

Why consumers choose green? The roles of environmental sensitivity, health consciousness, and attitude

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ABSTRACT

Green purchase intention is largely shaped by psychological factors that influence how consumers perceive and evaluate environmental issues. The present study investigates how environmental sensitivity and health consciousness drive the emergence of green purchase intention, while considering attitude toward green products as an intervening variable. The study was conducted among Avoskin consumers in Indonesia, and 152 participants were selected through purposive sampling. The analysis employed SmartPLS to assess measurement validity, construct reliability, and hypotheses. Empirical evidence demonstrates that environmental sensitivity and health consciousness significantly contribute to the development of attitudes toward green products and green purchase intention. Moreover, these attitudes directly influence green purchase intention. Attitude toward green products mediates the relationship between environmental sensitivity and health consciousness and green purchase intention. This study extends the theory of planned behavior and the value-belief-norm theory within the clean beauty industry in an emerging market. By validating the intervening role of green attitudes, the research clarifies the cognitive mechanism through which abstract psychological traits (environmental sensitivity and health consciousness) translate into concrete behavioral intent. For eco-friendly brands like Avoskin, these findings offer a blueprint for targeted marketing strategies. Marketing campaigns should simultaneously emphasize ecological benefits and personal health advantages, such as non-toxic ingredients or skin safety.

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1. Introduction

Economic growth continues to increase, yet it has caused ecological imbalances and accelerated excessive exploitation of natural resources (Nekmahmud et al., 2022). This development has heightened public and government awareness of the need for more environmentally responsible production systems and consumption patterns (Camilleri et al., 2023). Barbu et al. (2022) reported that 73% of consumers across 60 countries are committed to purchasing environmentally friendly products even at higher prices. This shift

in consumption patterns reflects growing individual concern for environmental preservation, as evidenced by green product purchases (Ogiemwonyi et al., 2023). A deeper understanding of green purchasing is needed, especially regarding the environmental impacts arising from human activities (Lin, 2023). Within this framework, green purchase intention can be viewed as a manifestation of consumption behavior that emphasizes environmental considerations alongside personal needs (Zhuang et al., 2021).

This concept also reflects customers' willingness to purchase products or services from companies that adopt ecological practices and represents the initial step among consumers who care about health, the environment, and nature conservation (Tao et al., 2022; Ali et al., 2023). Nevertheless, inconsistencies persist among consumer attitudes, purchase intentions, and purchasing decisions, especially for green products (Margariti et al., 2024). Considerations of price, availability, and skepticism toward sustainability claims lead consumers to continue choosing conventional alternatives (García-Salirrosas et al., 2023). A weak attitude toward green products is a major obstacle, as existing commitments are often insufficient to drive actual behavior (Khan et al., 2025).

This situation calls for further investigation into the determinants of green purchase intention, with particular attention to environmental sensitivity, health consciousness, and attitudes toward green products (Yen & Hoang, 2023; Chanda et al., 2024). Environmental sensitivity captures individuals' awareness of ecological concerns and often serves as a basis for environmentally responsible actions (Dunne et al., 2024). Health consciousness reflects a heightened awareness of personal well-being, leading individuals to make safe, environmentally sustainable consumption decisions (Nguyen et al., 2023). Together, these psychological aspects help shape favorable attitudes toward green products, which in turn strengthen green purchase intention (Li & Shan, 2025).

Several studies indicate that environmental sensitivity contributes to green purchase intention (Phuong et al., 2025). Greater environmental awareness encourages consumers to place greater importance on green products and indicates a readiness to incur additional costs, particularly among younger generations (Gomes et al., 2023). Conversely, limited environmental sensitivity is often reflected in a lack of concern toward ecological issues, which can reduce individuals' engagement in environmentally responsible behavior (Lohani et al., 2025). High environmental sensitivity motivates individuals to minimize environmental damage through behaviors such as green purchasing (Yayla et al., 2022). Building on Verplanken and Orbell (2022), who highlight that attitude serves as an evaluative mechanism that directs behavior, this study treats attitude toward green products as a mechanism by which environmental sensitivity influences green purchase intention.

Greater health consciousness is linked to a higher level of green purchase intention (Kaur et al., 2024; Aguinaga & Paula, 2025; Ji et al., 2025; Li & Shan, 2025). Health consciousness increases awareness, motivation, and knowledge related to health aspects, thus influencing consumer preferences for safe and sustainable products (Kaur et al., 2024). Low health consciousness can increase health risks and impede environmental sustainability efforts (Nordström, 2023). This influence is related to attitudes toward environmentally friendly products, which shape consumer decisions (Cam, 2023). This concept is linked to the development of favorable evaluations of green products and higher purchase intentions (Hoyer et al., 2018; Yen & Hoang, 2023; Chanda et al., 2024; Rivera & Paula, 2024).

This study draws on the value-belief-norm (VBN) theory, which posits that environmentally oriented actions are linked to the combined influence of personal value orientations, perceptions of environmental concerns, and internal norms that shape individuals' actions (Stern et al., 1999; Sun et al., 2024). Environmental sensitivity reflects ecological values and beliefs that motivate behaviors such as green purchasing (Balaskas et al., 2023). When environmental sensitivity is limited, individuals are less likely to recognize

environmental issues and may show diminished support for sustainability-oriented actions (Akay & Akçaova, 2025). Furthermore, consumers with high health consciousness believe that environmentally friendly products provide long-term health benefits, which motivates purchase intentions (Pontes et al., 2024; Van Hoang & Tung, 2024; Khan & Qureshi, 2025).

In addition, this study adopts the theory of planned behavior (TPB), which explains that behavioral intention is shaped by personal evaluations of a particular action (Ajzen, 1991). From this perspective, greater environmental concern and health consciousness are associated with positive attitudes toward green products (Han & Utama, 2024; Sriramaneni et al., 2025). This attitude ultimately directs consumers to contribute to environmental sustainability through green product purchases (Februadi et al., 2022; Fenta et al., 2024). The increasing demand for sustainable beauty products provides the context for this study, which investigates consumer purchasing behavior toward Avoskin products in Indonesia. As a prominent local brand, Avoskin emphasizes environmentally responsible practices, such as adopting natural ingredients, utilizing sustainable packaging, and promoting recycling initiatives (Kadir, 2025). Its consistent application of sustainability principles makes Avoskin a relevant context for analyzing green purchase intention.

Previous studies have presented separate findings. Chanda et al. (2024) show that environmental sensitivity is associated with the development of favorable attitudes toward green products, which, in turn, enhance green purchase intention. Meanwhile, Yen and Hoang (2023) concluded that health consciousness influences attitude toward green products, which then drives purchase intention. Although both studies employed the same mediating variable, they examined different psychological aspects, yielding partial insights. Therefore, a more comprehensive understanding can be achieved by examining how these psychological factors jointly shape attitudes and, in turn, influence purchasing intentions. Based on the above discussion, this study aims to analyze the influence of environmental sensitivity and health consciousness on green purchase intention, with attitude toward green products as an intervening variable, among Avoskin consumers in Indonesia.

2. Literature Review and Hypothesis Development

2.1. Literature Review

2.1.1. Theory of Planned Behavior and Value-Belief-Norm Theory

Ajzen (1991) introduced the theory of planned behavior (TPB). The theory states that three factors: attitude, subjective norms, and perceived behavioral control, are essential to the development of behavioral intention, which in turn influences human behavior (Ajzen, 1991). A person's attitude toward an action indicates how much they think it is good or bad (Ajzen, 1991). According to the TPB, an individual is more likely to imitate an action if they have a positive attitude about it (Yadav & Pathak, 2016). When people view behavioral outcomes favorably, they are more likely to exhibit positive attitudes and engage in specific activities (Ajzen, 1991; Han et al., 2010).

Since individual elements are crucial to consumers' behavioral processes (Bigliardi et al., 2020), this study uses the value-belief-norm (VBN) theory to investigate the variables that affect customers' intentions to make green purchases. Stern et al. (1999) created and first presented the VBN theory. According to this theory, beliefs (ecological worldview, knowledge of consequences, and ascription of responsibility) are influenced by values (altruistic, biospheric, and egoistic). Personal norms are influenced by these ideas, which ultimately impact conduct. VBN was originally developed to assess environmentalism, but it has since been applied to the empirical analysis of green-goods purchases, including cosmetics (Quoquab et al., 2020).

2.1.2. Environmental Sensitivity

Environmental sensitivity reflects how individuals react to environmental stimuli, shaped by their psychological background and life experiences (Annalisa et al., 2022; Yano & Oishi, 2024). Greater sensitivity is often associated with stronger responsiveness to pro-environmental communication, heightened ecological awareness, and an enhanced intention to choose green products (Chen et al., 2022; Balaskas et al., 2023; Pluess et al., 2023). Environmental sensitivity concerns one's viewpoint and understanding of both behavior and environmental issues. According to Abd'Razack et al. (2017), consumers' adoption of green products is therefore driven by values and beliefs that benefit the environment. According to Law et al. (2017), consumers with environmental sensitivity expressed this through their attitudes and character, as well as their steadfast devotion to environmental preservation.

