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Green Lifestyle and Green Brand Image as Drivers of Green Customer Citizenship Behavior: The Mediation Role of Green Trust

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Abstract: This study examines the effects of green lifestyle and green brand image on green customer citizenship behavior (GCCB), with green trust as a mediating variable. A quantitative approach was employed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. Data were collected from 200 respondents selected through purposive sampling using an online questionnaire measuring consumer perceptions of environmentally friendly products marketed through Sociolla. The results indicate that green lifestyle has no significant direct effect on GCCB and no significant indirect effect through green trust. In contrast, green brand image has significant direct and indirect effects on GCCB through green trust. The novelty of this study lies in simultaneously examining the roles of an environmentally oriented lifestyle and green brand image in explaining GCCB while testing green trust as a mediator in both relationships within the context of environmentally friendly beauty products in Indonesia. The findings suggest that perceptions of green brand image and consumer trust play important roles in encouraging voluntary supportive behavior toward green brands, whereas an environmentally oriented lifestyle does not automatically translate into such behavior. This study extends the application of the Stimulus–Organism–Response framework in green marketing research and offers practical implications for businesses seeking to strengthen their green brand image and consumer trust through transparent, credible, and consistent sustainability practices.

Keyword: Green Lifestyle, Green Brand Image, Green Trust, Green Customer Citizenship Behavior, Green Marketing.

INTRODUCTION

In recent decades, increasing awareness of climate change, pollution, and environmental degradation has prompted consumers to be more concerned about the environmental impact of their consumption decisions. The appearance of the phenomenon Green Lifestyle reflects

the change in value and consumer orientation from conventional consumption to more sustainable consumption (Y. Zhang & Yang, 2023b);(Arasyi & Kusumawati, 2023);(Chuah et al., 2020). Consumers who live a green lifestyle not only pay attention to the content of the product, but also assess the production process, distribution, and social and environmental practices of the company. This creates great pressure for companies to not only sell eco-friendly products, but also to establish a brand image that is green and trustworthy by consumers (Waris et al., 2024); (Hwang & Lyu, 2020); (Thai & Nguyen, 2022).

Green brand image is a key factor in shaping consumer perception of the company's environmental commitment. Research shows that a strong brand image on sustainability issues can influence consumers' loyalty, trust, and prosocial behavior towards the brand (Lin et al., 2017); (Y. Zhang & Yang, 2023b); (Astini, 2017); (Siwandana & Wardana, 2017). Green brand image also has a significant impact on the formation of Green Trust, namely consumer trust in the integrity and goodwill of the company in practicing sustainability (Arasyi & Kusumawati, 2023); (Y. Zhang & Yang, 2023b); (Y. Zhang & Yang, 2023a); (Deng & Yang, 2021).

Green trust not only influences purchasing decisions, but also plays an important role as a mediator between green brand image and consumer behaviors such as loyalty, advocacy, and voluntary behavior that supports the brand (Customer citizenship behaviour) (Tonder et al., 2024); (Chuah et al., 2020); (Amireh, 2021); (Waris et al., 2024). Several studies have also shown that green trust is an important element in reducing the negative effects of practices Greenwashing and increase customer commitment to behaviors that support sustainability, including positive information sharing, advocacy, and long-term loyalty (Astini, 2017); (Siwandana & Wardana, 2017).

One of the important indicators of the success of a sustainable marketing strategy is the emergence of voluntary consumer behavior that supports the company, known as Green Customer Citizenship Behaviour (GCCB). This behavior includes actions outside of the primary consumption role, such as spreading positive information about the brand, helping other customers understand the benefits of green products, and supporting the company's efforts to protect the environment (Deng & Yang, 2021); (B. L. Zhang et al., 2022); (Kuang & Lyu, 2024). Green customer citizenship behaviour is not only a form of passive loyalty, but an active expression of moral and emotional involvement towards a company that is perceived to have environmental values that are in harmony with consumers (Thai & Nguyen, 2022); (Chuah et al., 2020); (Tonder et al., 2024); (Hwang & Lyu, 2020).

Recent research shows that the relationship between green brand image and GCCB is not direct, but mediated by consumer trust in the brand (Green Trust) (Y. Zhang & Yang, 2023b); (Arasyi & Kusumawati, 2023); (Waris et al., 2024); (Astini, 2017). Green trust allows consumers to internalize brand values and view the company as a strategic partner in the mission of environmental conservation. In this context, green trust acts as a bridge between perception and behavior. Consumer trust strengthens affection and attachment to the company, which in turn encourages cooperative and voluntary behavior, including GCCB (Siwandana & Wardana, 2017); (Deng & Yang, 2021); (Amireh, 2021); (Chuah et al., 2020).

