectiveness of green marketing and green brand image in encouraging green customer loyalty (Suki et al, 2016; Alamsyah et al, 2020).

Green customer loyalty represents consumers' long-term commitment to repeatedly purchase, support, and recommend environmentally friendly products despite the availability of competing alternatives (Martinez, 2015; Çavuşoğlu et al., 2020; Han et al., 2025). In the green consumption context, loyalty is not only reflected in repeat purchasing behavior, but also in consumers' willingness to pay premium prices, provide positive word-of-mouth, and maintain a long-term relationship with brands that demonstrate environmental responsibility (Issock et al., 2019; Zhang et al., 2023; Rehman et al., 2025). Consequently, companies have begun to integrate environmental issues into their strategies in order to comply with regulations and differentiate environmentally friendly products (Lin et al, 2017). This is because consumers who are aware of the importance of maintaining environmental quality consistently prefer to purchase environmentally friendly products (Osman et al, 2016; Kinasih et al, 2023). Companies that take the initiative to address environmental and social issues in their operations tend to gain customer loyalty (Karim & Rabiul, 2022; Arasyi & Kusumawati, 2023). For companies, green customer loyalty is essential because it supports long-term business sustainability while strengthening the practical value of green marketing strategies (Karim & Rabiul, 2022; Arasyi & Kusumawati, 2023).

Although previous studies have examined the relationships among green marketing, green brand image, green awareness, and green customer loyalty, most of them have investigated these variables separately or partially, such as the effect of green marketing on green brand image or the influence of green awareness on green purchase behavior. Unlike previous studies that examined these variables separately, this study offers novelty by

integrating green marketing, green brand image, green awareness, and green customer loyalty in a single model within the context of Indonesian botanical. In addition, recent empirical local literature, particularly studies using data from young Indonesian consumers such as Generation Z, remains limited, resulting in an incomplete understanding of the dynamics of green consumer behavior in the domestic market. Therefore, further research is needed to bridge this gap by holistically investigating the influence of green marketing on green brand image, green awareness, and green customer loyalty within the context of companies in Indonesia, in order to provide practical implications for sustainable marketing strategies.

METHOD

This study adopts a quantitative approach because it is suitable for obtaining broad information, testing relationships among variables, and generating accurate, measurable data to examine theoretical validity (Sugiyono, 2022). Botanical Essential serves as the subject of this study. It is an Indonesian brand that prioritizes natural ingredients and is committed to sustainability and the empowerment of local communities, offering products such as perfumes, body care, hair care, and home care. Meanwhile, the object of this study is consumers who purchase environmentally friendly products from a company that implements green marketing and possesses a green brand image. This study focuses on the effect of green marketing on green brand image and green awareness, as well as how green awareness mediates the relationship between green marketing and green customer loyalty. The sample consists of consumers who have purchased and/or used Botanical Essential products at least twice within the past year and are aware that Botanical Essential products are environmentally friendly. The sample was selected using purposive sampling based on the criterion of consumers who had repurchased the products, indicating direct experience and loyalty toward the products. The one-year period was applied to ensure that respondents had recent direct experience with the products under investigation. Since the population size is unknown, the sample size was determined by multiplying the number of indicators, namely 20, by a value between 5 and 10; therefore, the sample size obtained in this study was 200 respondents (Hair et al., 2021).