2.1.3. Health Consciousness

Health consciousness is associated with greater awareness of personal well-being, shaping the way individuals evaluate and choose products (Remr, 2023; Liang et al., 2024). Health-conscious individuals are typically characterized by stronger self-regulation and greater attentiveness to their health, which can lead them to favor green products as part of their self-identity and for long-term benefit considerations (Harris et al., 2020; Farfán et al., 2025; Saintila et al., 2025). Health consciousness not only directly promotes green purchase intentions but also indirectly influences consumers' behavioral intentions by enhancing attitudes, subjective norms, and perceived behavioral control (Li & Shan, 2025). Consumers with high health consciousness are more likely to hold positive attitudes toward organic foods because they believe these products support health maintenance and provide long-term health benefits (Ishaq et al., 2021; Chetioui et al., 2023).

2.1.4. Green Purchase Intention

Green purchase intention refers to consumers' willingness to buy green products (Wang et al., 2019). The term "green purchase intention" refers to a consumer's inclination to purchase environmentally friendly products in the future (Bósquez et al., 2023). Similarly, according to Sheng et al. (2019), green purchase intention is the precursor to behavior and denotes a deliberate action plan that enables a person to accomplish a particular objective. Individuals with green purchase intention tend to prefer sustainability-oriented products and act on this preference in their actual purchasing decisions (Nassanbekova et al., 2024). This tendency is shaped by awareness of environmental issues, the need for healthier products, and commitment to sustainability (Mensah, 2021; Siyal et al., 2021). Such intention underlies environmentally responsible actions, reflected in consumers' choices, purchasing decisions, and support for sustainable products and corporate practices (Oliver et al., 2023; Ramadhanti et al., 2024).

2.1.5. Attitude toward Green Product

The construct refers to consumers' overall judgment of sustainable products (Rivera & Paula, 2024). This judgment is based on perceptions of ecosocial, personal, and company benefits, as well as the effectiveness of consumer actions (Barbu et al., 2022). Consumers view green products as efforts to repair environmental damage while meeting needs. A positive attitude contributes to environmental sustainability (Shang et al., 2024; Hermanto et al., 2024). Furthermore, according to Chekima et al.

(2016), attitude toward the environment refers to customers' evaluation of the environment, shaped by their perceptions and actions. Similarly, one of the most important aspects that directly affects green purchase intention is the idea of environmental concern on environmental attitude (Kamalanon et al., 2022).

2.2. Hypothesis Development

2.2.1. Positive Effect of Environmental Sensitivity on Green Purchase Intention

The VBN framework highlights that awareness of environmental preservation guides individuals in acting in ways that support sustainability (Stern et al., 1999). These underlying values and beliefs are reflected in environmental sensitivity, including ecological awareness and a sense of responsibility for safeguarding the environment (Tiwari, 2023). A higher degree of environmental sensitivity often translates into greater awareness of environmental problems and a greater tendency to participate in actions to address them (Dong et al., 2023). Greater awareness can encourage the view that individual contributions matter in sustaining the environment (Al Mamun et al., 2025). This belief strengthens a sense of moral obligation, which can influence consumers' tendency to consume sustainable products (Hong et al., 2024).

Greater sensitivity to ecological problems has been linked to a stronger intention to purchase green products (Kim & Lee, 2023; Chen et al., 2024). The sensitivity makes individuals more aware of the impacts of pollution, leading them to choose green products (Chanda et al., 2024). In addition, such concern leads individuals toward healthier living patterns and a greater preference for eco-friendly products (Moslehpour et al., 2023). Consistency in findings has been documented across previous studies (Cui et al., 2024; Han & Utama, 2024). **H₁: Environmental Sensitivity Has a Positive Effect on Green Purchase Intention**

2.2.2. Positive Effect of Environmental Sensitivity on Attitude Toward Green Product

Drawing on the VBN theory, this study considers consumers' views of environmentally responsible products as reflecting their underlying perceptions of sustainability-related values (Stern et al., 1999). Environmental sensitivity refers to how individuals respond to environmental conditions, shaped by awareness and perception, experience, and the emotional processing of environmental information (Wigley et al., 2025). Individuals with this mindset will experience environmental stimuli intensely, have a strong attachment to nature, and exhibit heightened emotional reactions to environmental issues (Duradoni et al., 2025). Consumers with a strong connection to the environment typically develop a sense of ecological responsibility and are driven to adopt values aligned with nature conservation (Megha, 2024). A sense of responsibility can foster favorable evaluations of green products, as purchasing them is often viewed as a way to protect and preserve the environment (Alam et al., 2023). These perceptions encourage more positive attitudes toward green products (Februadi et al., 2022).

Heightened environmental concern increases individuals' awareness of their protective role, encouraging more thoughtful consumption and a more positive attitude toward green products (Mihuț et al., 2025). Empirical evidence from prior studies further confirms a positive association between the two constructs (Chanda et al., 2024; Supartha & Sukaatmadja, 2025). **H₂: Environmental Sensitivity Has a Positive Effect on Attitudes Toward Green Products**

2.2.3. Positive Effect of Attitude Toward Green Products on Green Purchase Intention

According to Ajzen (1991), the TPB posits that behavioral intention is influenced by attitude toward that behavior. Regarding green products, this attitude reflects how they are perceived and evaluated based on individuals' values and awareness of environmental concerns (Mani & Ndubuisi, 2023; Nguyen, 2023). Positive perceptions of the benefits of green products contribute to more favorable evaluations and encourage more positive attitudes (Liu et al., 2025; Februadi et al., 2022). When green products are perceived as capable of meeting consumer needs while benefiting the environment, more favorable attitudes toward them are likely to lead to stronger purchase intentions (Shang et al., 2024).

Positive attitudes can increase the likelihood that individuals will intend to choose environmentally responsible options (Chen et al., 2022). The use of green products in daily life tends to be higher among consumers who hold more positive attitudes (Mehta & Chahal, 2021). These attitudes strengthen green purchase intentions (Ahmed et al., 2023). Existing evidence also demonstrates a significant positive relationship aligned with this hypothesis (Vania & Ruslim, 2023). **H₃: Attitude Toward Green Product Has a Positive Effect on Green Purchase Intention**

2.2.4. Environmental Sensitivity and Green Purchase Intention: The Role of Attitude Toward Green Products

This sensitivity indicates a heightened responsiveness to environmental stimuli and a stronger emotional attachment to the natural environment (Annalisa et al., 2022). In line with VBN theory, such ecological awareness can lead to more positive assessments of green products (Stern et al., 1999). This positive evaluation contributes to the development of favorable attitudes. Thus, greater environmental sensitivity is associated with stronger attitudinal responses (Chanda et al., 2024; Liu et al., 2025).

In the TPB, behavioral intention is primarily influenced by an individual's attitude (Ajzen, 1991). When consumers view green products positively, they tend to have greater intention to choose them, as doing so may reflect a sense of environmental responsibility (Yen & Hoang, 2023). While environmental sensitivity can directly influence green purchase intention, research also shows that this influence can occur through the mediation of attitude toward green products (Chanda et al., 2024). Thus, higher levels of this trait are associated with more favorable evaluations, which, in turn, contribute to stronger green purchase intention (Han & Utama, 2024). Therefore, this construct can be considered a mediating factor linking the former and the latter (Chanda et al., 2024; Han & Utama, 2024; Supartha & Sukaatmadja, 2025). **H₄: Attitude Toward Green Product Mediates Positive Influence of Environmental Sensitivity on Green Purchase Intention**

2.2.5. Positive Effect of Health Consciousness on Green Purchase Intention

Sustainable behavior develops from internal value orientations and environmental viewpoints that give rise to a sense of responsibility to take appropriate actions, as explained by VBN theory (Stern et al., 1999). Health consciousness relates to the extent to which individuals prioritize their physical well-being (Castellini et al., 2023). Greater health consciousness often reflects heightened attention to personal well-being and encourages preventive behavior, such as choosing products regarded as healthier options (Li & Shan, 2025; Yang et al., 2023).

With higher awareness, consumers tend to prioritize products that contribute to their well-being and limit their selection of products that may pose health risks (Phuong et al., 2025). Eco-friendly products are perceived as healthier because they use natural ingredients and are processed cleanly, making them attractive to consumers with high health consciousness (Bayona et al., 2023). Health consciousness is associated with a greater preference for green products that meet health standards in daily consumption, thereby reinforcing green purchase intention (Cam, 2023; Kaur et al., 2024; Gulzar et al., 2024).

Moreover, Fitriani and Warganegara (2024) explains that this concept influences preferences for the consumption of environmentally friendly products. Health reasons are the primary motivation for green purchase intention (Phuong et al., 2025). This purchasing behavior is also seen among health-conscious consumers, as it reflects alignment with their underlying health principles (Qasim et al., 2019). Accordingly, higher health consciousness is associated with stronger intentions to purchase green products (Liang et al., 2024; Sriramaneni et al., 2025). **H₅: Health Consciousness Has a Positive Effect on Green Purchase Intention**

2.2.6. Health Consciousness and Attitudes Toward Green Products

The VBN theory explains that positive evaluations of actions aligned with personal values are shaped by individuals' internalized value orientations and belief systems (Stern et al., 1999). Health consciousness reflects individuals' views on health and encourages more careful consideration in maintaining their physical condition (Mendoza et al., 2024). Higher health consciousness leads consumers to prioritize health considerations, prefer environmentally friendly products, and accept higher prices (Alsubhi et al., 2023). This concept also influences consumers' risk evaluations of products perceived as safer and healthier (Diliarosta et al., 2021). This awareness encourages consumers to choose products with health attributes, including eco-labels and benefits for physical well-being (Uliano et al., 2024).

