

SUSTAINABLE BEAUTY IN INDONESIA: THE ROLE OF ATTITUDE IN MEDIATING THE IMPACT OF ENVIRONMENTAL KNOWLEDGE AND PERCEIVED ECO-FRIENDLY QUALITY ON PURCHASE INTENTION



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Abstract

This study examines the impact of environmental knowledge, green perceived quality, and brand image on purchase intention toward environmentally friendly beauty products, with attitude as a mediating variable. Central Java was selected due to its growing interest in sustainable products and rising environmental awareness, making it a relevant context for green consumer behavior research in Indonesia. Using a quantitative method, data were collected from 185 respondents via an online survey, though self-selection bias may limit generalizability. Structural Equation Modeling-Partial Least Squares (SEM-PLS) was employed for analysis. Results show that environmental knowledge and brand image significantly influence purchase intention, while green perceived quality affects purchase intention indirectly through attitude, indicating a potential lack of consumer clarity on green product quality. Attitude serves as a key mediator, underscoring the importance of positive consumer perceptions. These findings suggest that effective marketing strategies should focus on environmental education, brand strengthening, and clearer communication of product sustainability to boost consumer confidence and intention to purchase green beauty products.

Keywords: Purchase Intention, Environmental Knowledge, Green Perceived Quality, Brand Image, Attitude, Environmentally Friendly Beauty Products

INTRODUCTION

Global environmental degradation, driven by industrialization and unsustainable consumption, has prompted urgent international action. The United Nations responded by establishing the 17 Sustainable Development Goals (SDGs), with SDG 12 focusing on responsible consumption and production (Un.org, 2023). This global agenda encourages innovation and consumer education as pathways toward environmental resilience. Within this framework, the adoption of environmentally friendly products is seen as a cornerstone of sustainable living (Ketelsen et al., 2020).

Despite growing awareness, consumer resistance to green products remains an obstacle. Aesthetic appeal, practicality, and personal preferences often hinder adoption especially when products are perceived as unattractive or inconvenient (Wallner et al., 2023). In the beauty industry, this resistance is further complicated by strict hygiene expectations and social media trends that encourage overconsumption (Dinh & Lee, 2022). As a response, brands are increasingly integrating sustainable materials into product formulations and packaging to enhance eco-consciousness and social responsibility (Amberg & Fogarassy, 2019).

Ethical beauty brands strive to balance profitability and sustainability, reflecting a shift in consumer expectations and market dynamics (Grădinaru et al., 2022). This evolution highlights the role of consumer behavior in promoting sustainability, especially among younger generations. Millennials and Gen Z, who are known for their digital fluency and value-driven preferences, are key drivers in the green product market. Their attitudes and behaviors warrant closer examination, particularly in emerging markets like Indonesia where environmental challenges are acute, yet research remains limited.

Although numerous studies have explored factors such as environmental knowledge, perceived green quality, and brand image in shaping green purchase intentions (Simanjuntak et al., 2023; Kim & Lee, 2023; Bi et al., 2023), findings remain inconsistent. In some contexts, environmental knowledge significantly drives green product purchases (Ansari & Siddique, 2019; Tan et al., 2022), while in others, it fails to translate into actual intention (Simanjuntak et al., 2023; Moslehpour et al., 2021). These contradictions raise questions

about the cultural, psychological, and contextual factors that mediate green consumer behavior.

This study aims to address these inconsistencies by focusing on Millennials and Gen Z consumers in Central Java, Indonesia. Specifically, it investigates the influence of environmental knowledge, green quality perception, and brand image on green purchase intention. By developing a theoretical framework that integrates branding and sustainability theories, this research contributes to a deeper understanding of how younger consumers in a developing context respond to green products. The findings are expected to inform both academic discourse and practical strategies for promoting sustainable consumption in the beauty sector.

REVIEW OF LITERATURE

Theory of Planned Behavior (TPB)

The Theory of Planned Behavior (TPB), developed by Ajzen and Fishbein, posits that individual behavior is driven by behavioral intention, which is influenced by attitude, subjective norms, and perceived behavioral control (Ajzen, 1991). In the context of green consumption, TPB provides a predictive framework for understanding eco-friendly behaviors such as supporting sustainable brands and purchasing green products (Riva et al., 2022). Attitudes toward sustainability, social pressures, and consumers' perceived ability to act serve as key psychological drivers of purchase intentions.

