

Green Cosmetic Purchase Intention of Gen Z: The Mediating Role of Attitude

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ABSTRACT

Purpose: Growing environmental concerns have accelerated the demand for sustainable products, including green cosmetics. This trend is particularly evident among Generation Z, known for their strong environmental values and active online presence. Despite their pro-environmental attitudes, a noticeable gap persists between Gen Z's environmental awareness and their actual green purchasing behavior. This study investigates the determinants of green cosmetic purchase intention among Generation Z in Sri Lanka, employing Theory of Planned Behavior (TPB) framework.

Design/methodology/approach: A quantitative, cross-sectional survey was conducted with 450 Gen Z consumers using a structured online questionnaire. Data was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM).

Findings: The findings revealed that attitude has the strongest direct influence on purchase intention, confirming the central proposition of TPB. While eWOM and product knowledge do not directly affect purchase intention, both show significant indirect effects through attitude. Notably, environmental concern negatively predicts purchase intention directly but exerts a positive indirect effect via attitude, suggesting skepticism about green claims or concerns about greenwashing. The results underscore the pivotal role of attitude as a psychological mechanism that translates awareness into behavioral intention.

Originality: This research contributes to extending knowledge of consumer behavior towards green cosmetics purchasing. The present study is grounded on the Theory of Planned Behavior by further explaining using eWOM to contribute the theoretical foundation of the study. Further, it empirically contributes to broadening the understanding of comprehensive consumer behaviour on green cosmetic market that has been inadequately researched.

Implications: From a practical perspective, the study offers valuable insights for marketers: building trust and providing credible, informative content through eWOM and educational efforts can foster positive attitudes and enhance green purchase intentions among Gen Z consumers.

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Introduction

Environmental challenges, including resource depletion, climate change and pollution, have become critical global concerns (Ali et al., 2023; Nguyen et al., 2024). Driven by industrialization and urbanization, these issues have compelled governments, businesses, and individuals to implement policies and practices that promote environmental sustainability (Srivastava, Sanjeev & Gupta, 2024). Consequently, consumer behavior has undergone a notable shift, with increasing demand for eco-friendly products that align with rising environmental consciousness (Ghazali et al., 2017).

This transformation is particularly evident in the cosmetics industry, where consumer demand for green cosmetics has surged due to heightened awareness of their health and environmental implications (Ghazali et al., 2017; Suphasomboon & Vassanadumrongdee, 2022). Green cosmetics, formulated using natural ingredients such as fruit extracts and free from synthetic chemicals, contribute to environmental sustainability while ensuring ethical practices such as animal welfare (Ghazali et al., 2017; Limbu, Pham & Nguyen, 2022). The global green cosmetics market is projected to reach USD 70.6 billion by 2034, expanding at a compound annual growth rate (CAGR) of 7%, underscoring the increasing consumer preference for sustainable beauty products (Globenewswire, 2024). Similarly, Sri Lanka's cosmetics market is also witnessing growth, expected to reach US\$ 201.70 million by 2025, with a projected annual growth rate of 4.79% (CAGR 2025-2030). This expansion is largely attributed to the growing demand for natural and organic products, reflecting global shifts toward sustainability and eco-conscious beauty choices (Statista, 2025).

A key driver of this demand is Generation Z, a demographic widely recognized for its strong awareness of environmental and social issues. Their commitment to sustainability significantly influences their preference for ethical and eco-friendly products. As a highly digital generation, Gen Z relies on online platforms such as social media, blogs, and consumer reviews to inform purchasing decisions (Lopes, Pinho & Gomes, 2024). Research indicates that sustainability is a key determinant of their buying behavior, with many actively seeking brands that align with their ethical and environmental values (Djafarova & Fouts, 2022). Furthermore, Gen Z represents the largest segment of beauty consumers globally and demonstrates a willingness to pay a premium for eco-friendly products (AS Watson, 2019). Despite these trends, a considerable gap persists between Gen Z's pro-environmental attitudes and their actual purchasing behaviors. While 62% of Gen Z shoppers express a preference for sustainable brands and 73% indicate a willingness to pay more for eco-friendly products, actual adoption rates remain relatively low (FirstINSIGHT, 2025).

