

ELUCIDATING THE EFFECTS OF ENVIRONMENTAL CONSCIOUSNESS ON GREEN PURCHASE BEHAVIOR THROUGH THE VALUE-ATTITUDE-BEHAVIOR MODEL: MODERATING ROLE OF PRICE SENSITIVITY

Dinh Van Hoang

Graduate School, Ho Chi Minh City Open University, Vietnam

Le Thanh Tung*

Faculty of Economics and Public Management, Ho Chi Minh City Open University, Vietnam

Nguyen Dinh Hoa

Faculty of Labor Relations and Trade Unions, Ton Duc Thang University, Vietnam

ABSTRACT

This study examines consumers' green purchasing behavior through an extended value-attitude-behavior model. Using survey data from 486 Vietnamese consumers with prior experience purchasing green products, the study reveals the influence of customers' value (environmental consciousness) on their general attitude toward the environment (pro-environmental attitude) and their specific attitude (attitude toward green products). Both attitudes would have positive effects on their green purchasing behavior. Additionally, the study finds that price sensitivity significantly moderates the relationship between both general and specific attitudes and green purchase behavior. These findings provide useful insights to be used by policymakers and business leaders in designing interventions that will inspire environmental values and attitudes in consumers, contributing towards a more responsible and greener future for consumerism within developing countries.

Keywords: Attitude; Environmental consciousness; Green purchase behavior; Price sensitivity.

Submission: 12th January 2025

Accepted: 12th September 2025

<https://doi.org/10.33736/ijbs.8722.2025>

1. INTRODUCTION

Mounting global concerns over environmental degradation, from pollution to unpredictable climate change, have spurred environmentally responsible actions (Hoang & Tung, 2024). Green consumption has become a mainstream trend in this context, with green products often perceived as healthy, high-quality, and essential for sustainable development (Semprebon et al., 2019). Vietnamese consumers' environmental awareness is growing. Vietnam's environmental

* Corresponding author: Faculty of Economics and Public Management, Ho Chi Minh City Open University, Ho Chi Minh City, Vietnam. Email: tung.lt@ou.edu.vn. ORCID: <https://orcid.org/0000-0001-8487-2217>

consciousness and economic indicators reflect this trend. Forecasts indicate that Vietnam's green economy will substantially grow, increasing from a \$6.7 billion GDP contribution in 2020 to \$300 billion by 2050 (Kim Loan, 2023). Additionally, 84% of Vietnamese respondents indicated a readiness to pay more for green items. (Statista, 2023). This study focuses on green products in general due to their rising relevance in both policy and green consumption. While much attention has been given to studies on environmental behavior in Western countries, research on green consumption behaviors in emerging markets, particularly Vietnam, remains limited (Hoang & Tung, 2024). Such environmental challenges have increased public interest in sustainable consumption, prompting scholars and policymakers to investigate consumer motivations for buying green products.

Research in environmental psychology has indicated that values can positively shape pro-environmental behavior (Shin et al., 2017; Ćinjarević et al., 2022; de Matos et al., 2025). Environmental values encourage such efforts (Cheung & To, 2019). Shin et al. (2022) discovered that altruistic, egoistic, and ecospheric values affect the propensity to pay a premium for organic products. Likewise, functional, social, conditional, and epistemic values exert differing influences on behavior (Rana & Solaiman, 2023). The Values-Attitudes-Behaviors (VAB) model has been extensively studied in Western contexts (Shin et al., 2017; Ćinjarević et al., 2022; de Matos et al., 2025), but its application in emerging markets such as Vietnam, particularly in incorporating both general and product-specific attitudes, has not been explored (Van Hoang & Le Thanh, 2024). Because Vietnam's collectivist culture impacts individuals' attitudes and intents in unique ways, it may influence their receptivity to green products (Duong, 2022), which contrasts with the Western setting, which frequently promotes individuality (Han & Stoel, 2017). Environmental consciousness (ECS) expresses personal values and attitudes about reducing harm to the environment (Laheri et al., 2024). Consumers who value environmental values have better environmental awareness (Cheung & To, 2019). This study advances the field by examining how customers' environmental values, especially ECS, influence behavior in a developing market like Vietnam.