This study collected data through a questionnaire survey distributed both online and onsite using a 1–5 Likert scale, where 1 indicates “Strongly Disagree” and 5 indicates “Strongly Agree” (Siratan et al., 2024). The online questionnaire was distributed through digital platforms, while the onsite questionnaire was administered directly to respondents who met the predetermined criteria, this combination of online and onsite distribution was used to reach a broader range of respondents while ensuring that all participants had direct experience with Botanical Essential products. Green marketing was measured as the environmentally friendly initiatives implemented by Botanical Essential in relation to products, pricing, promotion, and packaging. This construct was represented by five reflective indicators (GM1–GM5) based on Kinasih et al. (2023). Green brand image reflects consumers’ perceptions of Botanical Essential’s environmental commitment. This construct was represented by five reflective indicators (GBI1–GBI5) based on Jabeen et al. (2023) and Lin et al. (2017). Green awareness reflects consumers’ perceptions of the environmental efforts undertaken by Botanical Essential through various elements, such as labels, slogans, and symbols used in marketing campaigns. This construct was represented by five reflective indicators (GA1–GA5) based on Junarsin et al. (2022). Green customer loyalty reflects consumers’ commitment and loyalty toward Botanical Essential’s environmentally friendly products and services. This construct was represented by five reflective indicators (GCL1–GCL5) based on Lin et al. (2017) and Han et al. (2025). Data analysis was conducted using Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS 3.0 (Hair et al., 2021). Since the data were collected using a single self-administered questionnaire, this

study assessed the potential issue of common method bias using the full collinearity VIF approach. The results showed that all full collinearity VIF values were below the recommended threshold of 3.3, indicating that common method bias was not a serious concern in this study (Hair et al., 2021). The measurement model (outer model) was evaluated through indicator loadings, average variance extracted (AVE), and discriminant validity, while the structural model (inner model) was assessed using R^2 values and the significance of path coefficients to test the hypothesized relationships (Hair et al., 2021).

RESULT AND DISCUSSION

Based on the results of questionnaire distribution conducted online through Google Forms to 200 respondents who used Botanical Essential products and met the sample criteria, the respondent profile obtained shows a composition relevant for examining environmentally oriented consumer behavior in Indonesia. In terms of gender, the respondents were dominated by women, totaling 138 individuals or 69%, while men accounted for 62 individuals or 31%. The dominance of female respondents indicates that Botanical Essential products are more widely accessed or preferred by female consumer segments, particularly in categories of products based on natural and environmentally friendly ingredients. In terms of age, the 25–34-year age group constituted the largest group, with 108 respondents or 54%, followed by the 35–44-year age group, with 67 respondents or 33.5%. Meanwhile, the 18–24-year age group comprised 13 respondents or 6.5%, and the 45–54-year age group accounted for 12 respondents or 6%. These findings indicate that most respondents were within the productive age range, which generally reflects a more mature capacity to evaluate the functional, ethical, and sustainability values of a brand. Regarding educational background, most respondents held Bachelor degree, totaling 123 individuals or 61.5%, followed by Diploma graduates with 41 individuals or 20.5%, master's degree holders with 29 individuals or 14.5%, and senior high school/vocational high school graduates with 7 individuals or 3.5%. This educational structure suggests that the respondents possessed an adequate level of literacy to understand the concepts of green marketing, green brand image, and green awareness. In terms of income, the group earning 8–10 million rupiah represented the largest proportion, with 90 respondents or 45%, followed by those earning 5–8 million rupiah, with 53 respondents or 26.5%, those earning above 10 million rupiah, with 45 respondents or 22.5%, those earning Rp3–5 million, with 8 respondents or 4.0%, and those earning below 3 million rupiah, with 4 respondents or 2%. Furthermore, the purchase frequency within the past year showed that 79 respondents or 39.5% had purchased the products twice, 78 respondents or 39% had purchased them three times, 40 respondents or 20% had purchased them four times, and 3 respondents or 1.5% had purchased them five times. Overall, these characteristics strengthen the relevance of the sample for examining sustainable customer loyalty in the context of green marketing and green brand image in Indonesia.