However, TPB in its original form may not fully account for the complexity of modern consumer decision-making, particularly in niche markets like sustainable beauty. As such, recent research incorporates external constructs such as environmental knowledge, brand image, and perceived green product quality to extend TPB's explanatory power (Moslehpour et al., 2021; Rustam et al., 2020). These constructs reflect contemporary consumers' exposure to digital information, green marketing, and shifting cultural norms, thus offering a more nuanced understanding of green consumerism.

Millennial and Gen Z consumers, especially in collectivist cultures like Indonesia, often rely on peer influence and social proof when making sustainable choices. Therefore,

this study adopts TPB as a base model but integrates additional variables to better capture the cognitive and affective processes shaping green beauty product choices.

Environmental Knowledge

Environmental knowledge encompasses both cognitive understanding of ecological issues and awareness of the human-environment relationship (Kim & Lee, 2023). It enables consumers to assess the long-term impact of their consumption and increases sensitivity to environmental cues. Numerous studies indicate that individuals with higher environmental literacy are more likely to purchase eco-friendly products (Tan et al., 2022; Simanjuntak et al., 2023). However, some research suggests this relationship is moderated by price sensitivity and brand trust, indicating that knowledge alone may not suffice (Gautam, 2022). This complexity highlights the necessity of exploring how environmental knowledge interfaces with other constructs such as attitude.

H1: Environmental knowledge significantly and positively influences purchase intention.

H2: Environmental knowledge significantly and positively influences attitude.

Green Perceived Quality

Green perceived quality refers to consumers' subjective assessment of a product's environmental performance, beyond its tangible features like price or packaging (Chen, 2023). It reflects trust in a product's green claims, which is increasingly important amid rising greenwashing skepticism (Nekmahmud & Fekete-Farkas, 2020). In green beauty, quality is associated not only with efficacy but also safety and ethical sourcing. Studies reveal that high perceived green quality strengthens both attitude and intention, particularly when consumers feel confident in identifying authentic green attributes (Riva et al., 2022; Wang & Li, 2022). Nonetheless, inconsistencies remain regarding how consumers weigh these attributes vis-à-vis cost or brand loyalty (Xu et al., 2022).

H3: Green perceived quality significantly and positively influences purchase intention.

H4: Green perceived quality significantly and positively influences attitude.

Brand Image

A well-established green brand image serves as both a cognitive heuristic and emotional anchor, enabling consumers to form favorable perceptions even without extensive product evaluation (Guha et al., 2021). In the context of sustainable beauty, brand image shapes perceived authenticity and trust, especially when linked to environmental transparency and ethical values (Scheidt et al., 2020). For Millennials and Gen Z, brand symbolism often outweighs functional value, reinforcing identity expression through eco-conscious purchases (Büyükdag & Kitapci, 2021). However, the strength of brand image varies across markets and is often contingent on prior brand experience and digital presence (Zhou et al., 2021).

H5: Brand image significantly and positively influences purchase intention.

H6: Brand image significantly and positively influences attitude.

Subjective Norms

Subjective norms—perceptions of social pressure—play a crucial role in collectivist societies where group alignment is valued (Chin et al., 2018). Among young Indonesian consumers, social influence through social media trends, influencers, and peer approval significantly affects interest in green beauty (Kumar & Pandey, 2023). However, the strength of normative influence may differ depending on demographic factors, such as urban versus rural residency or education level. While TPB treats subjective norms as a stable predictor, its efficacy may fluctuate based on cultural and social contexts, warranting deeper investigation (Xie & Madni, 2023).

H7: Subjective norms significantly and positively influence purchase intention.

H8: Subjective norms significantly and positively influence attitude.

Mediating Role of Attitude

Attitude, as a central TPB construct, embodies cognitive evaluation and emotional disposition toward green consumption. A favorable attitude increases the likelihood of pro-environmental behavior (Barrett & Feng, 2021). While TPB posits attitude as a direct predictor of intention, its role as a mediator becomes critical when evaluating how external variables—such as environmental knowledge or brand image—translate into action. Mediation theory suggests that attitude may act as a psychological filter that interprets input

from external sources and aligns it with personal values (Naz et al., 2020). This framework is especially relevant in green beauty, where values, identity, and aesthetics intersect.

Nonetheless, attitude may not always be the sole or strongest mediator. Constructs like trust or perceived behavioral control may also influence how knowledge or social pressure converts into intention. By focusing on attitude, this study prioritizes internal cognitive processing over external contingencies, aligning with the psychological orientation of TPB while acknowledging its limitations.