Therefore, this study aims to investigate the factors influencing the purchase intentions of Sri Lankan Gen Z consumers concerning sustainable and eco-friendly cosmetics. By analyzing the motivations behind their purchasing decisions, this research aims to provide valuable insights into how Gen Z's preferences impact the growth of the green

cosmetics market in Sri Lanka, thereby identifying key challenges and opportunities for the industry in this emerging market.

The objectives of this research are:

1. To determine the relationship between e WOM, product knowledge, environmental concern and attitude on purchase intention.
2. To determine the relationship between e WOM, product knowledge and environmental concern on attitude.
3. To determine the mediating relationship of attitude between e WOM, product knowledge, environmental concern, and purchase intention.

Literature Review

Relationship between eWOM, product knowledge, environmental concern and purchase intention

Electronic word-of-mouth (eWOM) significantly shapes consumer purchase intentions by rapidly sharing positive or negative product information online and guiding decision-making (Verma et al., 2023). The relationship between eWOM and purchase intention is widely supported, with studies showing that positive and negative eWOM shape consumer decisions (Gupta & Syed, 2022; Ngarmwongnoi et al., 2020). Positive eWOM builds confidence and social proof, while negative eWOM reduces perceived product quality (Amarullah, 2021; Ladhari & Michaud, 2015).

Consumers trust peer reviews more than brand messages, increasing eWOM's influence on purchase intention (Jaini et al., 2020; Nguyen & Nguyen, 2021). This effect is stronger for green products, as environmental and ethical concerns make consumer reviews more impactful (Hong et al., 2023; Nguyen et al., 2024). However, some studies suggest eWOM may not directly influence behavior, depending on context and consumer traits (Baber et al., 2016). Based on these insights, the following hypothesis is proposed:

H1: eWOM influences consumers' purchase intention toward green cosmetics.

Product knowledge, the information a consumer holds about products, significantly influences decision-making and purchase intention, particularly for green products, by reducing uncertainty and enhancing confidence (Sun & Wang, 2020; Zameer & Yasmeen, 2022). Both objective and subjective knowledge aid decision-making, with subjective knowledge often having a stronger impact (Ghazali et al., 2017). However, some studies suggest that knowledge alone may not always drive purchase intention (Nekmahmud et al., 2022). Based on these insights, the following hypothesis is proposed:

H2: Product Knowledge influences consumers' purchase intention toward green cosmetics.

Environmental concern (EC) involves awareness and active engagement in sustainable practices, shaping eco-conscious attitudes and green buying behavior (Cheung & To,

2019; Paul, Modi & Patel, 2016). Environmental concern drives green purchase intention, as higher awareness often leads to more eco-friendly buying behavior (Yadav & Pathak, 2016). It particularly influences Gen Z, who are more inclined toward sustainable consumption (Lopes, Pinho and Gomes 2024). In green cosmetics, it influences purchases linked to conservation values (Liobikienė & Bernatoniene, 2017). However, its impact is not always consistent (Duong et al. 2022). Hence, the following hypothesis is developed:

H3: Environmental concern influences consumers' purchase intention toward green cosmetics.

Relationship between attitude and purchase intention

Attitude is a core psychological construct reflecting an individual's evaluation and disposition toward an object, idea, or behavior (Ajzen, 1991). It significantly shapes cognition and behavior, influencing how people perceive and respond to their environment (Lavuri, Parida & Singh, 2024). In the context of green consumerism, attitude serves as a key predictor of purchase intention, with research indicating that favorable attitudes toward eco-friendly products lead to stronger buying intentions (Nguyen et al., 2024; Shimul, Cheah & Khan, 2022). This relationship is evident across various product categories, including green cosmetics, where positive attitudes have been shown to significantly increase the likelihood of purchase (Limbu, Pham & Nguyen, 2022; Pop, Saplacan & Alt, 2020). Based on these insights, the following hypothesis is proposed:

H4: Attitude influences consumers' purchase intention toward green cosmetics.

Relationship between eWOM, product knowledge, environmental concern and attitude

Electronic word-of-mouth (eWOM) significantly shapes consumer attitudes by influencing perceptions, trust, and product evaluations (Gupta & Syed, 2022). Its impact depends on factors like source credibility and review quality (Kazmi & Mehmood, 2016). As a form of social proof, high-quality eWOM fosters positive attitudes, especially in green product domains like cosmetics (Teixeira et al., 2023; Teng et al., 2017). Based on the above proclamation, the following hypothesis is proposed:

H5: eWOM influences consumers' attitudes toward green cosmetics.