Table 1. Results of Outer Loading for Convergent Validity Testing and

Variable	Item	Loadings	VIF
Green Awareness (GA)	GA1	0.848	2.379
	GA2	0.862	2.537
	GA3	0.847	2.365
	GA4	0.866	2.568
	GA5	0.835	2.277
Green Brand Image (GBI)	GBI1	0.831	2.192
	GBI2	0.850	2.383
	GBI3	0.861	2.595
	GBI4	0.820	2.112
	GBI5	0.876	2.619
Green Customer Loyalty (GCL)	GCL1	0.869	2.578

Variable	Item	Loadings	VIF
	GCL2	0.866	2.505
	GCL3	0.832	2.232
	GCL4	0.854	2.423
	GCL5	0.811	2.082
Green Marketing (GM)	GM1	0.867	2.532
	GM2	0.847	2.333
	GM3	0.827	2.067
	GM4	0.835	2.248
	GM5	0.812	2.109

Source: Primary data processed using SmartPLS 3 (n = 200)

The outer loading results in Table 1 demonstrate that all indicators adequately represent their respective constructs. The loading values range from 0.811 to 0.876, exceeding the recommended threshold of 0.70 for convergent validity in PLS-SEM. The highest indicator value is found in GBI5 at 0.876, while the lowest value is found in GCL5 at 0.811; nevertheless, both values still satisfy the criteria for convergent validity. Thus, each item is able to consistently and empirically reflect the variable being measured (Hair et al., 2021). In addition all full collinearity VIF values were below the recommended threshold of 3.3 indicating that common method bias was not a serious concern in this study (Hair et al., 2021).

Table 2. Results of Construct Reliability and Validity

Variable	Cronbach's Alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average Variance Extracted (AVE)
Green Awareness (GA)	0.905	0.906	0.930	0.725
Green Brand Image (GBI)	0.902	0.906	0.927	0.719
Green Customer Loyalty (GCL)	0.901	0.904	0.927	0.717
Green Marketing (GM)	0.894	0.897	0.922	0.702

Source: Primary data processed using SmartPLS 3 (n = 200)

The results in Table 2 show that all constructs meet the criteria for reliability and convergent validity. Cronbach's Alpha values range from 0.894 to 0.905, while Composite Reliability values, both rho_a and rho_c, are above the threshold of 0.70, indicating very good internal consistency. In addition, the AVE values for all variables range from 0.702 to 0.725, exceeding the minimum threshold of 0.50. Therefore, the Green Awareness, Green Brand Image, Green Customer Loyalty, and Green Marketing constructs are considered reliable and valid (Hair et al., 2021).

Table 3. Fornell Larcker Results

Variable	GA	GBI	GCL	GM
GA	0.852			
GBI	0.516	0.848		
GCL	0.758	0.496	0.847	
GM	0.570	0.324	0.610	0.838

Source: Primary data processed using SmartPLS 3 (n = 200)

The Fornell–Larcker test results in Table 3 indicate that discriminant validity has been established for all constructs. The square root of AVE values on the diagonal, namely 0.852 for GA, 0.848 for GBI, 0.847 for GCL, and 0.838 for GM, are higher than the correlations among the other constructs. This condition confirms that each construct has stronger explanatory power for its own indicators than for other constructs (Hair et al., 2021).

Therefore, Green Awareness, Green Brand Image, Green Customer Loyalty, and Green Marketing are empirically distinct constructs.

Table 4. R-Square Test Results

Variable	R Square	R-square Adjusted
Green Awareness (GA)	0.448	0.443
Green Customer Loyalty (GCL)	0.634	0.628

Source: Primary data processed using SmartPLS 3 (n = 200)