Sustainable products are often perceived as safer alternatives due to their reliance on organic materials (Dwivedi et al., 2025). This positive assessment provides significant health value to consumers who prioritize health consciousness, thereby fostering a positive attitude toward green products (Cam, 2023; Liu et al., 2025). Individuals with greater concern for personal health are also more likely to perceive green products positively, as these products are associated with long-term well-being (Li & Shan, 2025). Such consciousness is important in shaping favorable evaluations (Pan et al., 2025) and is consistently associated with the formation of positive attitudes (Kaur et al., 2024; Liang et al., 2024). **H₆: Health Consciousness Has a Positive Effect on Attitudes Toward Green Products**

2.2.7. Health Consciousness and Green Purchase Intention: The Role of Attitude Toward Green Product

Individuals who adopt environmental principles tend to evaluate actions consistent with those principles more positively, as explained by the VBN theory (Stern et al., 1999). Greater health consciousness is often associated with more positive evaluations of environmentally responsible products, as these are viewed as safe, healthy, and aligned with personal values, leading to positive attitudes (Liang et al., 2024). VBN theory also explains that health consciousness can directly drive green purchase intentions because health consciousness makes consumers more careful in selecting products and integrates health values into purchasing decisions (Huang et al., 2022).

The TPB suggests that favorable evaluations of a behavior lead to stronger intentions to engage in it (Ajzen, 1991). Extant literature consistently highlights the role of attitude toward green products in enhancing green purchase intention (Ahmed et al., 2023; Liao et al., 2020; Olfat, 2025). Consumers who perceive environmentally friendly products as healthy, safe, and ecologically valuable choices are more likely to purchase them. Yen and Hoang (2023) identify an indirect relationship whereby health consciousness affects green purchase intention through the intervening variable of attitude toward green products. Similarly, other studies confirm that this condition shapes more favorable evaluations, ultimately increasing green purchase intention (Liang et al., 2024; Sriramaneni et al., 2025). Therefore, this construct can be viewed as a mediating factor linking the predictor and the outcome (Kaur et al., 2024). **H₇: Attitude Toward Green Product Mediates Positive Influence of Health Consciousness on Green Purchase Intention**

The research model (Figure 1) examines how environmental sensitivity and health consciousness influence the intention to purchase green products through consumer attitudes. This structure is a path analysis or structural equation modeling (SEM) model that positions the attitude toward green products variable as a mediator.

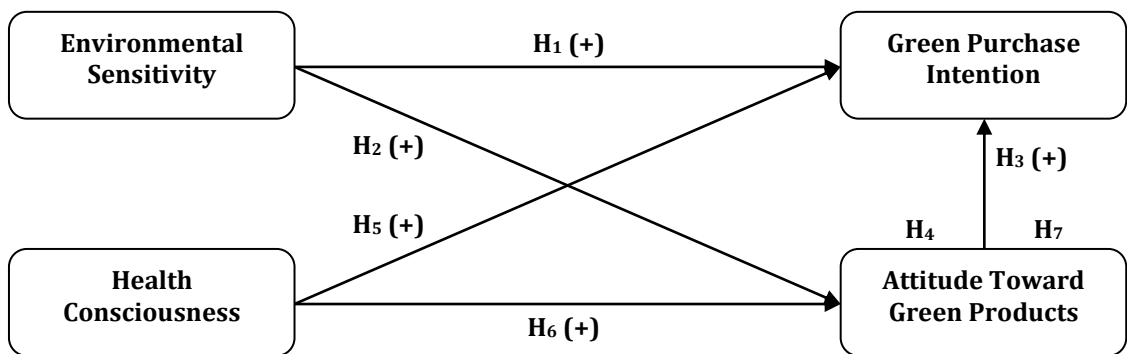


Figure 1. Research Model Development

3. Research Methods

3.1. Population and Sampling Method

The present study targeted users of Avoskin cosmetic products in Indonesia. The sample comprised 152 respondents. This number was determined with reference to Roscoe (1975), who proposed that an appropriate sample size typically ranges from 30 to 500 participants. Respondents were selected through purposive sampling based on the following criteria: respondents had used Avoskin products at least once, were over 18 years of age, and were concerned about environmental issues and eco-friendly products. The research instrument included closed-ended questions rated on a five-point Likert scale, where a score of 1 represented “strongly disagree” and a score of 5 represented “strongly agree.”

3.2. Data Collecting Method

The research employed indicators adapted from earlier research that have demonstrated adequate validity and reliability. Furthermore, all measurement items were translated into Indonesian and adjusted to the context of Avoskin consumers in Indonesia. Variable measurements were conducted using the following indicators: environmental sensitivity has 4 indicators by Chanda et al. (2024), health consciousness has 3 indicators by Yen and Hoang (2023), green purchase intention has 5 indicators by

Yen and Hoang (2023), and attitude toward green products has 3 indicators by Ahmed et al. (2023).

3.3. Data Analysis Method

The relationships among latent constructs were examined through a structural equation modeling–partial least squares (SEM-PLS) approach implemented in SmartPLS 4.0 (Hair et al., 2021). The analysis process covered several stages, including testing for validity and reliability, and evaluating hypotheses. Validity was examined using outer loading criteria, with indicators required to meet a minimum loading of 0.7 and an average variance extracted (AVE) greater than 0.5 (Hair et al., 2019). A good variance inflation factor (VIF) value should be less than 5 (Hair et al., 2019). If the VIF is greater than 5, there is multicollinearity among the variables. Reliability was evaluated through Cronbach's alpha and composite reliability > 0.7 (Hair et al., 2019). R-Square measures the extent to which the independent variables can explain the variation in the dependent variable. According to Chin (1998), an R^2 value is considered strong if it exceeds 0.67. Meanwhile, the Adjusted R-Square is a measure that accounts for the number of independent variables and the sample size in the model. The significance of inter-variable relationships was examined through hypothesis testing using a p-value < 0.05 (Hair et al., 2019). Subsequently, the model's explanatory power was evaluated.

4. Results and Discussion

4.1. Characteristics of Respondents

Table 1 provides an overview of respondent characteristics. Most respondents were female ($n = 106$). Age distribution: the 18–30 age group accounted for the largest share, with 112 individuals. Most respondents had a high school education (68 individuals), while students accounted for the largest occupational group (56 individuals). Meanwhile, the most common frequency of Avoskin product use was 2–3 times per week, reported by 45 respondents.

Table 1. Characteristics of Respondents

Characteristics	Description	Frequency	Percentage
Gender	Female	106	69.7
	Male	46	30.3
Age (Years)	18-30 Years Old	112	73.7
	31-40 Years Old	38	25
	41-50 Years Old	2	1.3
Education	High School Graduate	68	44.7
	Diploma	7	4.6
	Bachelor's Degree	61	40.2
	Master's	16	10.5
Occupation	Degree/Doctorate		
	Student	12	8
	College Student	56	36.8
	Professional Worker	18	11.8
	Self-Employed	26	17.1
	Housewife	22	14.5
Frequency of Use	Not Working	18	11.8
	Rarely	35	23
	Once a Week	39	25.7
	2-3 Times a Week	45	29.6
	Almost Every Day	33	21.7

4.2. Validity and Reliability Test

Figure 2 shows the outer loading values for each indicator; none were eliminated, so all were found to be valid. Environmental sensitivity (ES) has 4 indicators; health consciousness (HC) has 3; green purchase intention (GPI) has 5; and attitude toward green products (AGP) has 3.

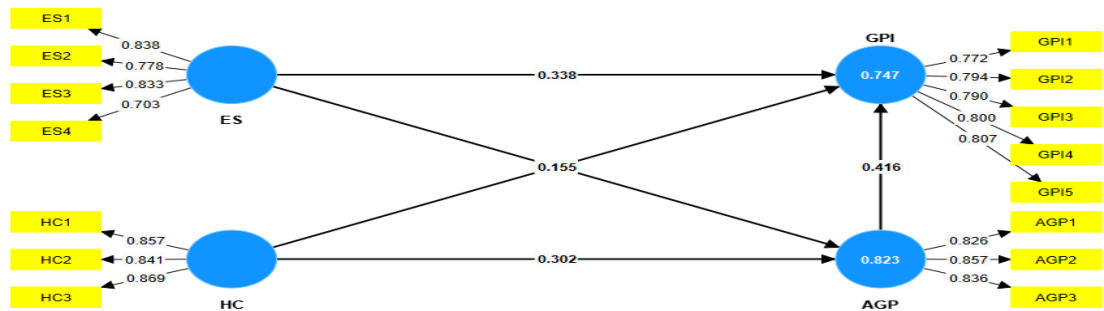


Figure 2. Measurement Model

Table 2 confirms that all constructs achieved acceptable levels, as reflected by outer loadings > 0.7 and AVEs > 0.5. In addition, the reliability criteria are met, as evidenced by Cronbach's alpha and composite reliability > 0.7.