In addition to brand image, Green Lifestyle is also seen as a key determinant in shaping consumers' environmentally friendly intentions and behaviors. This lifestyle involves consumption preferences, daily activities, and even social aspirations that are aligned with sustainability values (Arasyi & Kusumawati, 2023). Consumers who have a green lifestyle orientation tend to be more sensitive to environmental signals from brands, such as green labels, eco-friendly certifications, and sustainability transparency. They are also more motivated to exhibit pro-environmental behaviors such as GCCB as an expression of their personal identity and values (Tonder et al., 2024); (Deng & Yang, 2021); (Kuang & Lyu, 2024); (Amireh, 2021). Findings show that changes in consumer lifestyles towards

sustainability have created new opportunities as well as challenges for companies in forming long-term relationships with their consumers. For this reason, a brand strategy that integrates green lifestyle, green brand image, and green trust is very relevant in creating more value, not only in terms of loyalty but also in terms of consumer voluntary behavior in actively supporting the company or known as green customer citizenship behaviour (GCCB).

Although previous studies have explored the relationship between green marketing and customer loyalty, there is still a gap in explaining how green trust plays a mediating variable in the relationship between green brand image and GCCB, especially when combined with green lifestyle as a predictor of behavior. Furthermore, research in the context of developing countries such as Indonesia, which is in the transition phase towards green consumerism, is still very limited. Therefore, this research is significant to strengthen the theoretical and practical foundations in understanding green consumer behavior more comprehensively, especially with an approach based on the integration of psychographic factors and brand perception. This research is also expected to make a conceptual contribution to the green marketing literature and green consumer behavior, while offering practical implications for companies in designing sustainability strategies that are not only cosmetic, but able to build emotional relationships and voluntary behavior from consumers. By testing green trust as a mediator between green lifestyle and green brand image against GCCB, this study also emphasizes the importance of building trust as a key prerequisite for converting positive consumer perceptions into tangible behaviors that support sustainability. Based on the above background, the formulation of the problem in this study is as follows, the influence of green lifestyle on green customer citizenship behavior (GCCB). Several studies show that green lifestyles are predictors of consumer pro-environmental behavior (Y. Zhang & Yang, 2023b); (Tonder et al., 2024); (Chuah et al., 2020), the influence of green brand image on green customer citizenship behaviour (GCCB), green brand image has been proven to encourage active customer loyalty and advocacy (B. L. Zhang et al., 2022); (Le et al., 2021); (Waris et al., 2024); (Lin et al., 2017), green trust acts as a mediating variable in the relationship between green lifestyle and green customer citizenship behaviour, green trust strengthens the relationship between consumer life orientation and supportive actions towards the company (Siwandana & Wardana, 2017); (Amireh, 2021); (Arasyi & Kusumawati, 2023); (Astini, 2017), green trust also mediates the relationship between green brand image and green customer citizenship behaviour, green brand image triggers trust, which ultimately drives voluntary actions in support of the brand by consumers (Deng & Yang, 2021); (Y. Zhang & Yang, 2023b); (Khan et al., 2024).

Theoretically, this study integrates Stimulus-Organism-Response (SOR) Theory and Social Identity Theory to explain the formation of GCCB. In the SOR framework, green brand image and green lifestyle act as external stimuli that affect the internal psychological condition of consumers (organisms), namely green trust, which then produces a response in the form of GCCB. However, SOR alone is not enough to explain why consumers are willing to engage in voluntary behavior outside of transactional obligations. Social Identity Theory (Tajfel & Turner, 1979) complements this framework by explaining that individuals define themselves through membership in a social group of positive values. In the context of this study, consumers who have a social identity as 'green consumers' will tend to exhibit behaviors that support green brands as a form of affirmation of their identity. When consumers perceive a strong green brand image, they not only trust the brand (green trust), but also feel that the brand reflects the values of their social identity. This feeling of being part of a green consumer community is what drives GCCB, such as recommending brands to others or helping other consumers understand green products. Thus, Social Identity Theory enriches the SOR framework by explaining why and for whom the stimulus-organism-

response process takes place, especially in consumers who make sustainability part of their social identity.

Despite the growing interest in green marketing and sustainable consumer behavior, further research is needed to explain how green lifestyle and green brand image jointly contribute to green customer citizenship behavior (GCCB). Previous studies have primarily examined green lifestyle and green brand image in relation to purchasing decisions, customer loyalty, and satisfaction, while their combined relationships with voluntary customer behavior remain less explored (Murtiningsih et al., 2022);(Susilo & Wilujeng, 2023);(Afifa et al., 2025). Moreover, the mediating role of green trust in the relationships between green lifestyle and GCCB, as well as between green brand image and GCCB, requires further investigation. This issue is particularly relevant in Indonesia, where research has examined green brand image, environmental awareness, and purchase intention, but further empirical evidence is needed regarding voluntary customer behavior (Arasyi & Kusumawati, 2023); (Afifa et al., 2025); (Thai & Nguyen, 2022).