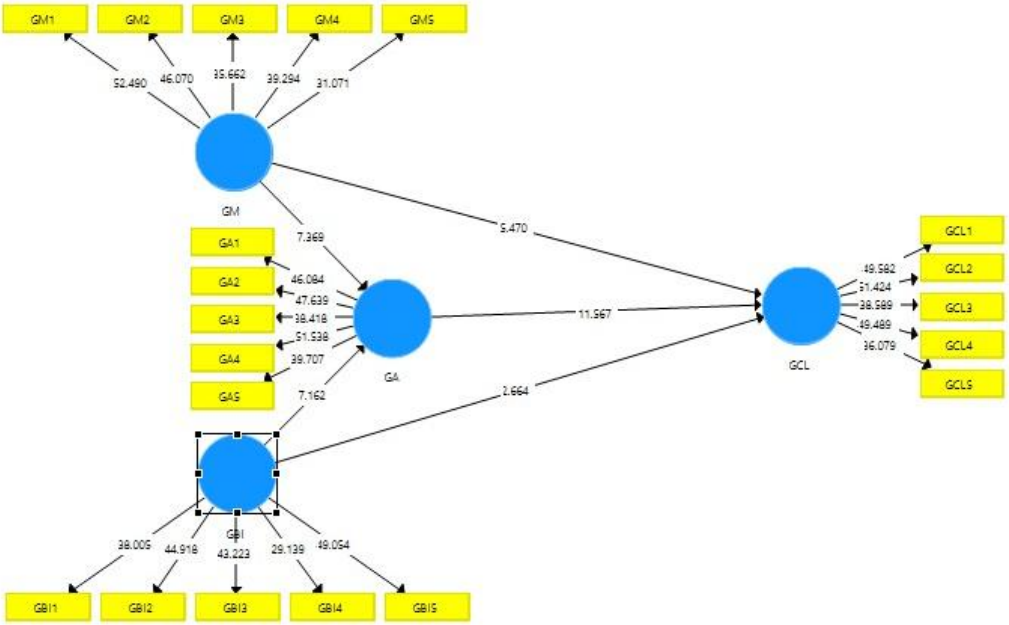
The R-square based on Table 4 values indicate that the model has adequate predictive capability (Hair et al., 2021). Green Awareness obtained an R-square value of 0.448 and an adjusted R-square value of 0.443, indicating that 44.8% of its variance is explained by the exogenous variables. Green Customer Loyalty recorded an R-square value of 0.634 and an adjusted R-square value of 0.628, suggesting that 63.4% of the variance in loyalty can be explained by the model. The remaining variance is theoretically and empirically influenced by other factors beyond the scope of this study.

Table 5. Hypothesis Testing Results (Direct Effects and Indirect Efects)

Coefficient Path	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic ((|O/STDEV|)	P Value
GA -> GCL	0.542	0.543	0.046	11.895	0.000
GBI -> GA	0.370	0.375	0.051	7.260	0.000
GBI -> GCL	0.133	0.132	0.051	2.585	0.010
GM -> GA	0.451	0.448	0.060	7.509	0.000
GM -> GCL	0.258	0.257	0.047	5.510	0.000
GBI -> GA -> GCL	0.201	0.204	0.035	5.702	0.000
GM -> GA -> GCL	0.244	0.243	0.036	6.818	0.000

Source: Primary data processed using SmartPLS 3 (n = 200)

Based on Table 5, all direct and indirect relationships show positive and significant effects, as the T-statistic values are greater than 1.96 and the P-values are below 0.05 (Hair et al., 2021). The path from GA to GCL demonstrates the strongest direct effect, with a coefficient of 0.542, indicating that an increase in GA plays a substantial role in enhancing GCL. GBI and GM also have significant effects on GA and GCL, although with varying levels of strength. The indirect effect results indicate that GA is able to mediate the effects of GBI and GM on GCL. Thus, the research model empirically supports all proposed hypotheses.



Source: Primary data processed using SmartPLS 3 (n = 200)

Figure 1. PLS-SEM Algorithm Output Model Results

The SmartPLS bootstrapping output figure which visualizes the relationships among green marketing, green brand image, green awareness, and green customer loyalty. The model confirms that all proposed direct and indirect relationships are empirically supported. Overall, the figure strengthens the statistical results by showing that green awareness plays a central role in linking green marketing and green brand image with green customer loyalty (Hair et al., 2021).

