

Consumption in the Beauty Industry: Factors Influencing Buying Behavior Toward Cruelty-Free Skincare

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ABSTRACT

The growing demand for ethical and sustainable beauty products has heightened consumer interest in cruelty-free skincare, underscoring the need to understand the factors shaping purchasing behavior. This study aims to examine the determinants of buyer behavior toward cruelty-free skincare products by integrating the ethical, cognitive, and social factors within the Theory of Planned Behavior (TPB) framework. Using a quantitative approach, data were collected from 216 skincare users in Indonesia, predominantly young and urban consumers. Structural Equation Modeling–Partial Least Squares (SEM-PLS) was employed to test the proposed relationships. The results reveal that attitude toward cruelty-free skincare has a strong and significant effect on buyer behavior ($\beta = 0.740$, $p < 0.001$). Environmental knowledge ($\beta = 0.233$, $p = 0.008$), subjective norms ($\beta = 0.270$, $p = 0.006$), and altruism ($\beta = 0.343$, $p < 0.001$) positively influence attitude, whereas personal appearance concern shows no significant effect ($\beta = 0.059$, $p = 0.315$). These findings reinforce the relevance of TPB in explaining ethical skincare consumption and extend prior studies by highlighting the importance of moral awareness, social influence, and environmental knowledge in shaping ethical purchasing behavior in an emerging market context.

Keywords: Altruism; Attitude; Buyer Behavior; Cruelty-Free Skincare; Theory of Planned Behavior

INTRODUCTION

The pursuit of sustainable consumption has become a central issue in achieving the Sustainable Development Goals (SDGs), particularly SDG 12 (Responsible Consumption and Production) and SDG 15 (Life on Land). In the beauty industry, skincare consumption is increasingly shaped not only by functional benefits but also by ethical and environmental considerations (Grappe et al., 2021). Skincare products are formulated to address specific skin types and conditions, and inappropriate product selection may reduce efficacy and increase the risk of skin irritation or damage (Draelos, 2021). As a result, consumer awareness of both product suitability and ethical attributes has become increasingly important.

In Indonesia, perceptions of beauty have evolved beyond traditional standards emphasizing fair skin, shifting toward clean, smooth, and healthy skin (Rosaline & Widianti, 2024). This shift has driven growth in skincare consumption, particularly facial care products, which dominated Indonesia's Fast-Moving Consumer Goods (FMCG) beauty market in the first half of 2024. Alongside market expansion, consumers have become more selective and value-oriented, increasingly relying on product labels as cues in their decision-making processes.

From a behavioral perspective, consumer responses to cruelty-free skincare can be explained through the Theory of Planned Behavior (TPB), which posits that attitudes, subjective norms, and individual beliefs shape behavioral outcomes (Ajzen, 2020; La Barbera & Ajzen, 2020). The TPB provides a robust framework for explaining ethical consumption by positing that behavior is primarily driven by attitude, subjective norms, and perceived behavioral control (Ajzen, 2020). In the context of cruelty-free skincare, TPB is particularly relevant because ethical purchasing decisions involve not only personal evaluations of product attributes but also moral beliefs and social expectations related to animal welfare and environmental responsibility (La Barbera & Ajzen, 2020; Zheng et al., 2021). Prior studies demonstrate that positive attitudes toward ethical products, reinforced by social influence and moral considerations, significantly enhance purchase intentions and actual buying behavior (Grappe et al., 2021; Magano et al., 2022). Thus, TPB offers a comprehensive lens to understand how cognitive, social, and ethical factors jointly shape consumer responses to cruelty-free skincare.

Environmental knowledge plays a critical role in forming positive attitudes toward ethical products, as consumers with higher awareness of environmental and animal welfare issues are more likely to support sustainable consumption practices (Cui et al., 2024). In the context of cruelty-free skincare, such knowledge strengthens consumers' evaluations of ethical product attributes and fosters favorable attitudes (Amalia & Darmawan, 2023; Wuisan & Februadi, 2022). Subjective norms also influence consumer attitudes, as social expectations and peer influence shape perceptions of acceptable and desirable consumption behavior (Baba et al., 2025; Dalziel & De Klerk, 2020). The growing visibility of animal-lover communities and ethical consumption discourse further reinforces social pressure to support cruelty-free products (Haris, 2022). Additionally, altruism reflects concern for the welfare of others, including animals, and has been shown to positively influence attitudes toward ethical and cruelty-free cosmetics (Liu, 2024; Marza et al., 2022).

Beyond ethical motives, personal appearance concern remains a salient driver in skincare consumption. Individuals who place high importance on personal appearance tend to be more engaged with skincare products and evaluate ethical attributes as part of their self-image and identity expression (Chin et al., 2018). Together, environmental knowledge, subjective norms, altruism, and personal appearance concerns are expected

to shape attitudes toward cruelty-free skincare, which subsequently influence buyer behavior, consistent with attitude-behavior relationships established in prior ethical consumption research (Dhir et al., 2021; Zheng et al., 2021).