Although consumers express environmental concerns, in reality, these concerns rarely translate into actual actions. Hughner et al. (2007) found that 67% of customers are concerned about the environment, but only 4% actually purchase green products. This phenomenon creates an "attitude-behavior gap" between what individuals say they concern about and what they really buy (ElHaffar et al., 2020). This event highlights the "attitude-behavior gap" (Chaihanchanchai & Anantachart, 2023). Moderators may influence the relationship between attitude and behavior (Chaihanchanchai & Anantachart, 2023; Van Hoang & Le Thanh, 2024; Hoang & Tung, 2024).

Several factors have been investigated, including demographics and personal or psychological characteristics (Chaihanchanchai & Anantachart, 2023), but the aspect involving customers' perceptions of pricing has received relatively less attention. The relationship between psychological states, attitudes, and behaviors is often studied using the Theory of Planned Behavior framework (Hsu et al., 2017; Bhutto et al., 2022; Lavuri, 2022; Srivastava & Gupta, 2023). According to Laheri et al. (2024), a pro-environmental attitude is a general concern regarding environmental issues, while an attitude toward green products is a specific evaluation of eco-friendly products (Chanda, 2024). To narrow the "attitude-behavior gap," where customers' favorable pro-environmental emotions do not convert to actual green purchases (Hoang & Tung, 2024). This study investigates the "attitude-behavior gap" by assessing how price sensitivity

moderates two dual attitudes: pro-environmental attitude (PEA) and attitude toward green products (AGP) within a VAB model in an emerging market context. Price sensitivity (PS) refers to the extent to which fluctuations in product pricing affect consumer purchasing behavior (Hsu et al., 2017). Customers who view green products as high quality may show readiness to pay extra (Lavuri, 2022); however, consumers who are price-sensitive are less likely to buy green products at higher prices (Aschemann - Witzel & Zielke, 2017). In this study, we examine how the consumers' environmental value—in particular, their environmental consciousness (ECS)—impacts green consumption behavior through mediator factors, such as pro-environmental attitude (PEA) and their specific attitude toward green products (AGP). We will address the research question (1), "What is the relationship between environmental consciousness and attitudes?" (2) "To what extent do PEA and AGP mediate the effect of ECS on green purchasing behavior?" (3) "What is the moderating role of PS influences between attitude and behavior?" This study adds to the current body of knowledge on green consumption by examining how ECS influences green purchasing behavior through attitudes.

Attitudes and behaviors toward environmental issues may vary depending on the cultural context (Laroche et al., 2001). The main focus of the VAB model is to study a hierarchical model starting from values, going through attitudes, and ending with behavior to explain consumer behavior in the context of green consumption from the perspective of value perception (Kim & Hall, 2021; Wang et al., 2023). By adding two attitudes and evaluating price sensitivity as a moderator, this study extends the VAB model and improves our comprehension of green behavior in emerging countries. The results of this study will aid in the formulation of culturally and economically suitable methods to foster sustainable consumption in developing economies.

2. LITERATURE REVIEW

2.1. *Value-Attitude-Behavior framework*

This study is grounded in the VAB framework, a model for understanding consumer-centric behavior. The VAB framework, a model for understanding consumer-centered behavior, is based on values (Cheung & To, 2019). An individual's belief that a particular action or behavior is morally superior to alternatives defines values (Rokeach, 1973). Attitudes are the inclination to react favorably or adversely to a certain scenario (Kim & Hall, 2021). An individual's conduct toward limiting environmental consequences is reflected through their actions, which are impacted by their beliefs and attitudes (Yadav & Pathak, 2017; Habib et al., 2023).