H9: Attitude mediates the relationship between environmental knowledge and purchase intention.

H10: Attitude mediates the relationship between green perceived quality and purchase intention.

H11: Attitude mediates the relationship between brand image and purchase intention.

H12: Attitude mediates the relationship between subjective norms and purchase intention.

H13: Attitude significantly influences purchase intention.

RESEARCH METHOD

This study employs a quantitative approach with a deductive analysis framework to examine the influence of environmental knowledge, green quality perception, brand image, attitude, and purchase intention toward green beauty products (Xiang et al., 2020; Hashish et al., 2022). Data were collected through an online survey distributed via social media using Google Forms. The quantitative method was chosen for its suitability in testing hypotheses based on existing theoretical frameworks.

The research population comprises consumers in Central Java with an interest in environmentally friendly beauty products. Due to the indeterminate population size, non-probability purposive sampling was applied. The inclusion criteria for respondents were: (1) users of beauty products, (2) aged between 15 and 40 years, (3) willingness to pay a premium for green cosmetics, and (4) demonstrated interest in sustainable beauty products. Although purposive sampling allows targeting a specific consumer segment, it poses limitations regarding sample representativeness and generalizability. Additionally, the online

distribution method may bias the sample toward younger, tech-savvy individuals with higher internet engagement, potentially underrepresenting other relevant consumer groups. These limitations should be considered when interpreting the findings.

The instrument consisted of a structured questionnaire with two sections. The first collected demographic data, and the second contained 38 Likert-scale items measuring the five constructs. These items were adapted from validated instruments in previous research, including studies by Paul et al. (2016), Nguyen et al. (2021), and Lin & Niu (2018), among others. A pilot test was conducted with 30 respondents to evaluate the clarity and reliability of the questionnaire. Internal consistency was assessed using Cronbach's alpha, with all constructs exceeding the acceptable threshold of 0.70. Content validity was ensured through expert review, and construct validity was examined via confirmatory factor analysis. Multicollinearity was assessed using Variance Inflation Factor (VIF), ensuring all values remained below the threshold of 10. Common method bias was tested using Harman's single-factor test, which confirmed that no single factor accounted for the majority of variance. The sample size was determined based on Hair et al.'s (2012) indicator-to-respondent ratio, with a minimum of 85 participants required to adequately reflect the 38 indicators across six variables.

RESULTS AND DISCUSSION

Data Description

Respondent characteristics in this study provide a demographic overview of the individuals who participated in the survey. A total of 185 respondents from Central Java Province, all of whom expressed an intention to purchase environmentally friendly beauty products, participated by completing a structured questionnaire.

Table 1.
Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	107	57,80
	Female	78	42,20
Total		185	100

Age (Years)	15-20	63	34,05
	21-30	121	65,41
	31- 40	1	0,54
Total		185	100
Education	High School	130	70,10
	D3	2	1,40
	D4/S1	52	27,90
	S2	1	0,60
Total		185	100
Monthly Income	< Rp500.000	19	10,20
	Rp1.000.000 - Rp3.500.000	79	42,90
	Rp3.600.000 - Rp6.000.000	55	29,90
	>Rp6.000.000	13	6,80
	Others	19	10,20
Total		185	100
Occupation	Students	147	79,48
	Entrepreneurs	10	5,40
	Private Employees	8	4,32
	PNS	2	1,08
	Freelancers	8	4,32
	Others	10	5,40
Total		185	100
Spending on “Green Beauty” Products	< Rp50.0000	40	21,62
	Rp51.000 – Rp100.000	62	33,51
	Rp101.000 – Rp500.000	61	32,97
	>Rp500.000	19	10,27
Total	Others	3	1,63
		185	100

Source: Processed primary data (2024)

Table 1 presents the demographic characteristics of the respondents. The majority were male (57.80%), while females accounted for 42.20%. In terms of age, the dominant age group was 21–30 years (65.41%), followed by 15–20 years (34.05%). Educational background data show that most respondents had completed high school (70.10%), while a smaller percentage had attained higher education levels. The majority of respondents were students (79.48%), indicating that younger, educated consumers form a significant market for green beauty products. Monthly income was primarily in the IDR 1,000,000–3,500,000

range (42.90%), with 33.51% of participants spending between IDR 51,000–100,000 monthly on green beauty products.