Although prior studies have explored purchase intention toward cruelty-free or green cosmetics in Indonesia and other contexts (Amalia & Darmawan, 2023; Grappe et al., 2021; Le-Hoang & Nguyen, 2025), several gaps remain. Existing research predominantly focuses on purchase intention rather than actual buyer behavior and often examines ethical consumption variables in isolation rather than within an integrated theoretical framework. Moreover, limited attention has been given to the simultaneous role of environmental knowledge, subjective norms, altruism, and personal appearance concern in shaping attitudes toward cruelty-free skincare, particularly within emerging market contexts. Empirically, evidence from Java Island remains scarce, despite its role as Indonesia's economic and lifestyle trendsetter with relatively high socio-economic characteristics (CNN Indonesia, 2025). In addition, while halal and BPOM labels are widely prioritized as signals of product safety, cruelty-free labeling has not yet been firmly established as a key behavioral determinant. To address these gaps, this study aims to examine buyer behavior toward cruelty-free skincare by extending the TPB through an integrated attitudinal model. By doing so, this study offers a novel contribution by providing empirical evidence from an emerging market context and enriching the ethical consumption literature with insights relevant to SDGs.

LITERATURE REVIEW

Attitude Toward Cruelty-Free Skincare and Buyer Behavior

The TPB explains that attitude represents an individual's overall evaluation of a behavior and plays a central role in shaping behavioral outcomes (Ajzen, 2020). Attitude reflects beliefs about the consequences of an action and the value attached to those consequences. Within the TPB framework, attitude serves as a key psychological determinant that influences whether individuals are inclined to translate intentions into actual behavior, particularly in consumption contexts involving value-laden decisions such as ethical and sustainable products (Hidayat et al., 2021).

In the context of cruelty-free skincare, attitude refers to consumers' cognitive, affective, and conative evaluations of products that are not tested on animals. Positive attitudes emerge when consumers perceive cruelty-free skincare as ethically acceptable, environmentally responsible, and aligned with their personal values (Grappe et al., 2021). Such favorable evaluations strengthen consumers' willingness to act consistently with their attitudes, resulting in actual purchasing behavior. Empirical studies show that consumers with positive attitudes toward cruelty-free claims demonstrate stronger behavioral commitment and loyalty toward such products (Magano et al., 2022).

Prior studies grounded in the TPB consistently identify attitude as a key antecedent of consumer behavior; however, empirical findings across ethical and cruelty-free consumption contexts reveal important nuances that warrant further examination. While several studies report a strong link between favorable attitudes and purchase intentions for cruelty-free or green cosmetics (Amalia & Darmawan, 2023; Grappe et al., 2021; Magano et al., 2022), others suggest that positive attitudes do not always translate into actual buying behavior, particularly in emerging markets where price sensitivity, label salience, and habit may intervene. These inconsistencies highlight a critical gap between attitudinal support and realized buyer behavior, underscoring the need to empirically validate the attitude-behavior relationship proposed in H1.

H1: Attitude toward cruelty-free skincare influences buyers' behavior toward cruelty-free skincare.

Environmental Knowledge

Environmental knowledge represents consumers' understanding of environmental facts, ecological systems, and the consequences of human activities on nature (Cui et al., 2024). This knowledge also includes awareness of environmental challenges and practical actions that can mitigate ecological damage (Jayasekara et al., 2024). As a cognitive foundation, environmental knowledge enables consumers to evaluate products beyond functional attributes and to consider environmental and ethical implications in their judgments.

In the skincare context, consumers with higher levels of environmental knowledge are more capable of recognizing the ethical implications of animal testing and the environmental footprint of cosmetic production. Magano et al. (2022) demonstrate that environmentally knowledgeable consumers tend to form more favorable attitudes toward cruelty-free products, as such products are perceived to minimize harm to animals and ecosystems. Consequently, environmental knowledge serves as a critical antecedent in shaping positive attitudes toward cruelty-free skincare.