The VAB framework has been applied in various domains to examine sustainable consumer behavior, including sustainable crowdfunding (Kim & Hall, 2021), reduction of food waste (Habib et al., 2023), environmentally beneficial actions (Segev & Liu, 2022), green purchasing (Cheung & To, 2019), and sustainable tourism (Wang et al., 2023). This study aims to forecast consumer behavior in green consumption utilizing the VAB framework, predicated on the value of the ECS component. This element encompasses an individual's comprehensive evaluative perception and assessment of environmental challenges (Ogiemwonyi et al., 2023). This study considers dual attitudes by examining both the pro-environmental attitude (PEA), which represents a general

inclination towards environmental protection, and the attitude toward green products (AGP), which focuses on specific product-related. This dual-attitude approach offers a more nuanced look at how broader moral considerations, often reflected in consumer environmental values, influence specific preferences and behaviors in the green marketplace (Cheung & To, 2019).

2.2. Environmental consciousness (ECS)

ECS indicates a broader consumer value that links a person's awareness and concern about environmental issues (Laheri et al., 2024). This means that everyone is aware of what they can do to help the environment and is committed to leaving as little of an impact on it as possible (Cheung & To, 2019; Khan, 2024). Customers who are very concerned about the environment have a better understanding of the environmental effects of the things they buy, which presents them a better basis for making decisions that support their values and beliefs (Cheung & To, 2019). An individual with a higher ECS will be more worried about environmental issues. ECS assesses thoughts, attitudes, and behaviors connected to environmental protection that contribute to an individual's attitude toward their environment (Ahmad et al., 2020). As a result, ECS serves as a precursor to both attitudes, PEA and AGP (Cheung & To, 2019; Khan, 2024).

H1: ECS has a positive effect on PEA.

H2: ECS has a positive effect on AGP.

2.3. Pro-environmental attitude (PEA)

A pro-environmental attitude is “an individual's positive or negative evaluation of attitudes, behaviors, or institutions related to environmental issues”; it consists of personal views, outlooks, and values on environmental issues (Khan, 2024). Individuals that care about the environment are more likely to value its preservation and understand why they need to adopt sustainable behaviors (Chang & Chen, 2012). The connection between environmental consciousness and environmental attitude can be expressed as higher ECS is likely to promote more favorable environmental attitudes. Individuals with a higher degree of care for ecological issues are more capable of recognizing the importance of conservation and the influence of human actions on ecosystems (Kautish & Sharma, 2021). This heightened awareness tends to alter their beliefs and values, forming a more positive attitude toward the environment (Shin et al., 2017).

H3: PEA has a positive effect on GPB.

2.4. Attitude toward green products (AGP)

AGP has been demonstrated to influence both purchase intentions and actual transactions (Ogiemwonyi et al., 2023; Van Hoang & Le Thanh, 2024). General environmental attitudes are significant (Khan, 2024), while specialized attitudes such as AGP more effectively demonstrate concrete activities undertaken to attain a goal (Varah et al., 2021). An individual with a favorable AGP is a predictor of their likelihood to make a purchase (Van Hoang & Le Thanh, 2024).

H4: AGP has a positive effect on GPB.