Accordingly, this study integrates green lifestyle and green brand image as predictors of GCCB and examines green trust as a mediator in both relationships.The study draws on Stimulus–Organism–Response (S-O-R) theory to explain how green lifestyle and green brand image relate to consumers' internal evaluations, represented by green trust, and their subsequent voluntary behaviors. Social Identity Theory (Deng & Yang, 2021);(Le et al., 2021) complements this framework by explaining how consumers' identification with sustainability-related values may encourage them to support brands perceived as consistent with those values. The novelty of this study lies in integrating psychographic factors (green lifestyle) and brand perceptions (green brand image) in a single model focused on GCCB, while examining two indirect pathways through green trust in the Indonesian context. This integrated approach extends the focus beyond purchasing intentions and conventional loyalty to voluntary behaviors that support environmentally responsible brands.Based on this theoretical framework, seven hypotheses are proposed. Green lifestyle is expected to have positive effects on GCCB (H1) and green trust (H3), while green brand image is expected to have positive effects on GCCB (H2) and green trust (H4). Green trust is also expected to positively influence GCCB (H5). Furthermore, green trust is hypothesized to mediate the relationship between green lifestyle and GCCB (H6) and between green brand image and GCCB (H7). These hypotheses provide the basis for examining the direct and indirect relationships among the four constructs.

METHOD

Research Design and Sampling

This study employed a quantitative approach to examine the direct and indirect relationships among green lifestyle, green brand image, green trust, and green customer citizenship behavior. The research model was developed based on the Stimulus–Organism–Response (S-O-R) framework, in which green lifestyle and green brand image represent stimuli, green trust represents the organism, and green customer citizenship behavior represents the response. The proposed relationships were tested using Structural Equation Modeling based on Partial Least Squares (PLS-SEM). This technique was selected because it can accommodate complex structural models, including mediation relationships, and is suitable for analyzing latent constructs without requiring multivariate normality (Ariska Sari & Prasetyawati, 2025).

The target population comprised consumers in Indonesia who had purchased environmentally friendly products through Sociolla. Respondents were selected using purposive sampling based on predefined eligibility criteria. To participate in the study, respondents were required to: (1) have purchased products marketed with environmentally

friendly claims through Sociolla at least twice during the preceding six months; (2) be familiar with Sociolla and its products; (3) be at least 17 years old, with parental or guardian permission for participants under 18; and (4) be able to understand and complete the questionnaire. These criteria were intended to ensure that participants had relevant purchasing experience and sufficient familiarity with the brand to evaluate the research constructs.

A total of 200 respondents participated in the study. The sample size was determined with reference to the guideline suggesting that the sample should be five to ten times the number of indicators associated with the construct containing the largest number of indicators (Hair et al., 2021). Data was collected through an online questionnaire distributed via social media platforms, particularly Instagram and WhatsApp groups. The questionnaire consisted of two sections. The first section collected demographic information, including age, gender, education, and frequency of purchasing environmentally friendly products. The second section measured the four research constructs. Online distribution was used to reach consumers who were accessible through digital communication channels.

The study followed the research ethics procedures described in the study protocol. Respondents were informed about the purpose of research, the confidentiality of their responses, and their right to discontinue participation. The data was used for academic research purposes.

Research Instrument and Measurement

The study examined four constructs: green lifestyle (GLS), green brand image (GBI), green trust (GT), and green customer citizenship behavior (GCCB). Green lifestyle refers to consumer lifestyle choices and practices associated with environmental sustainability. Green brand image represents consumers' perceptions of a brand's environmental responsibility and sustainability commitments. Green trust refers to consumers' confidence in a brand's environmental claims and practices. Green customer citizenship behavior refers to voluntary consumer actions that support a brand beyond routine purchasing transactions.

Each construct was initially measured using five indicators adapted from previous studies. The green lifestyle indicators were adapted from Le et al. (2022), van Tonder et al. (2024), Zhang and Yang (2023), and Joshi and Rahman (2019). The green brand image indicators were adapted from Chen (2010) and Zhang and Yang (2023). The green trust indicators were adapted from Chang (2013), Le et al. (2022), and Burbano (2011). The green customer citizenship behavior indicators were adapted from Groth (2005) and Waris et al. (2024). Table 1 presents the measurement indicators and their respective sources.

Table 1. Variable Indicators

Variable	Code	Indicator	Adaptation Source
Green Lifestyle (GLS)	GLS1	I consistently choose eco-friendly products in my daily life.	(Le et al., 2022); (Tonder et al., 2024): (Y. Zhang & Yang, 2023a); (Joshi & Rahman, 2019)
	GLS2	I try to reduce the use of products that have a negative impact on the environment.	
	GLS3	I consider the environmental impact before purchasing the product.	
	GLS4	I'm used to using products that can be recycled or reused.	
	GLS5	I am active in activities that support environmental conservation.	
Green Brand Image (GBI)	GBI1	This brand is known as a brand that cares about the environment.	(Chen, 2010); (Y. Zhang & Yang, 2023a)
	GBI2	The brand has a good reputation for maintaining environmental sustainability.	
	GBI3	Products from this brand are considered environmentally friendly by consumers.	