Prior studies consistently recognize environmental knowledge as an important cognitive foundation of ethical and sustainable consumption; however, its role in shaping attitudes toward cruelty-free skincare remains theoretically underexplored and context-dependent. Within the TPB, knowledge functions as a background factor that informs beliefs and evaluations, thereby indirectly shaping attitudes toward specific behaviors (Ajzen, 2020). Empirical evidence shows that consumers with higher environmental knowledge are more likely to develop favorable attitudes toward green and ethical products, as they better understand the environmental and moral consequences of their consumption choices (Cui et al., 2024; Dhir et al., 2021). Nevertheless, some studies emphasize that environmental knowledge alone does not always translate into ethical purchasing unless it is internalized as a moral obligation or ethical concern (Zheng et al., 2021), indicating potential variability across product categories and cultural contexts. In the cosmetics and skincare sector, where functional performance and appearance benefits often dominate decision-making, the attitudinal impact of environmental knowledge may differ from other green products (Grappe et al., 2021). This inconsistency highlights the need to empirically examine whether environmental knowledge effectively shapes consumer attitudes toward cruelty-free skincare, particularly in emerging markets such as Indonesia, where awareness of ethical labeling is still secondary to safety and halal considerations. Accordingly, this study posits that environmental knowledge positively influences attitude toward cruelty-free skincare.

H2: Environmental knowledge influences attitude toward cruelty-free skincare.

Subjective Norms

Subjective norms refer to individuals' perceptions of social pressure from important others to perform or avoid certain behaviors (Ajzen, 2020). Within the TPB framework, subjective norms capture the social dimension of decision-making, reflecting expectations from family, friends, and reference groups. When individuals value social approval and conformity, these perceived expectations can influence how they evaluate behaviors or products.

Research indicates that the influence of subjective norms depends on social context and perceived behavioral control (La Barbera & Ajzen, 2020). In the context of cruelty-free skincare, social encouragement from ethically conscious peers and communities

increases consumers' positive evaluations of cruelty-free products. [Magano et al. \(2022\)](#) highlight that supportive social environments strengthen consumers' attitudes toward cruelty-free consumption, suggesting that social approval reinforces ethical product evaluations.

Prior studies consistently acknowledge the relevance of social influence in ethical and sustainable consumption; however, their findings vary across contexts and product categories. Research in Western and developed markets suggests that peer groups, family expectations, and media exposure significantly enhance positive attitudes toward ethical cosmetics ([Dalziel & De Klerk, 2020](#); [Grappe et al., 2021](#)), while studies in Southeast Asian contexts emphasize the growing role of digital communities and influencers in shaping ethical perceptions, particularly among younger consumers ([Baba et al., 2025](#)). In Indonesia, where collectivist cultural values remain salient, social approval and conformity to group expectations may exert a stronger influence on attitudes toward cruelty-free skincare compared to purely individual motivations ([Amalia & Darmawan, 2023](#)).

H3: Subjective norms influence attitude toward cruelty-free skincare.

Altruism

Altruism reflects a moral orientation in which individuals prioritize the welfare of others over personal gain and act based on empathy, moral values, and social norms ([Liu, 2024](#)). Altruistic tendencies are shaped by personal experiences, family influence, interpersonal relationships, and social treatment, all of which contribute to the internalization of compassion and concern for others.

In consumer behavior, altruism manifests as concern for the well-being of animals and the environment. [Le-Hoang and Nguyen \(2025\)](#) explain that cruelty-free brands reflect altruistic values by rejecting animal testing practices. Internal factors such as altruism and concern for animal welfare influence ethical purchasing decisions for cruelty-free cosmetics, as consumers value brands that avoid animal testing and align with their moral and altruistic beliefs ([Le-Hoang & Nguyen, 2025](#)). Consumers who hold altruistic values tend to evaluate cruelty-free skincare more positively because such products align with their moral commitment to animal welfare. Empirical evidence confirms that altruistic values foster favorable attitudes toward cruelty-free and ethical cosmetic products ([Liu, 2024](#); [Marza et al., 2022](#)).

Prior studies suggest that consumers with strong altruistic values tend to evaluate products not solely based on functional or aesthetic benefits, but also on their perceived ethical consequences, such as harm avoidance and social responsibility ([Magano et al., 2022](#); [Marza et al., 2022](#)). However, empirical findings across contexts remain uneven. While research in Western and selected Asian markets confirms a positive association between altruism and favorable attitudes toward cruelty-free cosmetics ([Bonifacio et al., 2024](#); [Gustafson et al., 2022](#)), evidence from emerging markets such as Indonesia is still limited and fragmented. From a TPB perspective, altruism can be conceptualized as a moral belief that strengthens evaluative judgments, thereby shaping attitudes toward ethical products beyond normative or knowledge-based considerations ([Ajzen, 2020](#)).

H4: Altruism influences attitude toward cruelty-free skincare.