Product knowledge significantly shapes consumer attitudes toward eco-friendly products by enhancing understanding and trust in product benefits and claims (Ghazali et al., 2017; Sun & Wang, 2020). Objective knowledge fosters favorable attitudes more strongly than subjective knowledge, which has a limited impact (Nautiyal & Lal, 2022). In the context of green cosmetics, informed consumers exhibit more positive attitudes, reinforcing product knowledge as a key determinant (Hosseinpour et al., 2015; Yuan Yen et al., 2016). Based on these insights, the following hypothesis is proposed:

H6: Product Knowledge influences consumers' attitudes toward green cosmetics.

Environmental concern (EC) significantly shapes consumer attitudes toward green products, including green cosmetics, by raising awareness of environmental consequences and reinforcing ethical perceptions (Lopes, Pinho, & Gomes, 2024; Testa et al., 2024). Research shows that individuals, especially younger consumers, with strong EC tend to form more favorable attitudes toward eco-friendly products (Nguyen et al., 2024; Yadav & Pathak, 2016). Although findings vary in some contexts (Pham et al., 2019). EC remains a key belief-based factor guiding positive attitudes (Sharma et al., 2021). Based on these insights, the following hypothesis is proposed:

H7: Environmental concern influences attitude towards green cosmetics.

Mediating relationship of attitude between eWOM, product knowledge, environmental concern, and purchase intention

Within the TPB framework, attitude acts as a mediator linking eWOM to green purchase intention (Duong et al., 2022; Hong et al., 2023). Positive eWOM enhances trust and credibility, shaping favorable consumer attitudes that, in turn, drive purchase intention (Baber et al., 2016; Nguyen et al., 2024). Thus, eWOM influences intention both directly and indirectly through attitude (Parveen & Chaudhary, 2025). Higher product knowledge boosts consumer confidence and fosters favorable attitudes toward green products, thereby strengthening purchase intentions (Fauziah & Al Amin, 2021). Studies in emerging markets show that attitude mediates the link between product knowledge and purchase intention (Nautiyal & Lal, 2022). Attitude significantly mediates the link between environmental concern and purchase intention, turning concern into actionable buying behavior (Ali et al., 2023; Zameer & Yasmeen, 2022). Studies show that this indirect effect via attitude is often stronger than the direct influence of environmental concern (Lopes et al., 2024; Paul et al., 2016). Based on this evidence, the following hypotheses are proposed:

H8: Attitude mediates the relationship between eWOM and Purchase Intention towards green cosmetics.

H9: Attitude mediates the relationship between Product Knowledge and Purchase Intention towards green cosmetics.

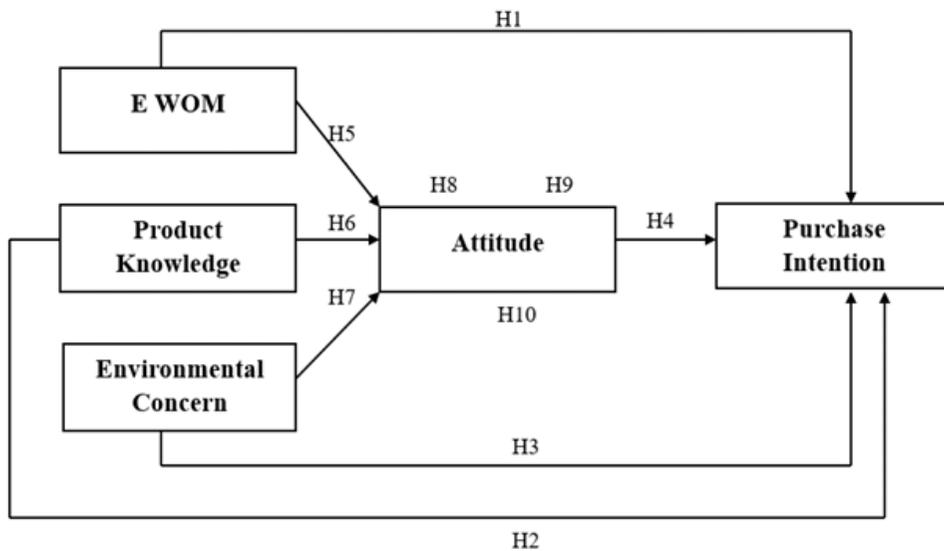
H10: Attitude mediates the relationship between Environmental Concern and Purchase Intention towards green cosmetics.