Table 2. Construct Validity and Convergent Reliability

Construct	Outer Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Environmental Sensivity		0.798	0.869	0.624
ES1	0.838			
ES2	0.778			
ES3	0.833			
ES4	0.703			
Health Consciousness		0.817	0.891	0.732
HC1	0.857			
HC2	0.841			
HC3	0.869			
Green Purchase Intention		0.853	0.894	0.628
GPI1	0.772			
GPI2	0.794			
GPI3	0.790			
GPI4	0.800			
GPI5	0.807			
Attitude toward Green Product		0.791	0.878	0.705
AGP1	0.826			
AGP2	0.857			
AGP3	0.836			

4.3. Inner Model

Based on Table 3, the study shows no indication of multicollinearity, as all VIF values are <5. This confirms that the indicators used for each variable are appropriate for model estimation. Furthermore, the model explains 82% of the variance in attitude toward green products ($R^2 = 0.823$; adjusted $R^2 = 0.820$) and 74% of the variance in green purchase intention ($R^2 = 0.741$; adjusted $R^2 = 0.742$).

Table 3. VIF and R-Square

Indicator Variables	VIF	R-Square	R-Square Adjusted
Environmental Sensitivity		-	-
ES1	1.772		
ES2	1.612		
ES3	1.870		
ES4	1.381		
Health Consciousness		-	-
HC1	1.795		
HC2	1.779		
HC3	1.876		
Green Purchase Intention		0.741	0.742
GPI1	1.708		
GPI2	1.853		
GPI3	1.977		
GPI4	2.058		
GPI5	1.951		
Attitude toward Green Product		0.823	0.820
AGP1	1.655		
AGP2	1.799		
AGP3	1.593		

4.4. Hypothesis Test

All hypotheses in this study were accepted or supported because the p-values were less than 0.05, as shown in Table 4. Environmental sensitivity positively affects green purchase intention. Environmental sensitivity has a positive effect on attitude toward green products. Attitude toward green products positively affects green purchase intention. Attitude toward green products mediates the relationship between environmental sensitivity and green purchase intention. Health consciousness positively affects green purchase intention. Health consciousness has a positive effect on attitude toward green products. Attitude toward green products mediates the relationship between health consciousness and green purchase intention.

Table 4. Path Analysis

Hypothesis	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
Environmental Sensitivity → Green Purchase Intention	0.610	0.608	0.073	8.385	0.000
Environmental Sensitivity → Attitude Toward Green Product	0.653	0.651	0.053	12.253	0.000
Attitude Toward Green Product → Green Purchase Intention	0.416	0.405	0.105	3.981	0.000
Environmental Sensitivity → Attitude Toward Green Product → Green Purchase Intention	0.272	0.264	0.075	3.611	0.000
Health Consciousness → Green Purchase Intention	0.280	0.283	0.078	3.597	0.000
Health Consciousness → Attitude Toward Green Product	0.302	0.302	0.057	5.307	0.000
Health Consciousness → Attitude Toward Green Product → Green Purchase Intention	0.126	0.121	0.036	3.528	0.000

4.5. Discussion

4.5.1. Environmental Sensitivity and Green Purchase Intention

The VBN theory suggests that environmental concern shapes moral norms that guide individuals toward environmentally friendly behavior (Stern et al., 1999). Environmental sensitivity serves as a foundational belief that enhances understanding of ecological consequences, leading individuals to prefer products that do not harm ecosystems (Ahmed et al., 2025). This understanding fosters an internal drive to act more responsibly toward the environment (Zhang et al., 2025). Consistent with this result, environmental sensitivity is positively reflected in green purchase intention, with higher levels corresponding to stronger intention (Chanda et al., 2024; Risyafani et al., 2024). This factor motivates individuals to engage in eco-friendly purchasing intentions in support of future environmental conservation efforts (Kim & Lee, 2023). Collectively, these studies suggest that environmental sensitivity is a key determinant in fostering green purchase intention.

4.5.2. Environmental Sensitivity and Attitude Toward Green Products

Theoretically, this relationship is supported by the VBN theory, which posits that greater attention to environmental issues strengthens environmentally oriented value systems and beliefs, thereby shaping favorable evaluations of consistent consumption behaviors (Stern et al., 1999). Environmental sensitivity enables individuals to assess and respond to environmental conditions, both physical and psychosocial (Matejczuk et al., 2022). High levels of environmental sensitivity also increase moral conviction and a sense of responsibility to take corrective action on environmental issues (Mamun et al., 2022). This responsibility fosters personal norms reflecting a moral obligation to support environmentally friendly actions (Wahid et al., 2022). These personal norms then serve as a foundation for shaping positive evaluations of green products (Ogiemwonyi et al., 2023).

Hong et al. (2024) indicate that stronger individual beliefs are associated with more positive attitudes toward green products. Chanda et al. (2024) emphasize that heightened awareness of the ecological implications of consumption plays a key role in shaping individual attitudes. Research by Yayla et al. (2022) also shows that environmental sensitivity can strengthen pro-environmental attitudes and increase the likelihood of choosing sustainable products. Similarly, previous studies found that this factor can improve such attitudes (Ogiemwonyi et al., 2023; Chanda et al., 2024).

4.5.3. Attitude Toward Green Products and Green Purchase Intention

According to Ajzen (1991), the TPB posits that positive beliefs and evaluations of a behavior strengthen intentions to engage in it. Attitude toward green products reflects how individuals evaluate consumption actions involving green products (Fenta et al., 2024). Positive attitudes emerge when consumers recognize benefits for themselves as well as for the environment (Pandey & Yadav, 2023). Favorable assessments shape positive perceptions of green products, which subsequently contribute to stronger green purchase intention (Hudayah et al., 2023). Supartha and Sukaatmadja (2025) argue that favorable attitudes toward green products encourage purchase intentions, reflecting concern for environmental sustainability. Similar findings are reported by Shan et al. (2020), indicating that stronger purchase intentions are linked to more favorable attitudes. Furthermore, this attitude contributes to more positive perceptions of a product's sustainability aspects, which in turn increase green purchase intention (Wang et al., 2022).

4.5.4. Environmental Sensitivity and Green Purchase Intention: The Role of Attitude Toward Green Products

The VBN theory suggests that environmental awareness encourages individuals to evaluate pro-environmental actions positively (Stern et al., 1999). Consumers with environmental sensitivity will consider the impact of products on pollution, thus forming an attitude toward green products that supports efforts to reduce environmental damage (Han & Utama, 2024). Within the TPB framework, individuals' intentions to perform a behavior become stronger when they evaluate it positively (Ajzen, 1991). Favorable evaluations of green purchases lead to more positive attitudes and a higher green purchase intention (Amalia et al., 2021). This finding is consistent with previous research, which identifies attitude toward green products as an intermediary factor linking environmental sensitivity to green purchase intention (Chanda et al., 2024). Both cognitive and affective aspects are shown to influence the likelihood of engaging in such purchasing behavior (Annalisa et al., 2022).

4.5.5. Health Consciousness and Green Purchase Intention

Based on the VBN theory, which explains that individual awareness of ecological and health impacts forms an internal norm that encourages environmentally friendly consumption behavior (Stern et al., 1999). Health consciousness is reflected in greater attention to personal health, which encourages individuals to adopt more preventive behaviors (Marsall et al., 2021) and encourages consumers to consider health aspects in their daily consumption (Liang et al., 2024). These beliefs and preferences shape personal norms for choosing safe, natural, and healthy products (Yang et al., 2023). These sociopsychological values, beliefs, and norms are reflected in increased intentions to purchase green products, as individuals perceive a responsibility to maintain their health and the surrounding environment (Hong et al., 2024). Personal norms help translate health consciousness into stronger green purchase intention (Nguyen et al., 2023; Kaur et al., 2024; Pan et al., 2025). The perceptions of safety and quality in green products also help explain this link (Li & Shan, 2025). Higher awareness of personal health tends to increase the likelihood of choosing environmentally friendly products (Yusliza et al., 2020).

4.5.6. Health Consciousness and Attitudes Toward Green Products

The VBN theory suggests that concerns for human health and environmental sustainability shape beliefs and attitudes toward sustainable actions (Stern et al., 1999). Health consciousness is characterized by individuals who prioritize their health and demonstrate greater awareness of personal well-being (Remr, 2023). This concept encourages individuals to prioritize health concerns, avoid hazardous products, and develop attitudes toward green products (Yang et al., 2023). Such awareness leads consumers to appreciate green products, as they are seen as supporting the ecosystem, soil, and human health, while also providing personal benefits (Iqbal et al., 2021). This belief leads individuals to evaluate green products positively and gradually develop a consistent preference for choosing them (Parashar et al., 2023; Panchasara, 2024). Li and Shan (2025) showed that health consciousness can increase attitudes toward green products, reflecting positive consumer reactions to their health benefits. This concept also enhances individuals' sensitivity to the benefits of environmentally oriented consumption, leading to greater acceptance and more favorable attitudes (Li & An, 2025).