Personal Appearance Concerns

Personal appearance concern refers to individuals' attention to and evaluation of their physical appearance, including tendencies to compare themselves with others ([Neff & Vonk, 2009](#); [Rodgers et al., 2017](#)). These concerns are shaped by self-compassion,

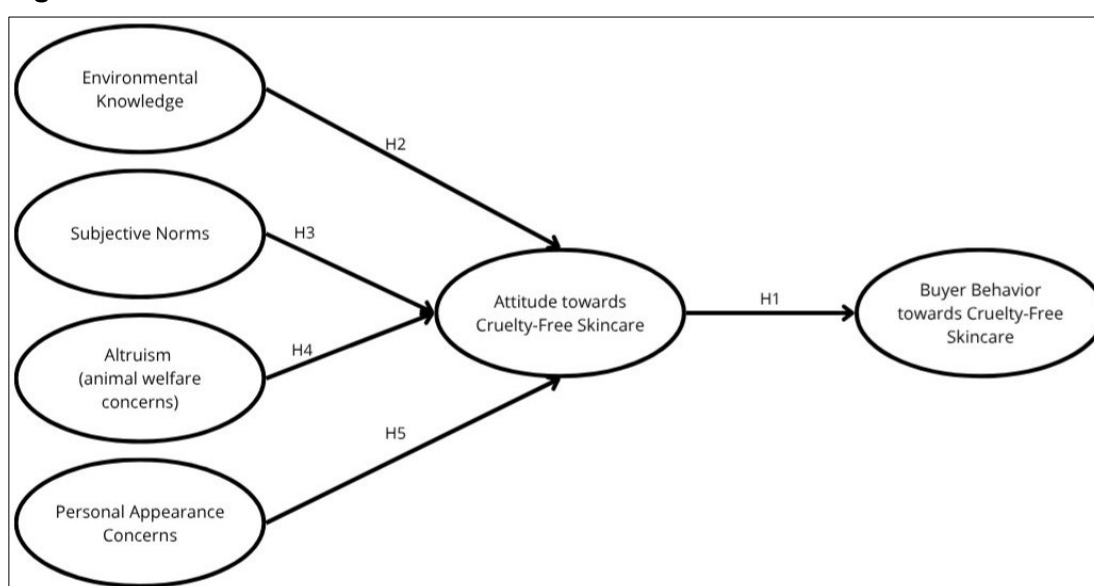
cultural standards, media exposure, and social norms, which collectively influence how individuals perceive their bodies and appearance (Rodgers et al., 2017).

In the skincare domain, individuals with high personal appearance concerns are more engaged in product evaluation and selection. Such consumers not only seek products that enhance skin health but also prefer options that align with their self-image and values. Cruelty-free skincare allows consumers to maintain their appearance while expressing ethical responsibility, leading to more favorable attitudes toward these products. Le-Hoang and Nguyen (2025) further demonstrate that positive attitudes toward cruelty-free cosmetics play a central mediating role between ethical values and purchase behavior, highlighting the importance of moral considerations in shaping consumer decisions. Their findings indicate that consumers increasingly perceive cruelty-free skincare to align with personal appearance management with ethical and social responsibility, which strengthens both attitude formation and behavioral intention toward such products. Therefore, personal appearance concern plays a meaningful role in shaping attitudes toward cruelty-free skincare.

H5: Personal appearance concerns influence attitude toward cruelty-free skincare.

Figure 1 illustrates the proposed research model.

Figure 1. Research Model



RESEARCH METHOD

This study employed a quantitative research design using an online survey administered through Google Forms. The research was conducted on Java Island, encompassing DKI Jakarta, West Java, Central Java, East Java, and the Special Region of Yogyakarta (DIY).

Java Island was selected due to its role as a trendsetter region, its rapid market development, and its relatively high middle-to-upper socioeconomic profile, making it a strategic area for examining consumer behavior toward innovative products such as cruelty-free skincare (CNN Indonesia, 2025). Moreover, Java Island is home to approximately 57.04% of Indonesia's total population, representing the highest concentration of population, economic growth, consumption activity, purchasing power,

and exposure to both digital and conventional marketing campaigns compared to other regions in Indonesia (Muhamad, 2024).

The study population consisted of male and female residents aged 16–60 years who resided on Java Island, used skincare products, and were aware of the cruelty-free concept. A non-probability sampling technique was applied using purposive sampling based on these criteria. Data were collected from 216 respondents who met the predefined inclusion criteria. Ethical considerations were observed throughout the data collection process. All respondents provided informed consent prior to participation, and anonymity and confidentiality of responses were ensured, with data used solely for academic research purposes.

The exogenous variables examined in this study were Environmental Knowledge, Subjective Norms, Altruism, and Personal Appearance Concern, while the endogenous variables included Attitude toward Cruelty-Free Skincare and Buyer Behavior toward Cruelty-Free Skincare.

The adequacy of the sample size followed the guideline proposed by Hair et al. (2022), which recommends multiplying the number of indicators by five to ten times; with 25 measurement indicators, the required sample size ranged from 125 to 250 respondents, indicating that the final sample size was sufficient for analysis.