Data Analysis

Outer Model Analysis (Measurement Model Evaluation)

Table. 2
Construct Validity

Constructs	Items	Validity		Reliability		
		Outer Loadings	VIF	Cronbach's Alpha	Composite Reliability	AVE
Environmental Knowledge	EK1	0,796	2,733	0.892	0.918	0.650
	EK2	0,758	3,758			
	EK3	0,829	3,409			
	EK4	0,867	2,673			
	EK5	0,815	3,385			
	EK6	0,768	2,144			
Green Perceived Quality	GPQ1	0,825	2,733	0.924	0.938	0.653
	GPQ2	0,833	3,758			
	GPQ3	0,871	3,409			
	GPQ4	0,796	2,673			
	GPQ5	0,827	3,385			
	GPQ6	0,762	2,144			
	GPQ7	0,791	2,144			
	GPQ8	0,755	2,077			
Brand Image	BI1	0,864	2,739	0.915	0.934	0.703
	BI2	0,816	2,337			
	BI3	0,846	2,646			
	BI4	0,860	2,677			
	BI5	0,841	2,704			
	BI6	0,802	2,320			
Subjective Norms	SN1	0,835	2,353	0.912	0.932	0.695
	SN2	0,813	2,462			
	SN3	0,808	2,259			
	SN4	0,812	3,491			
	SN5	0,897	2,482			
	SN6	0,835	2,175			
Attitude	ATT1	0,702	1,587	0.903	0.926	0.677

	ATT2	0,868	3,088			
	ATT3	0,897	3,863			
	ATT4	0,817	2,232			
	ATT5	0,793	1,961			
	ATT6	0,847	2,645			
	PI1	0,796	2,175			
	PI2	0,796	2,042			
Purchase Intention	PI3	0,821	2,720	0.899	0.923	0.666
	PI4	0,874	3,203			
	PI5	0,830	2,423			
	PI6	0,777	1,935			

Source: Processed primary data (2024)

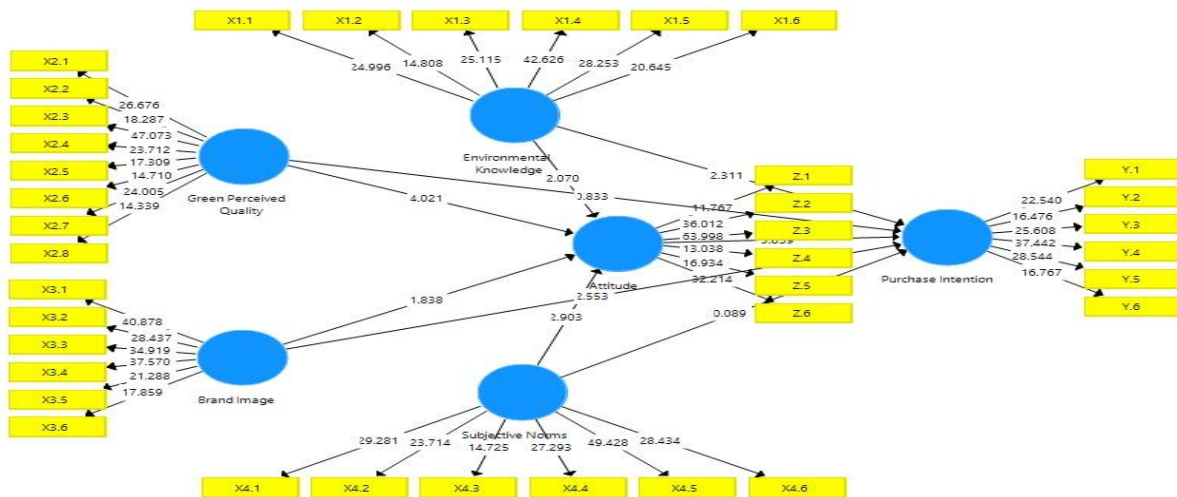


Figure 2

PLS Program Model Schematic

Source: Processed primary data (2024)

The outer model assesses construct validity and reliability. Convergent validity was determined based on outer loading values (>0.7), while discriminant validity was tested using the Fornell-Larcker criterion. Reliability was evaluated using Cronbach’s alpha and Composite Reliability (CR), both of which exceeded the threshold of 0.70, indicating high internal consistency.