Variable	Code	Indicator	Adaptation Source
	GBI4	The brand shows a real commitment to environmental conservation.	
	GBI5	I view this brand as an ecologically responsible brand.	
Green Trust (GT)	GT1	I believe that this brand truly implements eco-friendly practices.	(Chang, 2013);(Le et al., 2022); (Burbano, 2011)
	GT2	I believe the environmental claims made by this brand are credible.	
	GT3	This brand has integrity in protecting the environment.	
	GT4	I feel safe using products from this brand because of its environmental commitment.	
	GT5	I believe this brand does not engage in greenwashing practices.	
Green Customer Citizenship Behavior (GCCB)	GCCB1	I am willing to recommend this brand to others because it is eco-friendly.	(Groth, 2005); (Waris et al., 2024)
	GCCB2	I am willing to provide positive information about this brand to others.	
	GCCB3	I am willing to help others understand the environmental benefits of this product.	
	GCCB4	I am willing to support the environmental campaign carried out by this brand.	
	GCCB5	I am willing to volunteer to participate in activities that support this brand.	

Data Analysis

The data were analyzed using SmartPLS version 4.0 through two main stages: measurement model assessment (outer model) and structural model assessment (inner model). The measurement model was evaluated to assess indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Indicator reliability was assessed using outer loadings, with values above 0.70 considered desirable. Convergent validity was evaluated using the average variance extracted (AVE), with values above 0.50 indicating that a construct explained more than half of the variance in its indicators. Internal consistency reliability was assessed using composite reliability (CR) and Cronbach's alpha, with values above 0.70 considered acceptable. Discriminant validity was examined using the Fornell–Larcker criterion and the heterotrait–monotrait ratio (HTMT).

The structural model was evaluated by examining the coefficients of determination (R^2), path coefficients, t-statistics, p-values, and confidence intervals. Bootstrapping with 5,000 resamples was used to assess the statistical significance of hypothesized direct and indirect relationships. The analysis examined the effects of green lifestyle and green brand image on green customer citizenship behavior, their relationships with green trust, the effect of green trust on green customer citizenship behavior, and the mediating role of green trust. The mediation hypotheses were assessed based on the significance and confidence intervals of the corresponding indirect effects.

The analysis was conducted to determine whether the proposed relationships were supported by empirical data and to evaluate the mediating role of green trust in the relationship between the two independent variables and green customer citizenship behavior.

RESULT AND DISCUSSION

Based on age characteristics, out of a total of 200 respondents, the age group under 18 years old was the largest group, which was 89 respondents or 45%. Furthermore, respondents aged 18–26 years amounted to 73 people or 37%, while respondents aged 27–35 years old were 21 people or 11%. Respondents over the age of 35 were the smallest group, which was

17 people or 9%. The composition shows that the majority of the study respondents are in the young age group, especially respondents under 27 years old who overall account for 82% of the total sample. This condition shows that the research respondents are dominated by the younger generation who have the potential to have a fairly high exposure to environmental issues, environmentally friendly products, and sustainable consumption trends.

Based on income characteristics, as many as 87 respondents or 44% had an income of less than IDR 1,000,000 per month and became the group with the largest proportion. Furthermore, as many as 43 respondents or 22% had an income of IDR 1,000,000 – IDR 3,000,000, then 40 respondents or 20% had an income of IDR 3,000,001–IDR 5,000,000. Meanwhile, as many as 30 respondents or 15% had an income of more than IDR 5,000,000. Thus, the income distribution showed that most respondents were in the relatively low-income group, especially because the proportion of respondents with an income of less than IDR 3,000,000 reached 66%. These characteristics need to be considered in interpreting green consumer behavior because economic capabilities can be one of the considerations for consumers in choosing products that have environmentally friendly attributes.

Based on job characteristics, the majority of respondents were students, namely 134 people or 67% of the total 200 respondents. Furthermore, respondents who work as entrepreneurs/entrepreneurs are as many as 17 people or 9%, teachers/lecturers as many as 12 people or 6%, and private employees as many as 11 people or 6%. Respondents who work as tailors/workers in the garment/convection industry amounted to 9 people or 5%, housewives as many as 8 people or 4%, civil servants (PNS) as many as 5 people or 3%, and medical personnel as many as 4 people or 2%. This composition shows that the research sample is heavily dominated by students, which is in line with the dominance of young respondents. Therefore, the results of the research on Green Lifestyle, Green Brand Image, Green Trust, and Green Customer Citizenship Behaviour mainly reflect the perception and behavior of consumers from the young age group and students/students.

Table 2. Characteristics of Respondents

Characteristics	Category	Frequency	Prosentase
Age	<18 years old	89	45%
	18-26 years old	73	37%
	27-35 years old	21	11%
	>35 years old	17	9%
Revenue	<IDR1,000,000	87	44%
	IDR 1,000,000-IDR 3,000,000	43	22%
	IDR 3,000,001-IDR 5,000,000	40	20%
	>IDR 5,000,000	30	15%
Jobs	Student	134	67%
	Entrepreneur	17	9%
	Teacher/Lecturer	12	6%
	Private Employees	11	6%
	Housewives	17	9%
	Civil Servants	5	3%
	Medical Personnel	4	2%

The results of data analysis were obtained from questionnaire processing and testing of research models.

Instrument Testing (External Model), this stage is used to assess the validity and reliability of the indicators that make up the latent construct.

Validity Test

The purpose of the validity test in SEM-PLS is to ensure that each indicator is truly capable of reflecting the latent construct measured through convergent and discriminant validity testing. This test ensures that the research instrument has measurement accuracy so that the results of the analysis of the relationship between constructions are reliable and unbiased.