Data were analyzed using Structural Equation Modeling with the Partial Least Squares approach (SEM-PLS), which is appropriate for examining complex relationships among multiple latent constructs. The analysis assessed the effects of Environmental Knowledge, Subjective Norms, Altruism, and Personal Appearance Concern on Attitude toward Cruelty-Free Skincare and Buyer Behavior toward Cruelty-Free Skincare.

All measurement indicators were adapted from Magano et al. (2022) and measured using a six-point Likert scale ranging from 1 (strongly disagree) to 6 (strongly agree).

RESULTS

Table 1. Profile of Respondents

Respondent Profile	Frequency	Percentage (%)
Gender		
Female	184	84.98
Male	32	14.7
Age		
< 16 years	2	0.9
17–24 years	187	86.6
25–35 years	20	9.3
36–49 years	3	1.4
> 50 years	4	1.9
Domicile		
Yogyakarta (DIY)	14	6.5
DKI Jakarta	124	57.4
West Java	54	25
Central Java	8	3.7
East Java	16	7.4
Current/Last Education Level		
Diploma (D3)	6	2.8
Applied Bachelor (D4)	1	0.5
Bachelor's Degree (S1)	151	69.9

Master's Degree (S2)	3	1.4
Elementary School	1	0.5
Senior High School	54	25
Occupation		
Freelancer	2	0.9
Housewife	6	2.8
Employee	33	15.3
University Student	161	74.5
Student	6	2.8
Entrepreneur	8	3.7
Do You Use Skincare Products?		
Yes	216	100
No	0	0
Frequency of Skincare Use		
Several times a week	33	15.3
Rarely	10	4.6
Daily	33	15.3
Types of Skincare Products Currently Used*		
Moisturizer	139	84.13
Sunscreen	134	82.69
Facial wash	34	66.83
Toner	175	64.42
Ampoule	172	16.35
Do You Pay Attention to Product Labels?		
Yes	216	100
No	0	0
If Yes, Which Labels Do You Notice? *		
BPOM	193	92.79
Cruelty-Free	42	50.48
Halal	101	48.56
Organic	70	33.65
Vegan	105	20.19%
Do You Own Pets?		
Yes	141	34.7%
No	75	65.3%

Table 1 presents the demographic and behavioral profile of the respondents. The sample was dominated by female participants (84.98%), with most respondents aged between 17 and 24 years (86.6%). The majority resided in DKI Jakarta (57.4%), followed by West Java (25.0%), indicating strong representation from major urban areas on Java Island. Most respondents held a bachelor's degree (69.9%) and were university students (74.5%). All respondents reported using skincare products, with daily usage being the most common frequency (80.1%). Moisturizers, sunscreens, and toners were the most frequently used products. All respondents indicated that they paid attention to product labels, with BPOM being the most recognized label, followed by halal and cruelty-free labels. Additionally, 34.7% of respondents reported owning pets, suggesting a relevant context for examining attitudes toward cruelty-free skincare.

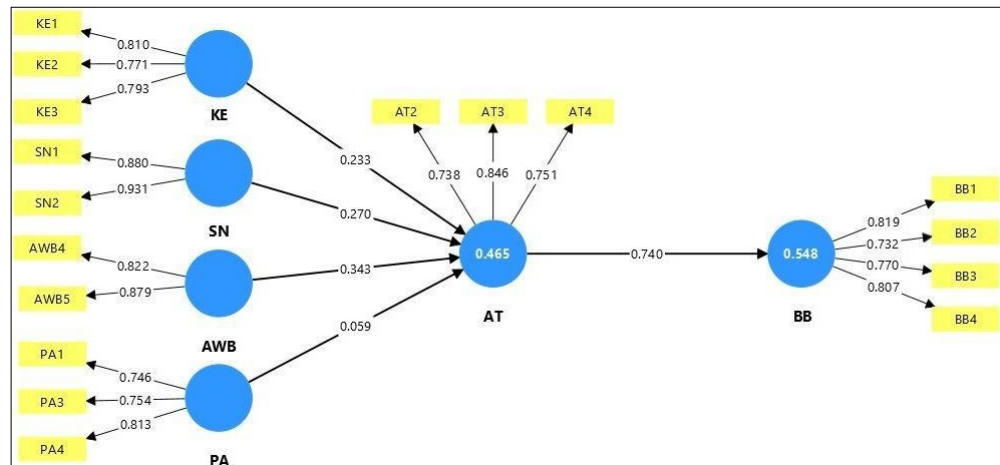
Table 2. Measurement Model Evaluation

Variable	Indicator	Outer Loading	AVE	Cronbach's Alpha	rho_A	Composite Reliability
Environmental Knowledge	KE1	0.810	0.626	0.703	0.706	0.863
	KE2	0.771				