4.5.7. Health Consciousness and Green Purchase Intention: The Role of Attitude Toward Green Product

The VBN framework posits that internalized values and beliefs regarding the importance of environmentally friendly products will shape positive evaluations of those products (Stern et al., 1999). Increased health consciousness drives changes in consumer consumption patterns (Li & Shan, 2025). High health consciousness encourages consumers to adopt healthy lifestyles and choose safe products, thereby shaping their attitudes toward green products (Widyasari & Haryanto, 2021). Consumers' awareness of health impacts encourages greater selectivity in product choice, particularly toward natural and chemical-free products, thereby strengthening green purchase intention (Devi et al., 2023).

Furthermore, TPB theory explains that behavioral intentions are strengthened when individuals evaluate a behavior positively (Ajzen, 1991). Perceptions of benefits associated with green products lead to positive attitudes, which in turn strengthen purchase intentions (Kamalanon et al., 2022). Kaur et al. (2024) report that attitude toward green products functions as a mediator linking health consciousness to green purchase intention. Thus, greater awareness of personal health is associated with more positive evaluations of green products, thereby increasing the likelihood of purchasing them (Yen & Hoang, 2023).

5. Conclusion

The results suggest a pattern in which environmental sensitivity and health consciousness shape attitudes toward green products and green purchase intention. Within this mechanism, attitude toward green products acts as an intervening factor linking the antecedent variables to green purchase intention. It also positively influences green purchase intention. Theoretically, this study strengthens the consumer behavior literature based on VBN and TPB theories. Rational considerations and psychological factors influence consumers' evaluations and responses, driving green product consumption. Attitude operates as a mediating mechanism, indicating the role of psychological processes in determining purchase intention.

Practically, this study has implications for Avoskin to continue implementing environmentally friendly practices consistently and transparently, so that consumers feel their contributions are making a positive impact on environmental preservation. Furthermore, the company needs to strengthen education about the health benefits of its products to build consumer confidence and positive perceptions, ultimately increasing purchasing intention, loyalty, and competitive advantage. Further research is recommended, incorporating predictor variables such as knowledge of eco-friendly brands, environmental concern, and the quality of eco-friendly products. Additionally, the study population could be expanded, and the sample size increased to reflect general consumer purchase intentions better. The relatively small sample size is a limitation of this study; the findings may not fully reflect the characteristics of the broader population.

References

- Abd'Razack, N. T., Medayese, S. O., Shaibu, S. I., & Adeleye, B. M. (2017). Habits and benefits of recycling solid waste among households in Kaduna, North West Nigeria. *Sustainable Cities and Society*, 28, 297–306. <https://doi.org/10.1016/j.scs.2016.10.004>
- Aguinaga, A. A., & de Paula, L. B. (2025). Health consciousness, hedonic and eudaimonic motivations in green purchase intention among Generation Z. *Cogent Business & Management*, 12(1). <https://doi.org/10.1080/23311975.2025.2528160>

- Ahmed, H. A. M., Abdelghani, A. A. A., Fayyad, S., & Rashwan, K. A. (2025). From commitment to action: The mediating effect of environmental identity in green buying, with eco-conscious behavior as a moderator. *Administrative Sciences*, 15(8). <https://doi.org/10.3390/admsci15080303>
- Ahmed, R. R., Streimikiene, D., Qadir, H., & Streimikis, J. (2023). Effect of green marketing mix, green customer value, and attitude on green purchase intention: Evidence from the USA. *Environmental Science and Pollution Research*, 30(5), 11473–11495. <https://doi.org/10.1007/s11356-022-22944-7>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Akay, A., & Akçaova, A. (2025). Measuring environmental awareness and sensitivity of university students: The case of a faculty of architecture and design. *SAGE Open*, 15(3), 1–18. <https://doi.org/10.1177/21582440251383809>
- Al Mamun, A., Yang, M., Hayat, N., Gao, J., & Yang, Q. (2025). The nexus of environmental values, beliefs, norms, and green consumption intention. *Humanities and Social Sciences Communications*, 12(1), 1–14. <https://doi.org/10.1057/s41599-025-04979-6>
- Alam, M. N., Ogiemwonyi, O., Hago, I. E., Azizan, N. A., Hashim, F., & Hossain, M. S. (2023). Understanding consumer environmental ethics and the willingness to use green products. *SAGE Open*, 13(1), 1–20. <https://doi.org/10.1177/21582440221149727>
- Ali, M., Ullah, S., Ahmad, M. S., Cheok, M. Y., & Alenezi, H. (2023). Assessing the impact of green consumption behavior and green purchase intention among millennials toward a sustainable environment. *Environmental Science and Pollution Research*, 30(9), 23335–23347. <https://doi.org/10.1007/s11356-022-23811-1>
- Alsubhi, M., Blake, M., Nguyen, T., Majmudar, I., Moodie, M., & Ananthapavan, J. (2023). Consumer willingness to pay for healthier food products: A systematic review. *Obesity Reviews*, 24(1). <https://doi.org/10.1111/obr.13525>
- Amalia, F. A., Sosianika, A., & Christabel, F. A. (2021). Green purchase intention of Indonesian young consumers: Extending VAB framework. *Journal of Marketing Innovation*, 1(1), 1–17. <https://doi.org/10.35313/jmi.v1i01.9>
- Annalisa, S., Francesca, L., Rachel, K., Liam, M., & Michael, P. (2022). The temperament trait of environmental sensitivity is associated with connectedness to nature and affinity to animals. *Heliyon*, 8(7), e09861. <https://doi.org/10.1016/j.heliyon.2022.e09861>
- Balaskas, S., Panagiotarou, A., & Rigou, M. (2023). Impact of environmental concern, emotional appeals, and attitude toward the advertisement on the intention to buy green products: The case of younger consumer audiences. *Sustainability*, 15(17). <https://doi.org/10.3390/su15171320>
- Barbu, A., Catană, Ș. A., Deselnicu, D. C., Cioca, L. I., & Ioanid, A. (2022). Factors influencing consumer behavior toward green products: A systematic literature review. *International Journal of Environmental Research and Public Health*, 19(24). <https://doi.org/10.3390/ijerph192416568>
- Bayona, L. G., Arias, A. V., García-Salirrosas, E. E., Espinoza-Requejo, C. C., & Moreno-López, G. (2023). Perception of green product consumption in the context of the COVID-19 pandemic in an emerging economy. *Sustainability*, 15(11). <https://doi.org/10.3390/su15119090>
- Bigliardi, B., Campisi, D., Ferraro, G., Filippelli, S., Galati, F., & Petroni, A. (2020). The intention to purchase recycled products: Towards an integrative theoretical framework. *Sustainability*, 12(22), 9739. <https://doi.org/10.3390/su12229739>
- Bósquez, N. G. C., Arias-Bolzmann, L. G., & Martínez Quiroz, A. K. (2023). The influence of price and availability on university millennials' organic food product purchase

- intention. *British Food Journal*, 125(2), 536-550. <https://doi.org/10.1108/BFJ-12-2021-1340>
- Cam, L. N. T. (2023). A rising trend in eco-friendly products: A health-conscious approach to green buying. *Heliyon*, 9(9), e19845. <https://doi.org/10.1016/j.heliyon.2023.e19845>
- Camilleri, M. A., Cricelli, L., Mauriello, R., & Strazzullo, S. (2023). Consumer perceptions of sustainable products: A systematic literature review. *Sustainability*, 15(11), Article 8923. <https://doi.org/10.3390/su15118923>
- Castellini, G., Acampora, M., Provenzi, L., Cagliero, L., Lucini, L., & Barelo, S. (2023). Health consciousness and pro-environmental behaviors in an Italian representative sample: A cross-sectional study. *Scientific Reports*, 13(1), Article 35969. <https://doi.org/10.1038/s41598-023-35969-w>
- Chanda, R. C., Isa, S. M., & Ahmed, T. (2024). Factors influencing customers' green purchasing intention: Evidence from a developing country. *Journal of Science and Technology Policy Management*, 15(5), 1056–1084. <https://doi.org/10.1108/JSTPM-03-2022-0044>
- Chekima, B., Wafa, S. A. W. S. K., Igau, O. A., Chekima, S., & Sondoh Jr, S. L. (2016). Examining green consumerism motivational drivers: does premium price and demographics matter to green purchasing?. *Journal of Cleaner Production*, 112, 3436-3450. <https://doi.org/10.1016/j.jclepro.2015.09.102>
- Chen, C., Li, D., Qian, J., & Li, Z. (2024). The impact of green purchase intention on compensatory consumption: The regulatory role of pro-environmental behavior. *Sustainability*, 16(18). <https://doi.org/10.3390/su16188183>
- Chen, L., Wu, Q., & Jiang, L. (2022). Impact of environmental concern on ecological purchasing behavior: The moderating effect of prosociality. *Sustainability*, 14(5). <https://doi.org/10.3390/su14053004>
- Chen, X., Rahman, M. K., Rana, M. S., Gazi, M. A. I., Rahaman, M. A., & Nawir, N. C. (2022). Predicting consumer green product purchase attitudes and behavioral intention during COVID-19 pandemic. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.760051>
- Chetioui, Y., Butt, I., Lebdaoui, H., Neville, M. G., & El Bouzidi, L. (2023). Exploring consumers' attitude and intent to purchase organic food in an emerging market context: A pre-/post COVID-19 pandemic analysis. *British Food Journal*, 125(11), 3979-4001. <https://doi.org/10.1108/BFJ-12-2022-1070>
- Chin, W. W. (1998). *The partial least squares approach to structural equation modeling*. Psychology Press.
- Cui, M., Li, Y., & Wang, S. (2024). Environmental knowledge and green purchase intention and behavior in China: The mediating role of moral obligation. *Sustainability*, 16(14). <https://doi.org/10.3390/su16146263>
- Devi, K., Singh, G., Roy, S. K., & Cúg, J. (2023). Determinants of organic food purchase intention: The moderating role of health consciousness. *British Food Journal*, 125(11), 4092–4122. <https://doi.org/10.1108/BFJ-03-2023-0220>
- Diliarosta, S., Muttaqiin, A., & Ramadhani, R. (2021). Consumer behavior model based on integration of food safety and health consciousness in Padang City. *Pharmacognosy Journal*, 13(1), 212–216. <https://doi.org/10.5530/pj.2021.13.30>
- Dong, Z., He, C., Hu, T., & Jiang, T. (2023). Integrating values, ascribed responsibility and environmental concern to predict customers' intention to visit green hotels: The mediating role of personal norm. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1340491>
- Dunne, H., Lionetti, F., Pluess, M., & Setti, A. (2024). Individual traits are associated with pro-environmental behaviour: Environmental sensitivity, nature connectedness and consideration for future consequences. *People and Nature*, 6(2), 586–597. <https://doi.org/10.1002/pan3.10581>