Methodology

This study adopted a deductive approach within the positivist paradigm, aiming to objectively test hypotheses derived from the established theory through empirical data (Sekaran & Bougie, 2016). A quantitative mono-method design was selected, utilizing a structured, self-administered online questionnaire to ensure consistency, standardization, and replicability (Saunders et al., 2023). The target population comprised Gen Z consumers aged 18 to 25 residing in the Western Province of Sri Lanka

due to their strong environmental awareness, sustainable consumption habits, and active engagement on digital platforms (Lopes et al., 2024; Nguyen et al., 2024). To ensure the relevance of participants to the study's focus, a filter question, "Do you currently use green cosmetics?" was included at the beginning of the questionnaire (Sekaran & Bougie, 2016). This ensured alignment with the research objectives by capturing data only from actual users of green cosmetics.

Figure 1
Conceptual Framework
Source: Author



A non-probability judgmental sampling technique was employed to intentionally select respondents with adequate knowledge and experience regarding green cosmetic usage. This method is appropriate when the research requires informed participants from a defined segment (Sekaran & Bougie, 2016). Based on existing literature, a minimum sample of 384 was deemed sufficient for robust statistical analysis (Limbu et al., 2022). To enhance generalizability and data reliability, 486 responses were initially collected. Following screening, 33 responses were excluded for not meeting the criteria, and 3 were removed due to incompleteness or outlier characteristics, leaving 450 valid responses for analysis. The questionnaire was divided into three key sections. The first section included the filter question to identify eligible respondents. The second section gathered demographic and behavioral data, including age, gender, education, income, occupation, internet usage, and green cosmetic shopping behavior. The third section measured the core constructs of the study: electronic word-of-mouth (eWOM), product knowledge, environmental concern, attitude, and purchase intention.

All measurement items were adapted from previously validated scales to ensure reliability and validity. eWOM (6 items), environmental concern (5 items), product knowledge (4 items), attitude (5 items), and purchase intention (4 items) were assessed

on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree) (See Table 1). Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed for data analysis, following the two-stage approach recommended by Hair et al., (2021). First, the measurement model was assessed for internal consistency, reliability, and validity. Then, the structural model was analyzed to examine the hypothesized relationships among the study's constructs.

Table 1
Measurements Items
Source: Survey data, 2025

Constructs	Measurement Items	Reference source
Purchase Intention	PI1 - I would like to consider purchasing green cosmetics first	(Nguyen et al. 2024)
	PI2 - I would like to buy green cosmetics as soon as I run out of cosmetic products, I am currently using	
	PI3 - I would like to recommend green cosmetic products to other people	
	PI4 - I would like to practice green consumption through purchasing green cosmetics	
Attitude	ATT1 - I like the idea of purchasing green products	(Nguyen et al. 2024)
	ATT2 - I like green cosmetic products	
	ATT3 - I always give priority to using green cosmetics	
	ATT4 - I feel proud to buy green cosmetics	
	ATT5 - For me, buying green cosmetics is a smart decision.	
E WOM	eWOM1 - I find review arguments on green cosmetic reliable	(Nguyen et al. 2024)
	eWOM2 - I find review arguments on green cosmetics to be persuasive	
	eWOM3 - Most reviewers about green cosmetics are trustworthy	
	eWOM4 - The reviewers supported my impression of the green cosmetic brand.	
	eWOM5 - Comments in the review are consistent with other reviews.	
	eWOM6 - The e WOM information about green cosmetic products is informative.	
Product Knowledge	PK1 - Do you agree that cosmetics free of preservative are green?	(Yuan Yen et al. 2015)
	PK2 - Do you agree that cosmetics free of ethanol are green?	

	PK3 - Do you agree that cosmetics free of synthetic additives are green?	
	PK4 - Do you agree that cosmetics consisting of natural ingredients are green?	
Environmental Concern	EC1 - Humans need to maintain a balance with nature to survive.	(Nguyen et al. 2024)
	EC2 - While purchasing cosmetic products, I focus on eco-friendly cosmetics.	
	EC3 - I think that green cosmetics use environmentally friendly ingredients.	
	EC4 - The environmental preservation of green cosmetic brands is coherent with my ethical values.	
	EC5 - Buying green cosmetics has an ethical interest for me, considering that the products have been ecologically produced.	