	KE3	0.793				
Subjective Norms	SN1	0.880	0.821	0.785	0.824	0.902
	SN2	0.931				
Altruism	AWB4	0.822	0.724	0.621	0.633	0.840
	AWB5	0.879				
Personal Appearance Concern	PA1	0.746	0.595	0.666	0.681	0.815
	PA3	0.754				
	PA4	0.813				
Attitude towards Cruelty-Free Skincare	AT2	0.738	0.608	0.676	0.684	0.823
	AT3	0.846				
	AT4	0.751				
Buyer Behavior towards Cruelty-Free Skincare	BB1	0.819	0.612	0.789	0.798	0.863
	BB2	0.732				
	BB3	0.770				
	BB4	0.870				

The measurement model evaluation (Table 2) demonstrates satisfactory psychometric properties. All indicators exhibit outer loading values above the threshold of 0.70, and the Average Variance Extracted (AVE) for each construct exceeds 0.50, confirming convergent validity and adequate construct representation in line with Hair et al. (2022). Discriminant validity is also established, as each indicator loads highest on its respective construct, and the square root of AVE for each latent variable is greater than its correlations with other constructs. Reliability assessment further supports the robustness of the measurement model, with Cronbach's alpha values above 0.60 and composite reliability values exceeding 0.70 for all constructs, indicating strong internal consistency. In addition, multicollinearity is not a concern, as all Variance Inflation Factor (VIF) values range between 1.249 and 1.718, remaining well below the recommended threshold of 5.

Figure 2. Structural Model



The structural model (Figure 2) assessment shows moderate explanatory power. The R-squared value for Attitude towards Cruelty-Free Skincare is 0.548, indicating that Environmental Knowledge, Subjective Norms, Altruism, and Personal Appearance Concerns jointly explain 54.8 percent of the variance in attitude. Meanwhile, the R-squared value for Buyer Behavior towards Cruelty-Free Skincare is 0.465, suggesting that Attitude towards Cruelty-Free Skincare accounts for 46.5 percent of the variance in buyer behavior. These results indicate that the proposed model provides an adequate explanation of consumer behavior in the context of cruelty-free skincare.

The effect size analysis using F-squared reveals differentiated levels of influence among the predictors. Attitude towards Cruelty-Free Skincare exerts a strong effect on Buyer Behavior, with an F-squared value of 1.213, highlighting attitude as a key driver of actual purchasing behavior. Environmental Knowledge shows the strongest effect on Attitude towards Cruelty-Free Skincare, with an F-squared value of 0.740, indicating a substantial contribution to attitude formation. Altruism demonstrates a moderate effect on attitude, with an F-squared value of 0.168. In contrast, Subjective Norms and Personal Appearance Concerns exhibit weak effects on Attitude towards Cruelty-Free Skincare, with F-squared values of 0.099 and 0.006, respectively. Overall, these findings suggest that cognitive and value-based factors play a more prominent role than social pressure or appearance-related concerns in shaping attitudes toward cruelty-free skincare. The model fit assessment indicates an acceptable level of goodness of fit. The SRMR value for the saturated model is 0.079, which is below the recommended threshold of 0.08, indicating a good fit between the observed and predicted correlation matrices. This result suggests that the PLS-SEM model adequately represents the empirical data and demonstrates satisfactory overall model fit.

Table 3. Direct Effect

	Original Sample (O)	Sample Mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
AT -> BB	0.740	0.740	0.043	17.091	0.000
KE -> AT	0.233	0.238	0.088	2.657	0.008
SN -> AT	0.270	0.263	0.099	2.726	0.006
AWB -> AT	0.343	0.344	0.062	5.519	0.000
PA -> AT	0.059	0.066	0.059	1.006	0.315

Note: Attitude Toward Cruelty-Free Skincare (AT), Buyer Behavior (BB), Environmental Knowledge (KE), Subjective Norms (SN), Altruism (AWB), Personal Appearance Concern (PA)

The results of the structural model analysis presented in Table 3 demonstrate that attitude toward cruelty-free skincare (AT) has a strong and significant positive effect on buyer behavior (BB) ($\beta = 0.740$, $t = 17.091$, $p < 0.001$). This finding provides strong empirical support for H1, indicating that consumers' attitudes play a decisive role in shaping their purchasing behavior toward cruelty-free skincare products. The high path coefficient and t-value further suggest that attitude functions as a central explanatory construct within the proposed model, underscoring its importance in translating ethical evaluations into actual buying behavior.

With regard to the antecedents of attitude, environmental knowledge (KE) shows a positive and statistically significant effect on attitude toward cruelty-free skincare ($\beta = 0.233$, $t = 2.657$, $p = 0.008$), thereby supporting H2. This result indicates that consumers who possess greater awareness and understanding of environmental and animal welfare issues tend to form more favorable attitudes toward cruelty-free skincare products. Similarly, subjective norms (SN) significantly influence attitude ($\beta = 0.270$, $t = 2.726$, $p = 0.006$), confirming H3 and highlighting the importance of social pressure and normative expectations in shaping ethical consumption attitudes. This finding suggests that perceptions of approval or encouragement from important others and social reference groups contribute meaningfully to the development of positive attitudes toward cruelty-free skincare.