1. Convergent Validity Test

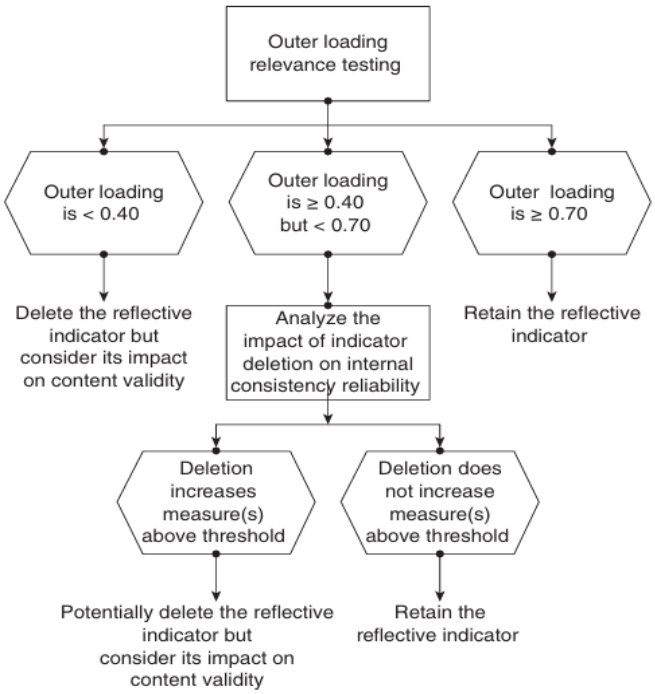
The purpose of the convergent validity test in SEM-PLS is to ensure that indicators measuring one latent construct have a high correlation and actually represent the same concept.

Table 3. Load factor value before deletion

Variable	Statement	*load factor*	Notes
Green Lifestyle	GL1	0,749	Valid
	GL2	0,405	Invalid
	GL3	0,240	Invalid
	GL4	0,765	Valid
	GL5	0,372	Invalid
Green Brand Image	GBI1	0,001	Invalid
	GBI2	-0,070	Invalid
	GBI3	0,144	Invalid
	GBI4	0,900	Valid
	GBI5	0,904	Valid
Green Customer Citizenship Behavior	GCCB1	0,859	Valid
	GCCB2	0,861	Valid
	GCCB3	0,893	Valid
	GCCB4	0,080	Invalid
	GCCB5	0,093	Invalid
Green Trust	GT1	0,862	Valid
	GT2	0,831	Valid
	GT3	0,845	Valid
	GT4	0,844	Valid
	GT5	0,855	Valid

Source: Primary data processed (2025)

The requirement that a statement item be declared valid is to have a loading factor value of > 0.70. Therefore, statement items with a loading factor value of < 0.70 need to be removed with consideration, i.e. the removal of such items can improve the reliability of composite values or Average Variance Extracted (AVE) values (Hair et al., 2017).



Sources: (Hair et al., 2021)

Figure 1. Removal Procedure

The removal of an item is not carried out simply for statistical reasons, but it is necessary to pay attention to the validity of its contents. The removal of this item considers the AVE value, composite reliability, and cronbach alpha because the removal of the item will affect the resulting value, as well as the results of the discriminant validity test. Please note that the removal of statement items will be done individually to maintain the legitimacy of the content. Here are the load factor values after the item is removed.

Table 4. Load factor value after removal

Variable	Statement	load factor	Notes
Green Lifestyle	GL1	0,906	Valid
	GL4	0,921	Valid
Green Brand Image	GBI4	0,900	Valid
	GBI5	0,907	Valid
Green Customer Citizenship Behavior	GCCB1	0,859	Valid
	GCCB2	0,864	Valid
	GCCB3	0,892	Valid
Green Trust	GT1	0,862	Valid
	GT2	0,831	Valid
	GT3	0,845	Valid
	GT4	0,844	Valid
	GT5	0,855	Valid

Source: Primary data processed (2025)

The removal of several indicators is not only based on statistical considerations (loading factor < 0.70) but also considers content validity based on theoretical studies. The GLS2, GLS3, and GLS5 indicators were removed because they conceptually reflect more environmental concern or perceived environmental responsibility than green lifestyle as a consistent daily lifestyle orientation. This is in line with Joshi & Rahman (2019) who distinguish between environmental concern and green lifestyle behavior. For the Green Brand Image construct, the GBI1, GBI2, and GBI3 indicators were removed because they theoretically measured green brand awareness and green brand association, rather than the

green brand image as a whole. According to Chen (2010), green brand image is more accurately measured through consumer perception of the brand's real commitment and ecological responsibility. As for GCCB, the GCCB4 and GCCB5 indicators were removed because they theoretically reflect green advocacy and customer participation, which are different dimensions of GCCB. According to Groth (2005), GCCB focuses more on helping behavior and providing positive recommendations (helping behavior and word-of-mouth).