Results and Interpretation

Data analysis was conducted using SPSS Version 28.0.1.1 and SmartPLS Version 4.1.0. SPSS was used to assess demographic characteristics and test for common method bias. A two-step approach was then applied using PLS-SEM: (1) measurement model assessment for validity and reliability, and (2) structural model assessment for hypothesis testing. PLS-SEM, suitable for predictive and exploratory research, was chosen due to its effectiveness in handling complex models and smaller samples (Hair et al., 2021). The demographic profile of the sample is demonstrated in Table 2.

Table 2
Demographic profile of the sample
Source: Survey data, 2025

Variable	Frequency	Percentage
Gender		
Male	184	40.9
Female	266	59.1
Age		
18 - 25	450	100
Geographic Distribution		
Western Province	450	100
Education		
Advanced level	6	1.3
Undergraduate	435	96.7
Postgraduate	9	2.0
Occupation		
Student	421	93.6
Self employed	10	2.2

Employed	19	4.2
Internet Usage		
Once a day	443	98.4
Once a week	6	1.3
Not even once a month	1	0.2
Online Green Cosmetics Shopping		
Less than once in six months	93	20.7
Once every six months	208	46.2
Once every three months	146	32.4
Once a month	2	0.4
Once a week	1	0.2
Monthly Income		
Less than 15,000	43	9.6
15,000 - 24,999	102	22.7
25,000 - 59,999	288	64.0
60,000 - 99,999	13	2.9
Above 100,000	4	0.9

Common method bias

Common Method Bias (CMB) was assessed using Harman's single-factor test, which showed a total variance of 67.66%, exceeding the 50% threshold and indicating potential bias. While this suggests CMB may be present, scholars such as Fuller et al., (2016) argue that such thresholds are context-dependent. Despite the elevated variance, the conceptual distinctiveness of the constructs and careful item design mitigate the impact of CMB. These factors reduce the likelihood that the observed relationships are primarily driven by common method variance. Therefore, although the Harman's test indicates elevated shared variance, the risk of substantial CMB affecting the study's conclusions is considered limited.

Measurement model assessment

A reflective measurement model was adopted, as the study's constructs are represented by their indicators. This approach is theoretically and empirically supported by prior SEM research (Hair et al., 2022; Nguyen et al., 2024).

First, the reliability of the reflective measurement model was confirmed through indicator loadings, Cronbach's alpha, and composite reliability. All indicator loadings exceeded the 0.708 threshold, indicating strong relationships with their respective constructs (Hair et al., 2021). Cronbach's alpha values ranged from 0.721 to 0.961, and composite reliability values ranged from 0.826 to above 0.95, both exceeding the recommended 0.70 benchmark. Although high composite reliability may indicate item

redundancy (Henseler et al., 2016), it also reflects construct homogeneity (MacKenzie et al., 2011). These results confirm the model's strong reliability (See Table 3).

Convergent validity was assessed using Average Variance Extracted (AVE). AVE values ranged from 0.542 to 0.868, all above the 0.50 threshold, confirming adequate convergent validity (Hair, et al., 2021) (See Table 3). Cross-loading analysis showed that most indicators loaded highest on their intended constructs, supporting discriminant validity. Some moderate cross-loadings, especially between Attitude and Environmental Concern, were theoretically justifiable due to conceptual overlap (Hair et al., 2019). HTMT analysis showed high correlations between some constructs, especially Environmental Concern and Attitude. While this slightly exceeded the threshold, it is theoretically justified under the Theory of Planned Behavior. Bootstrap confidence intervals supported discriminant validity for most pairs, suggesting acceptable validity overall, despite minor concerns (See Table 4). The Fornell–Larcker criterion showed that AVE square roots for all constructs exceeded inter-construct correlations, supporting discriminant validity. Although minor issues appeared, the HTMT results confirmed validity, reinforcing the model's overall integrity (Hair et al., 2021). (See Table 5).