- All constructs met the AVE (Average Variance Extracted) requirement of >0.50 , confirming convergent validity.
- Discriminant validity was established, as the square roots of AVEs were greater than inter-construct correlations (see Table 3).

Discriminant Validity

Table 3.
Discriminant Validity with Fornell-Larcker Criterion

	Environmental Knowledge	Green Perceived Quality	Brand Image	Subjective Norms	Attitude	Purchase Intention
Environmental Knowledge	0.806		0.844		0.831	
Green Perceived Quality	0.841	0.808	0.901		0.876	
Brand Image			0.839		0.854	
Subjective Norms	0.766	0.770	0.770	0.834	0.808	0.723
Attitude					0.823	
Purchase Intention	0.805	0.791	0.823		0.849	0.816

Source: Processed primary data (2024)

Inner Model Analysis

Coefficient Determination (R²)

Table 4.
Coefficient of Determination (R²)

	R Square	R Square Adjusted
Attitude	0.827	0.823
Purchase Intention	0.769	0.762

Source: Processed primary data (2024)

As shown in Table 4, the R² value for Attitude was 0.827, and for Purchase Intention, it was 0.769. These values indicate that the model explains 82.7% of the variance in attitude and 76.9% of the variance in purchase intention, suggesting a strong explanatory power.

Model Feasibility Test (Goodness of Fit)

Table 5.
Q-Square Analysis

	Model	Value
Attitude	Q ² (=1- sse/sso)	0.549
Purchase Intention	Q ² (=1- sse/sso)	0.472

Source: Processed primary data (2024)

The Q^2 values obtained for Attitude (0.549) and Purchase Intention (0.472) indicate good predictive relevance, as they are above zero (Table 5), signifying that the model has substantial predictive accuracy.

Hypothesis Testing

Hypotheses were tested using **bootstrapping analysis** in SmartPLS. A hypothesis is supported when the **T-statistic > 1.96** and the **P-value < 0.05**. Based on **Table 6**, several significant relationships were identified:

- Environmental Knowledge → Attitude (P = 0.039)
- Environmental Knowledge → Purchase Intention (P = 0.021)
- Green Perceived Quality → Attitude (P = 0.000)
- Attitude → Purchase Intention (P = 0.000)
- Brand Image → Purchase Intention (P = 0.011)
- Subjective Norms → Attitude (P = 0.004)

Conversely, some paths were not significant, including:

- Green Perceived Quality → Purchase Intention (P = 0.405)
- Brand Image → Attitude (P = 0.067)
- Subjective Norms → Purchase Intention (P = 0.929).

Path Coefficient Test

Table.6
Direct Effect Test

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Environmental Knowledge -> Attitude	0.173	0.177	0.084	2.070	0.039
Environmental Knowledge -> Purchase Intention	0.232	0.241	0.100	2.311	0.021
Green Perceived Quality -> Attitude	0.389	0.389	0.097	4.021	0.000
Green Perceived Quality -> Purchase Intention	-0.113	-0.124	0.136	0.833	0.405
Attitude -> Purchase Intention	0.497	0.501	0.129	3.859	0.000
Brand Image -> Attitude	0.168	0.160	0.092	1.838	0.067

Brand Image -> Purchase Intention	0.311	0.308	0.122	2.553	0.011
Subjective Norms -> Attitude	0.245	0.249	0.084	2.903	0.004
Subjective Norms -> Purchase Intention	-0.008	-0.008	0.093	0.089	0.929

Source: Processed primary data (2024)

The path coefficient in Table 6 shows the magnitude of the direct influence between the independent variables on the dependent variables in the research model. The path coefficient value ranges from -1 to +1, where a positive value indicates a unidirectional relationship (the higher the independent variable, the higher the dependent variable), while a negative value indicates an inverse relationship. In the table, the variable Attitude → Purchase Intention has the highest path coefficient (0.497), indicating that attitude has a strong influence on purchase intention. In addition, Green Perceived Quality → Attitude (0.389) and Brand Image → Purchase Intention (0.311) also have quite a large influence. Conversely, several relationships, such as Green Perceived Quality → Purchase Intention (-0.113) and Subjective Norms → Purchase Intention (-0.008) have a negative Path Coefficient, meaning that these variables do not have a direct positive influence on purchase intention. These path coefficient values are the basis for understanding the mechanism of the relationship between variables in the research model, so that they can be further interpreted for strategic decision making.