Table 5. Average Extracted Variance Value (AVE)

Yes	Variable	AVE Value	Notes
1	Green Lifestyle	0,834	Valid
2	Green Brand Image	0,816	Valid
3	Green Customer Citizenship Behavior	0,760	Valid
4	Green Trust	0,718	Valid

Source: Primary data processed (2025)

Based on the table above, it is known that all variables have an AVE value of > 0.50 which means they have met the requirements so it can be said that all variables are valid.

2. Discriminatory Validity Test

The purpose of the discriminant validity test in SEM-PLS is to ensure that the latent constructs are completely different and do not overlap with other latent constructs in the model. This test shows that the indicators of a construction have a higher correlation with its own construction than with other constructions, so the uniqueness of the measurement can be guaranteed.

Table 6. Cross Loading

	GL	GBI	GCCB	GT
GL1	0,906	0,028	0,045	0,044
GL4	0,921	0,020	0,044	0,052
GBI4	0,043	0,900	0,732	0,752
GBI5	0,005	0,907	0,764	0,767
GCCB1	-0,029	0,713	0,859	0,775
GCCB2	0,098	0,717	0,864	0,767
GCCB3	0,059	0,735	0,892	0,785
GT1	0,096	0,741	0,795	0,862
GT2	0,048	0,697	0,723	0,831
GT3	-0,008	0,725	0,766	0,845
GT4	0,021	0,694	0,725	0,844
GT5	0,064	0,702	0,758	0,855

Source: Primary data processed (2025)

The results of the cross loading above show that all indicators have a higher correlation with the construct they measure compared to other constructs, so that the discriminant validity is met. To strengthen the evidence of discriminant validity, this study also reported the Heterotrait-Monotrait Ratio (HTMT) values as follows:

Table 7. Nilai Heterotrait-Monotrait Ratio (HTMT)

Variabel	GLS	GBI	GCCB	GT
GLS	-			
GBI	0,089	-		
GCCB	0,098	0,858	-	
GT	0,112	0,873	0,901	-

Source: Primary data processed (2025)

The results of the HTMT test showed that the entire value was below the 0.90 threshold recommended by Hair et al. (2021). Although the HTMT value between GT and GCCB (0.901) is slightly above 0.90, this value is still acceptable because the bootstrap confidence interval of 95% indicates that the entire value is below 1.00. The high correlation between GBI, GT, and GCCB can theoretically be explained because in the SOR framework, the green brand image (stimulus) forms a green trust (organism) which then drives GCCB (response), so that the three have a close conceptual relationship.

3. Reliability Tests

The purpose of the reliability test in SEM-PLS is to ensure that the indicators in latent construction have good internal consistency in measuring the same concept. This test shows that the measurement results are stable and reliable through values such as Composite Reliability and Cronbach's Alpha.

Table 8. Reliability of Alpha and Cronbach Composites

Yes	Variable	Alpha Cronbach	Composite Reliability	Notes
1	Green Lifestyle	0,802	0,910	Valid
2	Green Brand Image	0,775	0,899	Valid
3	Green Customer Citizenship Behavior	0,842	0,905	Valid
4	Green Trust	0,902	0,927	Valid

Source: Primary data processed (2025)

The above data showed an alpha Cronbach value of > 0.60 and a composite reliability of > 0.70 on all variables, which means the variables used in this study were reliable.

Inner Model Structural Testing

The purpose of structural testing (inner model) in SEM-PLS is to assess the strength and direction of causal relationships between latent constructs in the research model. This test ascertains how well the model can explain the variance of endogenous constructs through values such as R^2 (R-squared)

Table 9. R-squared value

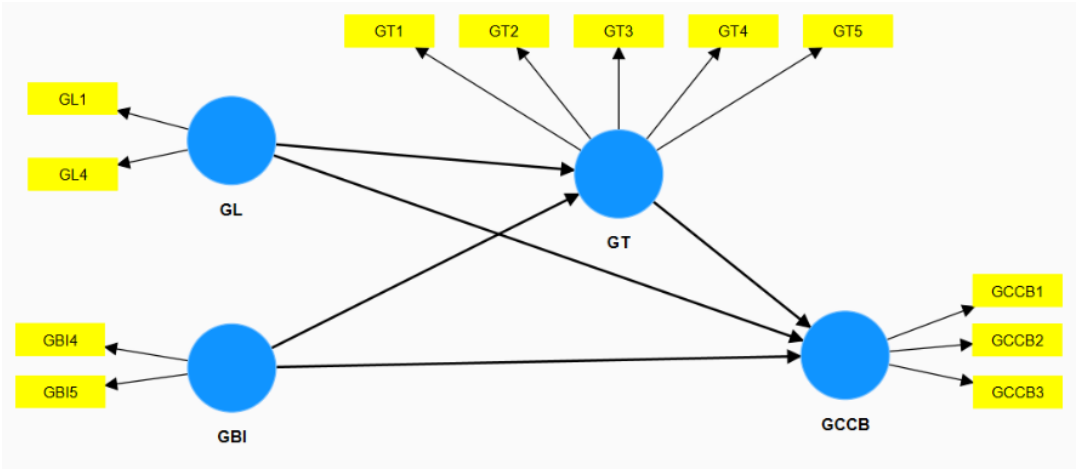
Variable	R-square	Adjusted R-square
Green Customer Citizenship Behavior	0,814	0,811
Green Trust	0,707	0,705

Source: Primary data processed (2025)

It is known that the R^2 value of the green trust construct is 0.705 or 70.5%, which means that green lifestyle and green brand image together can explain the green trust variance of 70.5%, while the remaining 29.5% is explained by other variables outside this study model. This R^2 value is in the strong category (> 0.60) based on the criteria of Hair et al. (2021), which shows that the model has good predictive ability in explaining the formation of green trust.