Table 3
Reliability and Convergent Validity
Source: Survey data, 2025

	Skewness	Kurtosis	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
ATT_1	-1.631	2.571	0.949	0.950	0.961	0.832
ATT_2	-1.973	3.758				
ATT_3	-1.836	3.130				
ATT_4	-1.707	2.584				
ATT_5	-1.943	3.336				
EC_1	-1.839	2.949	0.961	0.961	0.970	0.866
EC_2	-1.943	3.367				
EC_3	-2.076	3.727				
EC_4	-1.939	3.174				
EC_5	-2.030	3.604				
EWOM_1	-1.433	1.876	0.958	0.958	0.966	0.825
EWOM_2	-1.815	2.831				
EWOM_3	-1.638	2.272				
EWOM_4	-1.627	2.345				
EWOM_5	-1.696	2.506				
EWOM_6	-1.742	2.634				
PI_1	-.912	3.670	0.721	0.722	0.826	0.542
PI_2	-1.717	8.155				
PI_3	-1.515	5.574				
PI_4	-1.479	5.916				
PK_1	-1.746	2.585	0.950	0.950	0.964	0.868
PK_2	-1.973	3.362				
PK_3	-1.959	3.215				
PK_4	-1.984	3.549				

Table 4
Discriminant Validity (HTMT)
Source: Survey data, 2025

Construct Pair	HTMT Value
EC<->ATT	0.985
EWOM<->ATT	0.968
PI<->ATT	0.473
PK<->ATT	0.969
EWOM<->EC	0.953
PI<->EC	0.390
PK<->EC	0.956
PI<->EWOM	0.438
PK<->EWOM	0.950
PK<->PI	0.417

Table 5
Discriminant Validity (Fornell- Lacker)
Source: Survey data, 2025

	ATT_	EC_	EWOM_	PI_	PK_
ATT_	0.912				
EC_	0.942	0.931			
EWOM_	0.924	0.915	0.908		
PI_	0.396	0.327	0.370	0.736	
PK_	0.920	0.913	0.906	0.349	0.932

Structural model

To test the proposed hypotheses, the structural model was evaluated using the bootstrapping technique with 5,000 subsamples in SmartPLS 4.1.0. Path coefficients, t-statistics, and p-values were examined to determine hypothesis support (See Table 6). Contrary to prior findings (Nguyen et al., 2024; Pant & Kumar, 2023), H1 was not supported, as eWOM had no significant direct effect on purchase intention ($\beta = 0.183$, $t = 1.176$, $p = 0.240$). This aligns with Baber et al., (2016), who noted that eWOM does not always lead to direct behavioral outcomes. H2 was also not supported; the direct effect of product knowledge on purchase intention was non-significant and negative ($\beta = -0.026$, $t = 0.119$, $p = 0.905$). This contradicts findings by Cheung and To (2019) and Sun and Wang (2020), but supports Nekomahmud et al., (2022), who argue that product knowledge alone may not prompt action without attitudinal reinforcement. Unexpectedly, environmental concern had a significant but negative impact on purchase intention ($\beta = -0.470$, $t = 2.034$, $p = 0.042$), supporting H3. While this challenges conventional green marketing assumptions (Jaiswal & Kant 2018; Hong et al., 2023), it may reflect greenwashing skepticism (Costa et al., 2021), where concern does not translate into purchase due to mistrust or price sensitivity.

The relationship between attitude and purchase intention was positive and significant ($\beta = 0.694$, $t = 2.850$, $p = 0.004$) thus, H4 is supported. This result strongly aligns with the Theory of Planned Behavior (Ajzen, 1991) and prior studies (Nguyen et al., 2024; Yadav & Pathak, 2016). The analysis confirmed a significant and positive relationship between

eWOM and attitude ($\beta = 0.276, t = 3.722, p < 0.001$), thus H5 is supported. This supports prior literature (Pant & Kumar, 2023; Teixeira et al., 2023) showing that peer-generated content significantly shapes consumer evaluations. H6 was confirmed, as product knowledge had a significant positive effect on attitude ($\beta = 0.247, t = 2.104, p = 0.035$), consistent with Nautiyal and Lal (2022) and Yadav and Pathak (2016), who emphasized the role of credible information in forming favorable attitudes. The relationship between environmental concern and attitude was significant and positive ($\beta = 0.464, t = 4.173, p < 0.001$), thus, H7 is supported. This supports findings by Ali et al., (2023) and Nguyen et al., (2024), who found that environmental concern fosters favorable attitudes toward green products.