In addition, altruism (AWB) exhibits a significant positive effect on attitude toward cruelty-free skincare ($\beta = 0.343$, $t = 5.519$, $p < 0.001$), providing support for H4. Among the antecedent variables, altruism demonstrates the strongest influence on attitude, indicating that moral concern for animal welfare and ethical responsibility play a

prominent role in shaping favorable evaluations of cruelty-free skincare products. This result emphasizes the relevance of value-driven motivations in ethical consumption behavior.

In contrast, personal appearance concern (PA) does not have a statistically significant effect on attitude toward cruelty-free skincare ($\beta = 0.059$, $t = 1.006$, $p = 0.315$). Therefore, H5 is rejected, suggesting that appearance-related motivations do not substantially contribute to the formation of attitudes toward cruelty-free skincare products within the studied sample. Despite the general importance of appearance in skincare consumption, this variable does not emerge as a meaningful attitudinal predictor in the context of ethical product evaluation.

Overall, the hypothesis testing results confirm that cognitive factors (environmental knowledge), social influences (subjective norms), and moral values (altruism) significantly shape consumers' attitudes toward cruelty-free skincare, which in turn strongly drive buyer behavior. Conversely, personal appearance concerns appear to be less relevant in explaining ethical attitudes in the context of cruelty-free skincare consumption. Collectively, these findings demonstrate the robustness of the proposed structural model and provide empirical support for the hypothesized relationships, except for the non-significant path associated with personal appearance concern.

DISCUSSION

Significant Determinants of Attitude and Buyer Behavior Toward Cruelty-Free Skincare

The results demonstrate that attitude toward cruelty-free skincare is the strongest predictor of buyer behavior, thus supporting H1, and confirming the central proposition of the TPB that attitude is a key antecedent of actual behavior (Ajzen, 2020). This finding indicates that consumers who hold favorable evaluations of cruelty-free skincare are more likely to translate these attitudes into purchasing actions. The result is consistent with prior studies showing that positive attitudes toward ethical and cruelty-free cosmetics significantly enhance purchasing behavior and ethical consumption patterns (Grappe et al., 2021; Magano et al., 2022; Wuisan & Febuadi, 2022). This reinforces the applicability of TPB in explaining ethical skincare consumption within the Indonesian context.

Furthermore, environmental knowledge, subjective norms, and altruism were found to positively influence attitude toward cruelty-free skincare, providing empirical support for H2, H3, and H4, and highlighting the multidimensional nature of attitude formation. In line with TPB, these findings suggest that cognitive beliefs, perceived social expectations, and moral considerations jointly shape consumers' attitudinal evaluations (Ajzen, 2020; La Barbera & Ajzen, 2020). The significant role of environmental knowledge aligns with previous research emphasizing that informed consumers tend to develop stronger moral obligations and more favorable attitudes toward sustainable and ethical products (Cui et al., 2024; Dhir et al., 2021). This indicates that awareness of environmental and animal welfare issues enhances ethical evaluations of cruelty-free skincare.

The positive effect of subjective norms reflects the influence of social reference groups, peers, and online communities in shaping ethical consumption attitudes, particularly among younger consumers who are highly embedded in social networks, thereby confirming H3 (Baba et al., 2025; Dalziel & De Klerk, 2020). Similarly, altruism emerged as a significant attitudinal driver, supporting H4, and suggesting that concern for animal welfare and ethical responsibility strengthen favorable attitudes toward cruelty-free skincare. This finding is consistent with ethical consumerism literature, which

emphasizes altruistic values as a core motivation behind cruelty-free and sustainable product choices (Bonifacio et al., 2024; Marza et al., 2022; Le-Hoang & Nguyen, 2025).

Non-Significant Role of Personal Appearance Concern

In contrast, personal appearance concern did not have a significant effect on attitude toward cruelty-free skincare, leading to the rejection of H5. This result suggests that appearance-driven motivations may play a less dominant role compared to ethical and moral considerations in shaping attitudes toward cruelty-free products. While personal appearance concern is often associated with higher engagement in skincare consumption, it does not necessarily translate into stronger ethical evaluations of cruelty-free attributes.

This finding can be interpreted through the lens of psychological literature, indicating that appearance concerns are increasingly mediated by broader self-related constructs such as self-compassion and value-based identity, rather than solely by external beauty standards (Neff & Vonk, 2009; Rodgers et al., 2017). Among emerging adults, appearance-related consumption is no longer exclusively driven by aesthetic ideals but is increasingly integrated with ethical self-expression and moral identity. Consequently, consumers may prioritize ethical responsibility and animal welfare over appearance-related motivations when evaluating cruelty-free skincare, particularly within younger and more educated consumer segments.