Hypothesis Testing

Hypothesis testing in SEM-PLS is meaningful as an evaluation process to find out whether the relationship between latent constructs in the research model is statistically supported by empirical data. The goal is to determine the significance and direction of influence between variables through the value of the path coefficient and the value of p.



Source: Image processed using SmartPLS 4.0 (2025)

Figure 2. Direct and indirect influence models

The image above is the indirect effects model used in this study. The relationship in this study was analyzed using the value of p. If the value of p > 0.05 then Ho is accepted and Ha is rejected, if the p value ≤ 0.05 then Ho is rejected and Ha is accepted.

Table 10. Hypothesis Test Results

Hipotesis	Track	Effect Type	β	t-value	p-value	95% CI Lower	95% CI Upper	Conclusion
H1	GLS → GCCB	Direct	0,007	0,225	0,822	-0,056	0,067	Rejected
H2	GBI → GCCB	Direct	0,273	4,112	0,000	0,142	0,404	Accepted
H3	GLS → GT	Direct	0,031	0,819	0,413	-0,044	0,105	Rejected
H4	GBI → GT	Direct	0,840	25,345	0,000	0,770	0,906	Accepted
H5	GT → GCCB	Direct	0,660	8,977	0,000	0,519	0,800	Accepted
H6	GLS → GT → GCCB	Indirect	0,020	0,815	0,416	-0,032	0,072	Rejected
H7	GBI → GT → GCCB	Indirect	0,554	11,234	0,000	0,451	0,657	Accepted (Partial)

Sumber: Bootstrap 5000 resamples. CI = Confidence Interval 95%.

To test the mediation hypothesis (H6 and H7), this study used a bootstrapped indirect effects approach with 5000 resamples. The results showed that the indirect effect of GLS on GCCB via GT (H6) was 0.020 with a p-value of 0.416 (p > 0.05) and a 95% confidence interval (-0.032; 0.072) which included a number of 0, so H6 was rejected. This means that green trust does not mediate the influence of green lifestyle on GCCB.

Meanwhile, the indirect effect of GBI on GCCB via GT (H7) was 0.554 with a p-value of 0.000 (p < 0.05) and a 95% confidence interval (0.451; 0.657) which did not include a number of 0, so H7 was accepted. Based on the criteria of Baron & Kenny (1986), because the direct effect of GBI → GCCB remains significant (β = 0.273; p = 0.000) after the inclusion of GT mediators, the type of mediation that occurs is partial mediation. This means that green brand image affects GCCB both directly and through increasing green trust.

Green Lifestyle has no direct effect on Green Customer Citizenship Behaviour

The results of the study show that Green Lifestyle does not directly affect GCCB, which means that even if individuals have an eco-friendly lifestyle, it does not automatically encourage voluntary behavior in favor of green brands. These findings are in line with the results of the study (Hwang & Lyu, 2020), which states that green lifestyles influence consumption preferences more than prosocial actions towards brands. This indicates the existence of attitude–behaviour gap, where awareness and lifestyle do not always lead to concrete actions in favor of brands.

Green Brand Image has a direct effect on Green Customer Citizenship Behavior

Green brand image is proven to have a positive and significant influence on GCCB. Consumers who have a positive perception of a brand's green image tend to be more active in supporting, recommending, and maintaining the brand's reputation. These results are consistent with research (Arasyi & Kusumawati, 2023), which states that a green brand image reinforces the emotional commitment and voluntary behavior of consumers. In the context of green marketing, a strong brand image is the main stimulus for the formation of prosocial behavior because it creates a sense of pride and social responsibility towards the environment (Y. Zhang & Yang, 2023a).

Green Lifestyle has no direct effect on Green Trust

The test results show that Green Lifestyle has no direct effect on Green Trust. This shows that even if one lives an eco-friendly lifestyle, trust in green brands is not automatically formed without tangible evidence of the brand's sustainability commitment. This discovery is supported by (Le et al., 2022), which confirms that consumer trust is influenced more by the perception of brand credibility and transparency than by consumers' personal lifestyles. This signifies that trust is more brand-driven than consumer-driven.

Green Brand Image has a direct effect on Green Trust

Green brand image has a positive effect on Green Trust, which suggests that the stronger the green image a brand has, the higher the consumer's trust in the brand's commitment to the environment. These results support the research (Kuang & Lyu, 2024), which found that positive perceptions of green image reinforce consumer confidence in the credibility and consistency of a company's environmental actions. In other words, brand image serves as a bridge between corporate communication and long-term trust building.