Figure 2
Structural Model
Source: Survey data, 2025

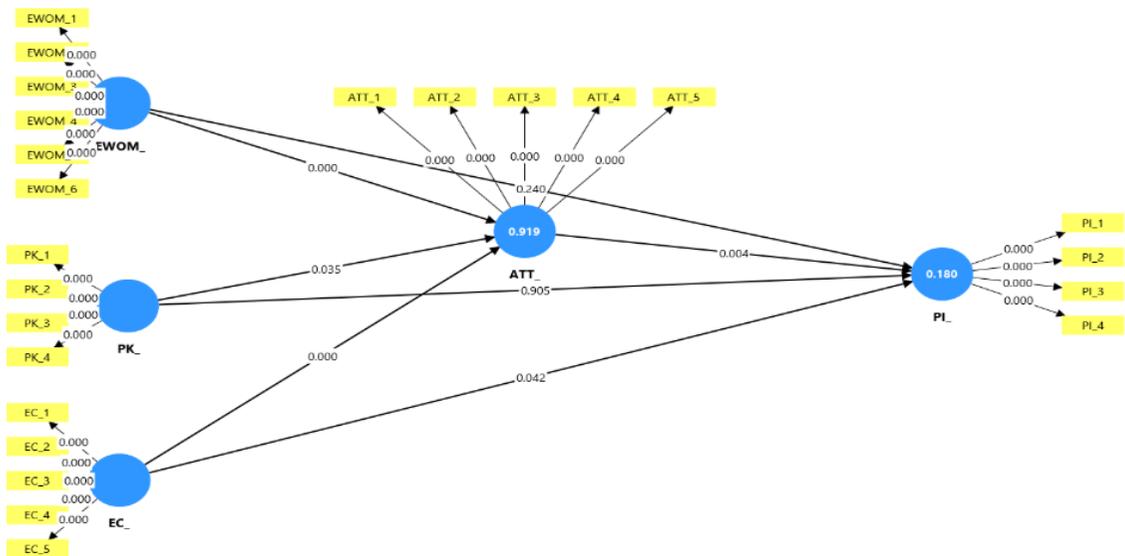


Table 6
Results of the hypothesized paths
Source: Survey data, 2025

Hypotheses	Path	Path Coefficient (β)	T statistics	P values	Results
H1	EWOM_->PI_	0.183	1.176	0.240	Reject
H2	PK_-> PI_	-0.026	0.119	0.905	Reject
H3	EC_-> PI_	-0.470	2.034	0.042	Accept
H4	ATT_-> PI_	0.694	2.850	0.004	Accept
H5	EWOM_->ATT	0.276	3.722	0.000	Accept
H6	PK_-> ATT_	0.247	2.104	0.035	Accept
H7	EC_-> ATT_	0.464	4.173	0.000	Accept

Mediation Effect

Next, a mediation analysis was conducted to examine whether attitude mediates the relationships between electronic word-of-mouth (eWOM), product knowledge, and environmental concern on purchase intention.

H8 assessed the mediating role of attitude (ATT) between electronic word-of-mouth (eWOM) and purchase intention (PI). Results show a strong, significant link between eWOM and ATT ($t = 61.774, p < 0.001$), and ATT significantly predicts PI ($t = 2.575, p = 0.010$). However, eWOM has no direct effect on PI ($t = 0.190, p = 0.850$). The indirect effect (0.341) and total effect (0.368) yield a VAF of 92.66%, indicating full mediation (Sarstedt et al., 2016). These results support prior findings by Hussain et al. (2017) and Erkan and Evans (2016) (see Table 7).

H9 examined whether attitude mediates the relationship between product knowledge and purchase intention. The analysis shows that product knowledge (PK) significantly influences attitude (ATT) ($t = 53.566, p < 0.001$), and ATT positively affects purchase intention (PI) ($t = 2.407, p = 0.016$). However, the direct effect of PK on PI is negative and not significant ($t = 0.521, p = 0.602$). The indirect effect (0.449) and total effect (0.347) yield a VAF of 129.39%, indicating inconsistent mediation (Sarstedt et al., 2016). Nevertheless, the significant indirect effect supports the hypothesis (See Table 8).