The findings of this study confirm that green marketing has a positive effect on green customer loyalty. This result indicates that consumers are more likely to remain loyal to botanical brands when marketing activities consistently communicate environmental responsibility, natural product value, and sustainable business practices. This finding is consistent with Rahbar and Wahid (2011), Martínez (2015), Lin et al. (2017), and Krishnan et al. (2024), who found that green marketing can strengthen customer loyalty by increasing perceived value, trust, and emotional attachment to environmentally friendly brands. However, this study extends previous findings by showing that, in the context of Indonesian botanical products, green marketing is not merely a promotional strategy but also a mechanism for building long-term consumer commitment. This suggests that consumers respond more positively when green marketing messages are supported by visible practices such as natural ingredients, environmentally friendly packaging, ethical production, and transparent sustainability claims.

The results also show that green marketing positively influences green awareness. This finding supports Junarsin et al. (2022), Osman et al. (2016), Liao et al. (2020), and Suki et al. (2016), who emphasized that green marketing can increase consumer knowledge and awareness of environmental issues. In the context of Botanical Essential, marketing messages related to plant-based ingredients, sustainable production, packaging reduction, and ecological responsibility appear to help consumers better understand the environmental value of the products. Unlike studies that position green marketing mainly as a tool to stimulate purchase intention, this study shows that green marketing also functions as an educational instrument that strengthens consumers' sustainability literacy. Therefore, the effectiveness of green marketing depends not only on how attractive the message is, but also on how clearly the message helps consumers understand the environmental benefits of the product.

Green brand image was found to have a positive effect on green awareness. This indicates that when consumers perceive a brand as natural, ethical, and environmentally responsible, they become more aware of the sustainability values associated with the brand. This result is in line with Alamsyah et al. (2020), Kang and Hur (2012), Doszhanov and Ahmad (2015), and Dewi and Syauki (2023), who argued that brand image can shape consumers' cognitive evaluation of environmental values. The finding differs from studies that treat green brand image only as an outcome of marketing communication, because this study shows that green brand image can also act as a stimulus that strengthens consumer awareness. In botanical products, a positive green brand image makes sustainability information easier to accept because consumers already associate the brand with naturalness, safety, and environmental concern.

Green brand image also has a positive effect on green customer loyalty. This finding confirms that customer loyalty toward botanical products is shaped not only by functional product quality, but also by consumers' belief that the brand represents ecological values that are consistent with their personal values. This finding is consistent with Lin et al. (2017), Bashir et al. (2020), Khoirala and Alfansi (2024), and Watson et al. (2024), who found that green brand image can increase trust, preference, and loyalty toward environmentally friendly brands. Nevertheless, compared with green awareness, the effect of green brand image on loyalty is relatively weaker. This implies that a positive green image alone may not be sufficient to create strong loyalty unless consumers also understand and internalize the environmental meaning behind the brand. Therefore, green brand image should be supported by credible information, transparent sustainability practices, and consistent consumer experience.

Among the direct relationships, green awareness plays the strongest role in explaining green customer loyalty. This result indicates that consumers with higher environmental awareness are more likely to repeatedly purchase, recommend, and maintain their relationship with botanical products that are perceived as environmentally responsible. This finding supports Arasyi and Kusumawati (2023), Issock et al. (2020), Zhang et al. (2023), and Mustonen et al. (2015), who emphasized that environmentally aware consumers tend to show stronger commitment toward green brands. In this study, green awareness appears to transform loyalty from a routine purchasing behavior into a value-based commitment. This means that consumers remain loyal not only because they like the product, but also because they believe that the product reflects environmental, ethical, and health-related values.