Indirect Effect Test

Table. 7
Indirect Effect Test

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Attitude -> Purchase Intention					
Brand Image -> Attitude					
Brand Image -> Purchase Intention	0.084	0.078	0.048	1.745	0.082
Environmental Knowledge -> Attitude					
Environmental Knowledge -> Purchase Intention	0.086	0.088	0.048	1.791	0.074
Green Perceived Quality -> Attitude					

Green Perceived Quality -> Purchase Intention	0.193	0.194	0.070	2.756	0.006
Subjective Norms -> Attitude					
Subjective Norms -> Purchase Intention	0.122	0.128	0.061	1.992	0.047

Source: Processed primary data (2024)

Table 7 analyzes the indirect effect of independent variables on dependent variables through mediating variables. A relationship is considered significant if T-statistic > 1.96 and P-value < 0.05. The results show that Green Perceived Quality → Purchase Intention (P = 0.006) and Subjective Norms → Purchase Intention (P = 0.047) have a significant indirect effect, indicating that the mediating variables play an important role in the relationship. In contrast, relationships such as Brand Image → Purchase Intention (P = 0.082) and Environmental Knowledge → Purchase Intention (P = 0.074) are not significant, indicating that the mediation in this relationship is not strong enough or does not contribute enough to the overall effect in the research model.

Direct Effect

The Influence of Environmental Knowledge on Purchase Intention and Attitude

Statistical analysis confirms that environmental knowledge significantly impacts both purchase intention (Path Coefficient: 0.232, T-Statistics: 2.311, P-Value: 0.021) and attitude (Path Coefficient: 0.173, T-Statistics: 2.070, P-Value: 0.039). Individuals with greater environmental awareness exhibit a stronger inclination to purchase eco-friendly beauty products, aligning with prior research (Ansar, 2024; Gautam, 2022; Moslehpour et al., 2021; Tan et al., 2022). Additionally, enhanced environmental literacy fosters a more favorable disposition toward sustainability concerns (Ogiemwonyi et al., 2019).

The Influence of Green Perceived Quality on Purchase Intention and Attitude

Findings indicate that green perceived quality does not significantly drive purchase intention (Path Coefficient: -0.113, T-Statistics: 0.833, P-Value: 0.405), implying that perceived sustainability does not directly translate into buying behavior due to factors like pricing, brand preference, and availability (Gil & Jacob, 2018; Hartanti et al., 2024). However, green perceived quality significantly enhances attitude (Path Coefficient: 0.389, T-Statistics: 4.021, P-Value: 0.000), suggesting that consumers with high confidence in a

product's eco-friendly attributes display stronger support for sustainable beauty products (Carzedda et al., 2021; Chen, 2023).

The Influence of Brand Image on Purchase Intention and Attitude

Brand image significantly influences purchase intention (Path Coefficient: 0.311, T-Statistics: 2.553, P-Value: 0.011), indicating that a reputable brand fosters consumer trust and drives purchasing behavior, as corroborated by previous studies (Majeed et al., 2022; Scheidt et al., 2020; Tan et al., 2022). However, it does not significantly impact attitude (Path Coefficient: 0.168, T-Statistics: 1.838, P-Value: 0.067), suggesting that other factors, such as personal experience, environmental education, and belief in sustainability claims, play a more dominant role (Zhou et al., 2021).

The Influence of Subjective Norms on Purchase Intention and Attitude

Subjective norms exhibit no significant effect on purchase intention (Path Coefficient: -0.008, T-Statistics: 0.089, P-Value: 0.929), contradicting prior research (Chin et al., 2018; Kumar & Pandey, 2023; Yeh et al., 2021), as purchasing eco-friendly beauty products is driven more by personal convictions than societal expectations. Conversely, subjective norms significantly shape attitude (Path Coefficient: 0.245, T-Statistics: 2.902, P-Value: 0.004), illustrating that social endorsement from family and peers cultivates pro-environmental attitudes (Sun & Wang, 2020; Xu et al., 2022).

The Influence of Attitude on Purchase Intention

Attitude exerts a significant impact on purchase intention (Path Coefficient: 0.497, T-Statistics: 3.859, P-Value: 0.000), reinforcing the Theory of Planned Behavior (TPB) (Naz et al., 2020). Consumers who hold a positive stance toward sustainable beauty products are more likely to translate their beliefs into purchasing decisions, underscoring the pivotal role of attitude in fostering eco-conscious consumption.