- Duradoni, M., Fiorenza, M., Bellotti, M., Severino, F. P., Valdrighi, G., & Guazzini, A. (2025). Highly sensitive people and nature: Identity, eco-anxiety, and pro-environmental behaviors. *Sustainability*, 17(6). <https://doi.org/10.3390/su17062740>
- Dwivedi, S., Gupta, A., & Sayal, A. (2025). Evolution of consumer perceptions and intentions in the green cosmetics market: A thematic and trend analysis. *Frontiers in Sustainability*, 6. <https://doi.org/10.3389/frsus.2025.1617779>
- Farfán, M. E., García-Salirrosas, E. E., Guerra-Velásquez, M., Veas-González, I., Gómez-Bayona, L., & Gallardo-Canales, R. (2025). Psychological determinants of healthy food purchase intention: An integrative model based on health consciousness. *Nutrients*, 17(7). <https://doi.org/10.3390/nu17071140>
- Februadi, A., Nabilah, A., & Najib, M. F. (2022). Determinants of attitudes toward green product and purchase intention of zero-waste product: A case study of menstrual cup. *Journal of Marketing Innovation*, 2(2), 130–141. <https://doi.org/10.35313/jmi.v2i2.34>
- Fenta, Y., Singh, M., & Gautam, R. K. (2024). Antecedents of consumers' green product purchase intention: An insight from Ethiopia. *Cogent Business & Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2361865>
- Fitriani, M., & Warganegara, T. L. P. (2024). The effect of health consciousness, environmental attitudes and environmental knowledge on green purchase intention (Case study on Corkicle). *International Journal of Multidisciplinary: Applied Business and Education Research*, 5(4), 1395–1404. <https://doi.org/10.11594/ijmaber.05.04.24>
- García-Salirrosas, E. E., Escobar-Farfán, M., Gómez-Bayona, L., Moreno-López, G., Valencia-Arias, A., & Gallardo-Canales, R. (2023). Influence of environmental awareness on the willingness to pay for green products: An analysis under the application of the theory of planned behavior in the Peruvian market. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1282383>
- Gomes, S., Lopes, J. M., & Nogueira, S. (2023). Willingness to pay more for green products: A critical challenge for Gen Z. *Journal of Cleaner Production*, 390. <https://doi.org/10.1016/j.jclepro.2023.136092>
- Gulzar, Y., Eksili, N., Koksai, K., Celik Caylak, P., Mir, M. S., & Soomro, A. B. (2024). Who is buying green products? The roles of sustainability consciousness, environmental attitude, and ecotourism experience in green purchasing intention at tourism destinations. *Sustainability*, 16(18). <https://doi.org/10.3390/su16187875>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.)*. SAGE Publications.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Han, E., & Utama, L. (2024). Factors that influence consumers' intention to purchase environmentally friendly products. *International Journal of Application on Economics and Business*, 2(3), 2987–2972. <https://doi.org/10.24912/ijaeb.v2i3.206-216>
- Han, H., Hsu, L. T. J., & Sheu, C. (2010). Application of the theory of planned behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, 31(3), 325–334. <https://doi.org/10.1016/j.tourman.2009.03.013>
- Harris, P., Salehi, A., Kendall, E., Whitty, J., Wilson, A., & Scuffham, P. (2020). "She'll be right, mate!": Do Australians take their health for granted? *Journal of Primary Health Care*, 12(3), 277–288. <https://doi.org/10.1071/HC20025>
- Hermanto, H., Astuti, W., Sugito, P., & Triatmanto, B. (2024). Can green attitude complement the influence of green marketing on green purchase intention for fast food products? *Journal of Economics and Management*, 46(1), 584–612. <https://doi.org/10.22367/jem.2024.46.20>

- Hong, Y., Al Mamun, A., Masukujjaman, M., & Yang, Q. (2024). Significance of the environmental value-belief-norm model and its relationship to green consumption among Chinese youth. *Asia Pacific Management Review*, 29(1), 127–140. <https://doi.org/10.1016/j.apmrv.2023.10.002>
- Hoyer, W. D., MacInnis, D. J., & Pieters, R. (2018). *Consumer behavior* (7th ed.). Cengage Learning.
- Huang, Z., Zhu, Y. D., Deng, J., & Wang, C. L. (2022). Marketing healthy diets: The impact of health consciousness on Chinese consumers' food choices. *Sustainability*, 14(4), 2059. <https://doi.org/10.3390/su14042059>
- Hudayah, S., Ramadhani, M. A., Sary, K. A., Raharjo, S., & Yudaruddin, R. (2023). Green perceived value and green product purchase intention of Gen Z consumers: Moderating role of environmental concern. *Environmental Economics*, 14(2), 87–102. [https://doi.org/10.21511/ee.14\(2\).2023.07](https://doi.org/10.21511/ee.14(2).2023.07)
- Ishaq, M. I., Sarwar, H., & Ahmed, R. (2021). "A healthy outside starts from the inside": A matter of sustainable consumption behavior in Italy and Pakistan. *Business Ethics, the Environment & Responsibility*, 30, 61-86. <https://doi.org/10.1111/beer.12333>
- Iqbal, J., Yu, D., Zubair, M., Rasheed, M. I., Khizar, H. M. U., & Imran, M. (2021). Health consciousness, food safety concern, and consumer purchase intentions toward organic food: The role of consumer involvement and ecological motives. *SAGE Open*, 11(2). <https://doi.org/10.1177/21582440211015727>
- Ji, D., Pongsakornrungsilp, S., Pongsakornrungsilp, P., & Kumar, V. (2025). When mindful consumption meets green purchase intention: Empirical evidence on how a mindful mindset influences tourists. *Sustainability*, 17(3). <https://doi.org/10.3390/su17031266>
- Kadir, S. (2025). The effect of Sharia green marketing and environmental awareness in fostering buying interest of beauty halal business. *Journal of Islamic Economics Lariba*, 11(1). <https://doi.org/10.20885/jielariba.vol11.iss1.art20>
- Kamalanon, P., Chen, J. S., & Le, T. T. Y. (2022). Why do we buy green products? An extended theory of the planned behavior model for green product purchase behavior. *Sustainability*, 14(2), 1–28. <https://doi.org/10.3390/su14020689>
- Kaur, B., Gangwar, V. P., Dash, G., Khan, N., & Alkhoraif, A. A. (2024). Our planet, our health: Impact of health consciousness and environmental concern on green purchase behavior: Role of reference groups. *Polish Journal of Environmental Studies*, 33(2), 1191–1202. <https://doi.org/10.15244/pjoes/172037>
- Khan, N. L., & Qureshi, I. H. (2025). Impact of environmental concern on green purchase intention: A mediation model using green trust. *Asian Journal of Economics, Business and Accounting*, 25(3), 538–550. <https://doi.org/10.9734/ajeba/2025/v25i31729>
- Khan, S. N., Minhas, N., & Neale, N. (2025). Bridging the green gap: Examining consumer green perceptions in an extended model of the theory of planned behavior. *Future Business Journal*, 11(1). <https://doi.org/10.1186/s43093-025-00593-9>
- Kim, N., & Lee, K. (2023). Environmental consciousness, purchase intention, and actual purchase behavior of eco-friendly products: The moderating impact of situational context. *International Journal of Environmental Research and Public Health*, 20(7), 5312. <https://doi.org/10.3390/ijerph20075312>
- Law, M. M. S., Hills, P., & Hau, B. C. H. (2017). Engaging employees in sustainable development—a case study of environmental education and awareness training in Hong Kong. *Business Strategy and the Environment*, 26(1), 84–97. <https://doi.org/10.1002/bse.1903>
- Li, Y., & An, N. (2025). The impact of health consciousness and environmental awareness on sports enthusiasts' purchase intentions for sustainable sports products. *World*, 6(1). <https://doi.org/10.3390/world6010020>