H10 assessed the mediation of attitude between environmental concern and purchase intention. The analysis indicates that environmental concern (EC) significantly influences attitude (ATT) ($t = 62.161, p < 0.001$), and ATT positively affects purchase intention (PI) ($t = 3.845, p = 0.000$). However, the direct effect of EC on PI is negative and marginally significant ($t = 1.963, p = 0.050$). The indirect effect (0.7357) and total effect (0.3267) yield a VAF of 225.2%, indicating inconsistent mediation (Sarstedt et al., 2016). Nonetheless, the significant mediation effect affirms the hypothesis (See Table 9).

Table 7
Mediation Analysis
Source: Survey data, 2025

Hypotheses	Path	Path Coefficient (β)	T statistics	P values	Results
H8	ATT_->PI_	0.143	2.575	0.000	Accept
	EWOM_->ATT_	0.015	61.774	0.000	Accept
	EWOM_->PI_	0.144	0.190	0.850	Reject

Table 8
Mediation Analysis
Source: Survey data, 2025

Hypotheses	Path	Path Coefficient (β)	T statistics	P values	Results
H9	ATT_->PI_	0.488	2.407	0.016	Accept
	PK_->ATT_	0.920	53.566	0.000	Accept
	PK_->PI_	-0.102	0.521	0.602	Reject

Table 9
Mediation Analysis
Source: Survey data, 2025

Hypotheses	Path	Path Coefficient (β)	T statistics	P values	Results
H10	ATT_->PI_	0.781	3.845	0.000	Accept
	EC_->ATT_	0.942	62.161	0.000	Accept
	EC_->PI_	-0.409	1.963	0.050	Accept

Implications

This study extends the Theory of Planned Behavior by highlighting attitude as a central mediator between eWOM, product knowledge, environmental concern, and purchase intention, especially in the green cosmetics context. It reveals that suppression effects, negative or weak direct effects of environmental concern and product knowledge, are counterbalanced by strong positive indirect effects through attitude, underscoring the complex emotional and cognitive dynamics. Additionally, the research confirms the indirect impact of eWOM via attitude, reinforcing the need to integrate digital influences into classical behavioral frameworks. Focusing on Gen Z in Sri Lanka, it addresses gaps in emerging market research and promotes gender inclusivity in green marketing.

These insights have practical relevance for green cosmetic brands in Sri Lanka. Given that attitude strongly drives Gen Z's purchase intentions, brands should prioritize transparent and emotionally resonant messaging that aligns with consumers' values. While eWOM does not directly predict behavior, its attitudinal influence is significant. Therefore, firms should leverage user-generated content, collaborate with eco-conscious influencers, and manage online reputation strategically. The presence of skeptical yet environmentally concerned consumers further emphasize the need for credible information on ingredients, production processes, and certifications to help build trust and counter greenwashing concerns.

Further, to enhance the impact, brands should adopt attitudinal segmentation, targeting both "skeptics" and "believers" with tailored messages. Moreover, optimizing campaigns across digital platforms, especially Instagram and TikTok, are essential to align with Gen Z's online behavior. This study further promotes sustainable consumption, contributing to key UN Sustainable Development Goals.

Conclusion

This study explored factors influencing Generation Z's purchase intention toward green cosmetics in Sri Lanka using the Theory of Planned Behavior (TPB). It focused on eWOM, product knowledge, and environmental concern, with attitude as a mediator. The findings indicate that both eWOM and product knowledge influence purchase intention indirectly via attitude, underscoring the significance of psychological engagement in green consumer behavior. Environmental concern demonstrated a complex relationship, exerting a negative direct effect on purchase intention but a positive indirect effect

through attitude, reflecting the nuanced nature of sustainable purchasing decisions. These results emphasize the pivotal role of consumer attitude and provide actionable insights for marketers aiming to emotionally engage Gen Z and foster trust through the strategic use of social media.

Limitations and Future Research

This study is limited to Gen Z consumers in Sri Lanka's Western Province recruited through judgmental sampling which reduces generalizability. The use of non-probability sampling further restricts applicability. It measures purchase intention rather than actual behavior and does not account for platform-specific differences in eWOM. Additionally, the cross-sectional, quantitative design limits depth and fails to capture changes over time.

Future studies should explore the unexpected negative effect of environmental concern on purchase intention, distinguish between subjective and objective product knowledge, and investigate barriers to green cosmetic purchases. Research should also examine evolving forms of eWOM and Gen Z's digital behavior, include broader demographics for generalizability, and use qualitative or mixed methods for deeper insights into consumer motivations.

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