Indirect Effect

The Influence of Environmental Knowledge on Purchase Intention through Attitude

Empirical findings reveal that environmental knowledge does not exert a statistically significant indirect effect on purchase intention via attitude, as indicated by a Path Coefficient of 0.086, T-Statistics of 1.791, and a P-Value of 0.074. Although a potential relationship exists, the P-Value exceeding 0.05 confirms its insignificance. Hence,

hypothesis H9 is rejected, corroborating prior studies (Simanjuntak et al., 2023; W. Zhang et al., 2021), which suggest that while enhanced environmental awareness fosters a more favorable outlook on sustainability and eco-friendly beauty products, this shift in perspective alone is insufficient to significantly drive purchase intention. However, environmental education remains a viable strategy, particularly when reinforced by persuasive marketing efforts, endorsements from influential figures, and experiential engagement to strengthen the attitude-intention link.

The Influence of Green Perceived Quality on Purchase Intention through Attitude

Green perceived quality significantly influences purchase intention indirectly via attitude, as evidenced by a P-value of 0.006 (<0.05) and a T-statistic of 2.756 (>1.96). This suggests that consumer perceptions of a beauty product's eco-friendly attributes not only shape purchase intention directly but also through the formation of a positive attitude toward sustainable cosmetics. Therefore, hypothesis H10 is accepted, aligning with previous studies (Riva et al., 2022; Wasaya et al., 2021), which assert that individuals who perceive green beauty products as high quality are more likely to develop trust and concern for their environmental benefits, reinforcing their purchasing decisions.

The Influence of Brand Image on Purchase Intention through Attitude

Findings indicate that brand image lacks a statistically significant indirect influence on purchase intention via attitude, with a P-value of 0.082 (>0.05) and a T-statistic of 1.745 (<1.96). Although brand image can shape consumer attitudes, its indirect effect on purchase intention is not strong enough to be deemed statistically relevant. Consequently, hypothesis H11 is rejected, consistent with prior research (Guha et al., 2021), which suggests that a favorable brand perception alone does not substantially enhance consumers' willingness to purchase sustainable beauty products. While a strong brand image fosters positive perceptions, elements such as product quality, consumer trust, and societal norms likely hold greater sway in influencing purchasing choices.

The Influence of Subjective Norms on Purchase Intention through Attitude

Subjective norms exhibit a statistically significant indirect impact on purchase intention through attitude, with a P-value of 0.047 (<0.05) and a T-statistic of 1.992 (>1.96). This underscores the role of social influence, derived from family, peers, or community in

shaping environmentally conscious attitudes, which in turn elevate purchase intention for eco-friendly beauty products. Consequently, hypothesis H12 is accepted, in agreement with prior research (Xie & Madni, 2023), affirming that subjective norms not only directly influence behavior but also contribute to attitude formation toward specific issues or products. When individuals experience social encouragement or pressure to support sustainability, they tend to develop a positive stance toward green beauty products, ultimately reinforcing their likelihood of purchasing them.

CONCLUSION

This study confirms that environmental knowledge, green perceived quality, and brand image significantly influence purchase intention, either directly or indirectly through attitude as a mediating variable. Among these, consumer attitude emerges as the most influential factor, underscoring its central role in green product adoption, particularly in the context of Indonesian Gen Z consumers. This demographic, marked by high digital literacy and rising environmental awareness, appears to rely more on internalized beliefs and knowledge than on external pressures. Interestingly, the absence of a direct effect from subjective norms on purchase intention suggests a deviation from the traditional assumptions of the Theory of Planned Behavior (TPB), which typically emphasizes social influence. This may reflect a growing sense of individual agency among young, environmentally conscious consumers, indicating that peer pressure is secondary to personal conviction and information literacy in shaping green purchasing decisions.

While TPB remains a useful framework, the findings suggest it may not fully capture the evolving dynamics of green consumerism in Indonesia. The model could be extended by integrating constructs such as eco-labeling awareness or green trust to better reflect the nuanced motivations of Gen Z.

From a practical standpoint, marketing strategies should focus on educational content that resonates with this generation's values and habits such as gamified eco-awareness campaigns on TikTok or Instagram Reels, and campus ambassador programs that encourage peer-led sustainability discourse. Instead of generic influencer promotions, partnerships with local micro-influencers who are seen as authentic and socially responsible may be more

impactful. These tailored approaches can cultivate not only favorable attitudes but also sustained engagement and purchase intention within this unique consumer segment.

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