- Li, Y., & Shan, B. (2025). Exploring the role of health consciousness and environmental awareness in purchase intentions for green-packaged organic foods: An extended TPB model. *Frontiers in Nutrition, 12*, 1–10. <https://doi.org/10.3389/fnut.2025.1528016>
- Liang, H., Wu, Z., & Du, S. (2024). Study on the impact of environmental awareness, health consciousness, and individual basic conditions on the consumption intention of green furniture. *Sustainable Futures, 8*, 100245. <https://doi.org/10.1016/j.sftr.2024.100245>
- Liao, Y. K., Wu, W. Y., & Pham, T. T. (2020). Examining the moderating effects of green marketing and green psychological benefits on customers' green attitude, value, and purchase intention. *Sustainability, 12*(18). <https://doi.org/10.3390/su12187461>
- Lin, Y. H. (2023). Determinants of green purchase intention: The roles of green enjoyment, green intrinsic motivation, and green brand love. *Sustainability, 15*(1). <https://doi.org/10.3390/su15010132>
- Liu, X., Kim, T. H., & Lee, M. J. (2025). The impact of green perceived value through green new products on purchase intention: Brand attitudes, brand trust, and digital customer engagement. *Sustainability, 17*(9), 1–24. <https://doi.org/10.3390/su17094106>
- Lohani, M., Wei, W., Janney, B., Zummo, L., & Blodgett, G. R. (2025). From eco-consciousness to apathy: The ECO-SHADOW inventory to assess cognitive and behavioral affect regulation and its role in climate action. *Frontiers in Psychology, 16*, 1–19. <https://doi.org/10.3389/fpsyg.2025.1575185>
- Mamun, A. A., Hayat, N., Masud, M. M., Makhbul, Z. K. M., Jannat, T., & Salleh, M. F. M. (2022). Modelling the significance of Value-Belief-Norm Theory in predicting solid waste management intention and behavior. *Frontiers in Environmental Science, 10*, 1–12. <https://doi.org/10.3389/fenvs.2022.906002>
- Mani, U. A. U., & Ndubuisi, V. N. (2023). Determinants of customer attitude towards green marketing. *British Journal of Marketing Studies, 11*(4), 54–67. <https://doi.org/10.37745/bjms.2013/vol11n45467>
- Margariti, K., Hatzithomas, L., & Boutsouki, C. (2024). Elucidating the gap between green attitudes, intentions, and behavior through the prism of greenwashing concerns. *Sustainability, 16*(12), 5108. <https://doi.org/10.3390/su16125108>
- Marsall, M., Engelmann, G., Skoda, E. M., Teufel, M., & Bäuerle, A. (2021). Validation and test of measurement invariance of the adapted health consciousness scale (HCS-G). *International Journal of Environmental Research and Public Health, 18*(11). <https://doi.org/10.3390/ijerph18116044>
- Matejczuk, M. B., Kata, G., & Poleszak, W. (2022). Environmental sensitivity in young adolescents: The identification of sensitivity groups in a Polish sample. *PLoS ONE, 17*(7), 1–14. <https://doi.org/10.1371/journal.pone.0271571>
- Megha, M. (2024). Determinants of green consumption: A systematic literature review using the TCCM approach. *Frontiers in Sustainability, 5*. <https://doi.org/10.3389/frsus.2024.1428764>
- Mehta, P., & Chahal, H. S. (2021). Consumer attitude towards green products: Revisiting the profile of green consumers using segmentation approach. *Management of Environmental Quality: An International Journal, 32*(5), 902–928. <https://doi.org/10.1108/MEQ-07-2020-0133>
- Mendoza, M. C. O., Chico, J. C. D., Ong, A. K. S., & Regayas, R. A. M. (2024). Assessment of health values, beliefs, norms, and behavior towards consumption intention of 3D-bioprinted meat. *Foods, 13*(17), 1–25. <https://doi.org/10.3390/foods13172662>
- Mensah, P. A. (2021). Green product awareness effect on green purchase intentions of university students: An emerging market's perspective. *Future Business Journal, 7*(1), 1–13. <https://doi.org/10.1186/s43093-021-00094-5>

- Mihuț, I. S. A., Sterie, L. G., & Mican, D. (2025). The green dilemma: What drives consumers to green purchase intention in an emerging EU economy? *Journal of Applied Economics*, 28(1). <https://doi.org/10.1080/15140326.2025.2536323>
- Moslehpour, M., Chau, K. Y., Du, L., Qiu, R., Lin, C. Y., & Batbayar, B. (2023). Predictors of green purchase intention toward eco-innovation and green products: Evidence from Taiwan. *Economic Research-Ekonomska Istraživanja*, 36(2). <https://doi.org/10.1080/1331677X.2022.2121934>
- Nassanbekova, S., Yeshenkulova, G., Nurguzhina, A., & Ibadildin, N. (2024). Green product purchase intention of young customers from developing country: Extended Theory of Planned Behavior. *International Journal of Sustainable Development and Planning*, 19(9), 3633–3642. <https://doi.org/10.18280/ijstdp.190931>
- Nekmahmud, M., Naz, F., Ramkissoon, H., & Fekete-Farkas, M. (2022). Transforming consumers' intention to purchase green products: Role of social media. *Technological Forecasting and Social Change*, 185, 122067. <https://doi.org/10.1016/j.techfore.2022.122067>
- Nguyen, D. D. (2023). Evaluating the consumer attitude and behavioral consumption of green products in Vietnam. *Sustainability*, 15(9). <https://doi.org/10.3390/su15097612>
- Nguyen, P. H., Nguyen, D. N., & Nguyen, L. A. T. (2023). Quantitative insights into green purchase intentions: The interplay of health consciousness, altruism, and sustainability. *Cogent Business & Management*, 10(3). <https://doi.org/10.1080/23311975.2023.2253616>
- Nordström, J. (2023). Strategic ignorance of health risk: Its causes and policy consequences. *Behavioural Public Policy*, 83–114. <https://doi.org/10.1017/bpp.2019.52>
- Ogiemwonyi, O., Alam, M. N., Alshareef, R., Alsolamy, M., Azizan, N. A., & Mat, N. (2023). Environmental factors affecting green purchase behaviors of consumers: Mediating role of environmental attitude. *Cleaner Environmental Systems*, 10, 100130. <https://doi.org/10.1016/j.cesys.2023.100130>
- Olfat, M. (2025). Consumers' green attitudes and their green purchase intentions: The mediating role of consumer-green product congruence and a comparison between genders. *Corporate Communications*, 30(3), 503–525. <https://doi.org/10.1108/CCIJ-08-2024-0150>
- Oliver, M. O., Jestratišević, I., Uanhoro, J., & Knight, D. K. (2023). Investigation of consumers' purchase intentions and behaviors towards environmentally friendly grocery packaging. *Sustainability*, 15(11). <https://doi.org/10.3390/su15118789>
- Pan, J., Wu, K. S., Huang, D. M., & Sun, S. W. (2025). Role of health-consciousness on purchase intention of health and wellness food: The serial mediating effect of attitude and desire. *Nutrients*, 17(5), 1–21. <https://doi.org/10.3390/nu17050746>
- Panchasara, D. (2024). Consumer preferences for green and sustainable products: A critical review. *Research Review International Journal of Multidisciplinary*, 9(11), 299–303. <https://doi.org/10.31305/rrijm.2024.v09.n11.039>
- Pandey, M., & Yadav, P. S. (2023). Understanding the role of individual concerns, attitude, and perceived value in green apparel purchase intention: The mediating effect of consumer involvement and the moderating role of Generation Z & Y. *Cleaner and Responsible Consumption*, 9, 100120. <https://doi.org/10.1016/j.clrc.2023.100120>
- Parashar, S., Singh, S., & Sood, G. (2023). Examining the role of health consciousness, environmental awareness and intention on purchase of organic food: A moderated model of attitude. *Journal of Cleaner Production*, 386, 135553. <https://doi.org/10.1016/j.jclepro.2022.135553>
- Phuong, N. V., Mergenthaler, M., & Quynh, P. N. H. (2025). Consumer transition: Analyzing the impact of environmental and health consciousness on green food choices in Vietnam. *Discover Sustainability*, 6(1). <https://doi.org/10.1007/s43621-025-01275-w>