Overall, these findings strengthen the explanatory power of TPB in the context of cruelty-free skincare consumption, with H1–H4 accepted, and H5 rejected, and highlight a shifting consumption logic in which ethical, environmental, and social values outweigh purely appearance-based considerations. This pattern reflects the growing importance of values-based consumption in the Indonesian skincare market, as also observed in prior studies on cruelty-free and ethical personal care products (Amalia & Darmawan, 2023; Le-Hoang & Nguyen, 2025).

The findings can be interpreted from the respondents' characteristics, which reflect a young, highly educated, and urban-dominated consumer segment. The predominance of female respondents aged 17–24 years, most of whom are university students and daily skincare users, helps explain the strong role of attitude in shaping buyer behavior toward cruelty-free skincare, consistent with the acceptance of H1, as this group is generally more engaged with product information and ethical branding. High awareness of product labels and frequent exposure to BPOM, halal, and cruelty-free labels indicate that cognitive factors such as environmental knowledge and subjective norms are salient in forming attitudes, supporting H2 and H3, particularly in urban settings like DKI Jakarta and West Java, where information access and social influence are stronger. Moreover, the proportion of respondents owning pets provides a relevant moral and emotional context that supports the influence of altruism on attitudes toward cruelty-free skincare, reinforcing H4. In contrast, the limited effect of personal appearance concern further substantiates the rejection of H5 and may reflect shifting beauty norms among young Indonesian consumers, who increasingly value ethical and environmental considerations alongside functional skincare benefits.

CONCLUSION

The objective of this study was to examine the determinants of buyer behavior toward cruelty-free skincare by analyzing the role of attitude and its antecedents, environmental knowledge, subjective norms, altruism, and personal appearance concern, within the framework of the TPB. The findings demonstrate that attitude toward cruelty-free

skincare plays a central role in shaping buyer behavior, confirming attitude as a key predictor of ethical consumption decisions.

By empirically confirming the positive effects of environmental knowledge, subjective norms, and altruism on attitude, this research supports H1–H4 and reinforces the TPB, while extending its explanatory power in the context of ethical consumption by integrating moral and value-driven constructs. In contrast, the non-significant role of personal appearance concern leads to the rejection of H5, suggesting that, within this consumer segment, ethical awareness and social influence outweigh appearance-oriented motivations when evaluating cruelty-free skincare products.

From a theoretical perspective, these findings contribute to the ethical consumption and sustainability literature by providing evidence from an emerging market context, where cruelty-free attributes are still developing as decision-making cues alongside more established labels such as halal and BPOM. This study demonstrates that incorporating altruistic values and environmental knowledge enhances the explanatory robustness of TPB in explaining ethical skincare consumption.

Practically, the results imply that marketers, industry practitioners, and policymakers should prioritize educational initiatives that enhance environmental and animal welfare knowledge, leverage social endorsement and normative influence, and emphasize ethical and moral messaging to strengthen favorable attitudes toward cruelty-free skincare. Such strategies are likely to be more effective than appearance-based appeals in encouraging ethical purchasing behavior among young consumers.

Finally, future research is encouraged to explore additional psychological and contextual factors, such as moral identity, trust in certification labels, and perceived product efficacy, as well as to apply qualitative or longitudinal approaches to capture deeper attitudinal dynamics across different consumer segments. Expanding the study to more diverse age groups and geographic regions would also help improve the generalizability of the findings and further advance research on sustainable and responsible consumption.

LIMITATION

This study has several limitations that should be acknowledged. Although the majority of respondents were university students, the sample also included freelancers, employees, housewives, entrepreneurs, and high school students. This heterogeneity may introduce variations in lifestyle, purchasing power, and skincare consumption patterns that were not fully controlled in the analysis. Additionally, the dominance of young respondents aged 17–24 limits the generalizability of the findings to older consumer segments with potentially different attitudes and motivations toward cruelty-free skincare. The use of self-reported data may also be subject to social desirability bias, particularly regarding ethical consumption behaviors.

Future studies are encouraged to involve more diverse demographic groups, including older consumers and working professionals, to enhance generalizability. Longitudinal research designs could provide deeper insights into the evolution of cruelty-free consumption behavior. Additionally, future research may incorporate other TPB-related variables, such as perceived behavioral control or moral obligation, as well as explore moderating factors such as cultural values or digital media influence on ethical skincare consumption.

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DECLARATION OF CONFLICTING INTERESTS

The authors report no conflicts of interest related to the conduct, authorship, or publication of this article.

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