Green Trust Has a Direct Effect on Green Customer Citizenship Behavior

The relationship between green trust and green customer citizenship behavior (GCCB) was found to be statistically significant. Consumers who trust a brand’s environmental commitment are more likely to engage in voluntary behaviors, such as providing positive testimonials and recommending its products to others. This finding is consistent with relationship marketing theory, which emphasizes the role of trust in fostering customer loyalty and extra-role behavior (Amireh, 2021). Similarly, Zhang and Yang (2023) found that green trust plays an important role in encouraging consumers to support a company’s environmental initiatives.

Although green trust and GCCB are closely related, they represent conceptually distinct constructs. Green trust reflects consumers’ confidence in a brand’s environmental claims, integrity, and commitment to sustainability, whereas GCCB refers to voluntary actions that support a brand beyond routine purchasing transactions. In the context of environmentally friendly cosmetic products, consumers may trust a brand’s environmental commitment without necessarily recommending its products or participating in its environmental initiatives. Thus, green trust represents a psychological evaluation, while GCCB reflects voluntary behavioral support. Nevertheless, the HTMT value between the two constructs (0.901) indicates a high degree of association. Therefore, discriminant validity should be interpreted cautiously and considered alongside the bootstrapped confidence interval for the HTMT value.

Green Lifestyle Has No Effect on Green Customer Citizenship Behavior through Green Trust

The mediation analysis revealed that green trust did not significantly mediate the relationship between green lifestyle and green customer citizenship behavior ($\beta = 0.020$, $t = 0.815$, $p = 0.416$, 95% CI [−0.032, 0.072]). Because the confidence interval included zero, the indirect effect was not statistically significant. This finding suggests that an environmentally oriented lifestyle does not necessarily translate into voluntary behaviors that support a specific green cosmetic brand through trust. Consumers may adopt environmentally responsible practices in their daily lives, such as reducing waste and choosing environmentally friendly products, without necessarily developing sufficient trust in a particular brand or engaging in brand-related citizenship behavior.

This finding illustrates the potential attitude–behavior gap between consumers' general environmental orientation and their voluntary support for a specific brand. In other words, consumers may demonstrate environmental awareness in their personal lives without extending that commitment to voluntary actions that benefit a particular company. Therefore, a green lifestyle alone may not be sufficient to generate green customer citizenship behavior through green trust. This interpretation should, however, be considered within the context of the study and the nonsignificant indirect effect observed in the data.

Green Brand Image Affects Green Customer Citizenship Behavior through Green Trust

The results indicate that green trust significantly mediates the relationship between green brand image (GBI) and green customer citizenship behavior. The indirect effect was positive and statistically significant ($\beta = 0.554$, $t = 11.234$, $p < 0.001$, 95% CI [0.451, 0.657]). The direct effect of green brand image on green customer citizenship behavior also remained positive and statistically significant. Following the mediation typology proposed by Zhao et al. (2010), this pattern represents complementary partial mediation because both the direct and indirect effects are significant and operate in the same direction.

These findings suggest that green brand image contributes to customer citizenship behavior both directly and indirectly through green trust. A favorable perception of a brand's environmental image may encourage consumers to recommend and support the brand, while trust in its environmental commitment provides an additional pathway for developing voluntary supportive behavior. This result is consistent with the Stimulus–Organism–Response (S-O-R) framework, in which green brand image acts as a stimulus, green trust represents the organism, and green customer citizenship behavior constitutes the response. Thus, establishing a credible green brand image may encourage voluntary consumer support by strengthening trust in the brand's environmental commitment.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

The findings indicate that green brand image and green trust play important roles in shaping green customer citizenship behavior (GCCB), whereas green lifestyle has no statistically significant direct effect on GCCB and no significant indirect effect through green trust. These results suggest that consumers' voluntary support for green brands may depend more on their perceptions of a brand's environmental image and their trust in its environmental commitment than on their general environmental lifestyle orientation. The study contributes to the green marketing literature by examining the mediating role of green trust in the relationships between green lifestyle, green brand image, and GCCB. The findings also support the relevance of the Stimulus–Organism–Response framework in explaining how brand-related perceptions may influence voluntary consumer behavior.

From a managerial perspective, Sociolla and other businesses in the environmentally friendly cosmetics sector should prioritize the development of a credible green brand image and transparent sustainability communication. Environmental claims should be supported by clear, verifiable information about product characteristics and environmental practices to strengthen consumer confidence and reduce concerns about greenwashing. Companies may also encourage customer citizenship behavior by providing opportunities for consumers to share product experiences, recommend environmentally responsible products, and participate in sustainability initiatives. In addition, environmental education and brand communication can help consumers connect their personal environmental values with a brand's sustainability commitments.

Limitations

This study has several limitations. First, the age composition of the sample requires careful consideration. The demographic results indicate that 89 respondents (44.5%) were under 18 years old, while the stated eligibility criteria required participants to be at least 17 years old. Because the reported demographic category does not distinguish 17-year-old respondents from those younger than 17, the available data does not establish whether all participants met the minimum age requirement. This issue should be verified against the original respondent data and the study's ethical procedures before the final manuscript.

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