Green awareness mediates the relationship between green marketing and green customer loyalty, indicating that green marketing is more effective in building loyalty when consumers first understand and internalize the sustainability values communicated by the brand. This finding is consistent with Suki et al. (2016), Junarsin et al. (2022), and Alamsyah et al. (2020), who emphasized that green marketing can strengthen consumer awareness of environmental issues and influence environmentally responsible behavior. In the context of botanical products, marketing messages related to natural ingredients, environmentally friendly packaging, and sustainable production processes may increase consumers' awareness of ecological and ethical product values, which subsequently encourages loyalty. This result extends previous studies that mainly positioned green marketing as a direct driver of consumer response by showing that loyalty is not formed only through exposure to green marketing messages, but through consumers' awareness and interpretation of those messages. Therefore, green awareness acts as a psychological mechanism that explains how green marketing contributes to more stable green customer loyalty. From a managerial perspective, botanical companies should integrate green marketing with consumer education rather than relying only on promotional claims. Marketing campaigns need to clearly explain the origin of botanical ingredients, the benefits of natural active components, low-waste production

processes, environmentally friendly packaging, and the ecological impact of consumer purchases. This approach can help consumers better understand the sustainability value of the products and strengthen their long-term commitment to the brand (Osman et al., 2016; Arasyi & Kusumawati, 2023).

Green awareness mediates the relationship between green brand image and green customer loyalty, indicating that a positive green brand image is more likely to generate loyalty when consumers understand the environmental values represented by the brand. This finding is consistent with Alamsyah et al. (2020), Bashir et al. (2020), and Zhang et al. (2023), who suggest that green brand perception can influence consumer responses through cognitive awareness and value-based evaluation. In the context of botanical products, a brand image perceived as natural, ethical, and environmentally responsible may strengthen consumers' awareness of sustainability issues, which subsequently encourages loyalty. This result extends previous studies that mainly viewed green brand image as a direct determinant of loyalty by showing that its effect becomes stronger when consumers are able to recognize and internalize the ecological meaning behind the brand. Therefore, green awareness serves as an internal mechanism that converts positive green brand perceptions into long-term commitment toward sustainable purchasing. From a managerial perspective, botanical companies should not rely only on visual green symbols, natural design, or eco-friendly claims to build loyalty. Companies need to translate their green brand image into clear and credible information, such as raw material narratives, sustainability evidence, responsible production processes, product usage education, and participatory programs such as packaging return initiatives or environmental campaigns. This strategy helps consumers not only perceive the brand as green, but also understand and become involved in its sustainability values (Dewi & Syauki, 2023; Butar Butar et al., 2024; Po & Jiang, 2023; Karim & Rabiul, 2024).

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that green marketing, green brand image, and green awareness play important roles in strengthening green customer loyalty toward botanical products. The findings show that green marketing and green brand image not only directly influence green customer loyalty but also contribute to loyalty through green awareness. This indicates that loyalty toward green botanical products is formed not only through promotional activities or brand perception, but also through consumers' ability to understand and internalize the ecological values communicated by the brand. Theoretically, this study contributes to the green marketing literature by integrating green marketing, green brand image, green awareness, and green customer loyalty in a single model within the context of Indonesian botanical products.

From a managerial perspective, botanical companies need to position sustainability as a core element of marketing strategy and brand management. Green marketing should be supported by credible and transparent information regarding natural ingredients, responsible sourcing, environmentally friendly production processes, sustainable packaging, and the ecological impact of consumer purchases. Companies also need to strengthen green awareness through educational content, eco-labels, refill or packaging return programs, and consistent sustainability communication so that consumers do not merely perceive the brand as green, but also understand the environmental value behind the products.

This study has several limitations that provide directions for future research. First, this study focuses on only one botanical brand, which limits the generalizability of the findings to other green product categories. Future studies should compare loyalty formation across different green product categories, such as personal care, food, household items, and fashion products. Second, because this study relies on self-reported consumer perceptions, future

research may include behavioral data, such as actual repurchase records or participation in sustainability programs, to reduce potential response bias. Third, the cross-sectional design limits the ability to capture changes in loyalty over time. Therefore, longitudinal or mixed-method studies are recommended. Future studies may also examine the moderating role of generation, such as Gen Z versus Millennials, and green skepticism in shaping the relationship between green marketing, green brand image, green awareness, and green customer loyalty.

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