- Pluess, M., Lionetti, F., Aron, E. N., & Aron, A. (2023). People differ in their sensitivity to the environment: An integrated theory, measurement and empirical evidence. *Journal of Research in Personality, 104*, 104377. <https://doi.org/10.1016/j.jrp.2023.104377>
- Pontes, S., Naranjo-Zolotov, M., & Painho, M. (2024). From intention to action: How environmental setback perception mediates green purchase behaviour. *Journal of Cleaner Production, 470*, 143285. <https://doi.org/10.1016/j.jclepro.2024.143285>
- Qasim, H., Yan, L., Guo, R., Saeed, A., & Ashraf, B. N. (2019). The defining role of environmental self-identity among consumption values and behavioral intention to consume organic food. *International Journal of Environmental Research and Public Health, 16*(7). <https://doi.org/10.3390/ijerph16071106>
- Quoquab, F., Jaini, A., & Mohammad, J. (2020). Does it matter who exhibits more green purchase behavior of cosmetic products in Asian culture? A multi-group analysis approach. *International Journal of Environmental Research and Public Health, 17*(14), 5258. <https://doi.org/10.3390/ijerph17145258>
- Ramadhanti, F., Suryandaru, R., & Amelia, N. (2024). Green purchase behavior in circular packaging: The case of young consumers in Indonesia. *Cleaner and Responsible Consumption, 14*, 100208. <https://doi.org/10.1016/j.clrc.2024.100208>
- Remr, J. (2023). Validation of the Health Consciousness Scale among the Czech population. *Healthcare, 11*(11). <https://doi.org/10.3390/healthcare11111628>
- Risyafani, S., Musnaini, M., & Adriani, Z. (2024). Influence of green marketing on green purchase intention mediated by environmental awareness. *Journal of Business Studies and Management Review, 8*(1), 82–86. <https://doi.org/10.22437/jbsmr.v8i1.35450>
- Rivera, H. J. P., & Paula, L. B. (2024). Personal variables in attitude toward green purchase intention of organic products. *Foods, 13*(2). <https://doi.org/10.3390/foods13020213>
- Roscoe, J. T. (1975). *Fundamental research statistics for the behavioural sciences* (2nd ed.). Holt Rinehart & Winston.
- Saintila, J., Florián-Castro, R. O., Macedo-Barrera, E. M., Pérez-Facundo, R. P., & Calizaya-Milla, Y. E. (2025). Health consciousness, sensory appeal, and perception of front-of-package food labels as predictors of purchase intention for unhealthy foods in Peruvian university students. *Nutrients, 17*(11), 1–16. <https://doi.org/10.3390/nu17111921>
- Shan, L., Diao, H., & Wu, L. (2020). Influence of the framing effect, anchoring effect, and knowledge on consumers' attitude and purchase intention of organic food. *Frontiers in Psychology, 11*, 2022. <https://doi.org/10.3389/fpsyg.2020.02022>
- Shang, W., Zhu, R., Liu, W., & Liu, Q. (2024). Understanding the influences on green purchase intention with moderation by sustainability awareness. *Sustainability, 16*(11). <https://doi.org/10.3390/su16114688>
- Sheng, G., Xie, F., Gong, S., & Pan, H. (2019). The role of cultural values in green purchasing intention: Empirical evidence from Chinese consumers. *International journal of consumer studies, 43*(3), 315-326. <https://doi.org/10.1111/ijcs.12513>
- Siyal, S., Ahmed, M. J., Ahmad, R., Khan, B. S., & Xin, C. (2021). Factors influencing green purchase intention: Moderating role of green brand knowledge. *International Journal of Environmental Research and Public Health, 18*(20), 10762. <https://doi.org/10.3390/ijerph182010762>
- Sriramaneni, S. D., Kotni, V. V. D. P., Babu, G. N. P. V., & Sriramneni, C. (2025). Green purchase intention: Understanding the role of environmental beliefs, health consciousness and perceived behavioural control. *Revista Galega de Economía, 34*(2). <https://doi.org/10.15304/rge.34.2.10587>
- Stern, P. C., Dietz, T., Abel, T., Guagnano, G. A., & Kalof, L. (1999). A value-belief-norm theory of support for social movements: The case of environmentalism. *Human Ecology Review, 6*(2), 81–97.

- Sun, J., Sarfraz, M., Xu, Y., & Azam, A. (2024). Forging green horizons: Revealing catalysts of pro-environmental behavior in an emerging market. *Heliyon*, 10(16), e36332. <https://doi.org/10.1016/j.heliyon.2024.e36332>
- Supartha, A. A. A. R. P., & Sukaatmadja, I. P. G. (2025). Role of attitude towards green in mediating the effect of environmental concern and green perceived value on green purchase intention. *International Research Journal of Management, IT and Social Sciences*, 12(4), 316-330. <https://doi.org/10.21744/irjmis.v12n4.2543>
- Tao, Y. T., Lin, M. D., & Khan, A. (2022). The impact of CSR on green purchase intention: Empirical evidence from the green building industries in Taiwan. *Frontiers in Psychology*, 13, 1-15. <https://doi.org/10.3389/fpsyg.2022.1055505>
- Tiwari, P. (2023). Influence of millennials' eco-literacy and biospheric values on green purchases: The mediating effect of attitude. *Public Organization Review*, 23(3), 1195-1212. <https://doi.org/10.1007/s11115-022-00645-6>
- Uliano, A., Stanco, M., Marotta, G., & Nazzaro, C. (2024). Combining healthiness and sustainability: An analysis of consumers' preferences and willingness to pay for functional and sustainable snack bars. *Future Foods*, 9, 100355. <https://doi.org/10.1016/j.fufo.2024.100355>
- Van Hoang, D., & Tung, L. T. (2024). Effect of environmental concern, green perceived value on young customers' green purchase intention: The mediating roles of attitude toward green products and perceived behavior control. *Scientific Papers of the University of Pardubice, Series D: Faculty of Economics and Administration*, 32(1), 35-37. <https://doi.org/10.46585/sp32011920>
- Vania, C., & Ruslim, T. S. (2023). The effect of environmental concern, attitude, green brand knowledge, and green perceived value on green purchase behavior with green purchase intention as a mediating variable on green beauty products. *Jurnal Ilmiah Manajemen dan Bisnis*, 9(3), 325. <https://doi.org/10.22441/jimb.v9i3.18126>
- Verplanken, B., & Orbell, S. (2022). Attitudes, habits, and behavior change. *Annual Review of Psychology*, 73, 327-352. <https://doi.org/10.1146/annurev-psych-020821-011744>
- Wahid, N. A., Fadzil, S. F. S., & Ariffin, S. K. (2022). Influences of problem awareness, awareness of consequences, and ascription of responsibility on consumer's personal norm to prevent water wastage behavior. *Environment and Ecology Research*, 10(2), 275-283. <https://doi.org/10.13189/eer.2022.100217>
- Wang, H., Ma, B., & Bai, R. (2019). How does green product knowledge effectively promote green purchase intention?. *Sustainability*, 11(4), 1193. <https://doi.org/10.3390/su11041193>
- Wang, Y. M., Zaman, H. M. F., & Alvi, A. K. (2022). Linkage of green brand positioning and green customer value with green purchase intention: The mediating and moderating role of attitude toward green brand and green trust. *SAGE Open*, 12(2). <https://doi.org/10.1177/21582440221102441>
- Widyasari, W., & Haryanto, J. O. (2021). Analysis of environmental attitude, health consciousness, and knowledge in developing product perception and intention to buy: A study on organic food product. *ASEAN Marketing Journal*, 2(2). <https://doi.org/10.21002/amj.v2i2.1996>
- Wigley, I. L. C. M., Nazzari, S., Pastore, M., Provenzi, L., & Barello, S. (2025). The contribution of environmental sensitivity and connectedness to nature to mental health: Does nature view count? *Journal of Environmental Psychology*, 102, 102541. <https://doi.org/10.1016/j.jenvp.2025.102541>
- Yadav, R., & Pathak, G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*, 135, 732-739. <https://doi.org/10.1016/j.jclepro.2016.06.120>

- Yang, Q., Al Mamun, A., Naznen, F., Siyu, L., & Mohamed Makhbul, Z. K. (2023). Modelling the significance of health values, beliefs and norms on the intention to consume and the consumption of organic foods. *Heliyon*, 9(6), e17487. <https://doi.org/10.1016/j.heliyon.2023.e17487>
- Yano, K., & Oishi, K. (2024). Individual differences in environmental sensitivity: Associations between cognitive emotion regulation and mental health. *Frontiers in Psychology*, 15. <https://doi.org/10.3389/fpsyg.2024.1322544>
- Yayla, Ö., Keskin, E., & Keles, H. (2022). The relationship between environmental sensitivity, ecological attitude, and ecological product purchasing behaviour of tourists. *European Journal of Tourism, Hospitality and Recreation*, 12(1), 31–45. <https://doi.org/10.2478/ejthr-2022-0002>
- Yen, N. T. H., & Hoang, D. P. (2023). The formation of attitudes and intention towards green purchase: An analysis of internal and external mechanisms. *Cogent Business & Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2192844>
- Yusliza, M. Y., Amirudin, A., Rahadi, R. A., Nik Sarah Athirah, N. A., Ramayah, T., Muhammad, Z., Mas, F. D., Massaro, M., Saputra, J., & Mokhlis, S. (2020). An investigation of pro-environmental behaviour and sustainable development in Malaysia. *Sustainability*, 12(17), 7083. <https://doi.org/10.3390/su12177083>
- Zhang, Q., Pong, P. W., Wong, W., & Wang, L. (2025). The efficacy of the theory of planned behaviour and value-belief-norm theory for predicting young Chinese intention to choose green hotels. *Scientific Reports*, 15, (14332). 1-21. <https://doi.org/10.1038/s41598-025-99447-1>
- Zhuang, W., Luo, X., & Riaz, M. U. (2021). On the factors influencing green purchase intention: A meta-analysis approach. *Frontiers in Psychology*, 12, 644020. <https://doi.org/10.3389/fpsyg.2021.644020>