2.5. *Moderation effect of price sensitivity (PS)*

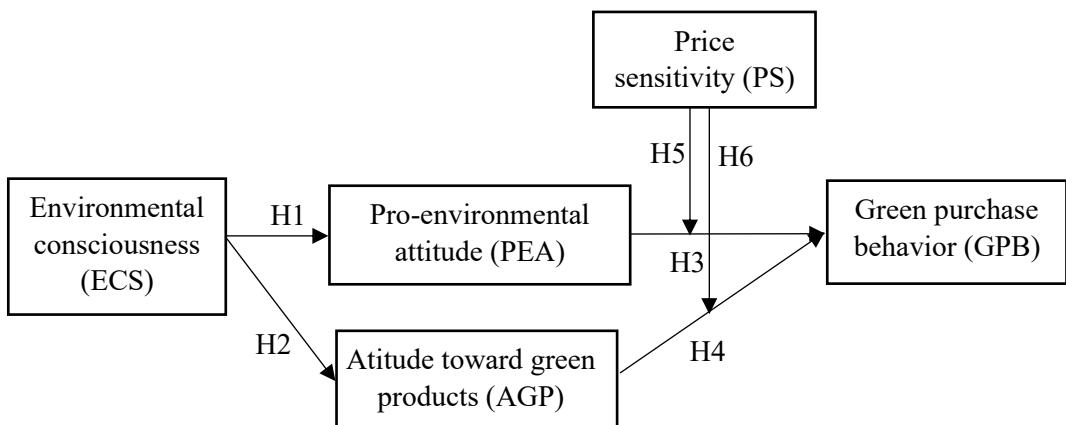
PS is the degree to which customers change their behavior when the price of a product goes up or down. It shows how much individuals are willing to pay more for perceived economic or psychological benefits (Monroe, 1973). Individuals with high PS are often responsible shoppers who think carefully about things like how the product will affect the environment, quality, and value (Karuppiah & Ramayah, 2023). When customers care a lot about the environment, they may make more intentional, value-driven choices that favor eco-friendly products, especially when they think the benefits (like health, sustainability, and long-term cost savings) are worth the extra money (Hsu et al., 2017). Research shows that as environmental concerns grow, customers are more willing to pay more when they see real value in terms of both the environment and functionality (Riyaz et al., 2024; Van Hoang & Le Thanh, 2024). According to the equity theory, the desire to buy is affected by how fair and valuable something seems in relation to its cost (Bhutto et al., 2022).

H5: PS moderates the relationship between PEA and GPB.

H6: PS moderates the relationship between AGP and GPB.

Figure 1 presents the theoretical framework for this study, which is based on previous research.

Figure 1: The conceptual model of this study



3. METHODOLOGY

3.1. *Measurement instrument and Questionnaire design*

A structured questionnaire with scales identified from previous studies. The Vietnamese translation of the questionnaire was ensured for clarity by an expert. A pilot test with 150 respondents showed that the questionnaire was clear and easy to understand. This process helped identify and resolve any ambiguity in the questionnaire. The constructs were assessed using a 5-point Likert scale.

The ECS was adapted from three items by Cheung and To (2019), such as "I am concerned about the future of the planet." Shin et al. (2017) developed a five-item scale to assess the PEA, which includes "I would describe myself as environmentally responsible." Varah et al. (2021) developed a four-item scale to assess the GPA, which includes the statement, "I possess a desirable attitude with regard to green products." Yadav and Pathak (2017) developed a 3-item instrument for GPB, such as "I have been purchasing green products on a regular basis," while the PS evaluation used a 4-item scale adapted from the research of Srivastava and Gupta (2023), which includes the example, "To me, it deserves to consume green products despite their premium pricing" (Table 1).

Table 1: Constructs and Items

Constructs	Items
ECS (Cheung & To, 2019)	ECS1 "I am concerned about the future of the planet" ECS2 "I feel as though you are part of the environment" ECS3 "I am conscious of decreasing the amount of plastic waste and the usage of chemicals, water, and energy"
PEA (Shin et al., 2017)	PEA1 "It is important to me that the products I use don't harm the environment" PEA2 "I consider the potential environmental impact of my actions when making many of my consumption decisions" PEA3 "I am concerned about wasting the resources of our planet" PEA4 "I would describe myself as environmentally responsible" PEA5 "I am willing to be inconvenienced in order to take environmentally sustainable actions"
AGP (Varah et al., 2021)	AGP1 "Purchasing a green product is a good idea" AGP2 "Green product is good for the environment" AGP3 "I possess desirable attitude with regard to green products" AGP4 "I feel good about myself when I use green products"
GPB (Yadav & Pathak, 2017)	GPB1 "I have been purchasing green products at regular basis" GPB2 "I have green purchasing behavior for my daily need products" GPB3 "I have green purchasing behavior over the past six months"
PS (Srivastava & Gupta, 2023)	PS1 "To me, it deserves to consume green products despite their premium pricing" PS2 "I am willing to buy green products at a higher price for their environmental benefits" PS3 "I am willing to pay more money to buy green products" PS4 "I am willing to buy a green daily-use product at a higher price than the regular product"

Source: Authors' own work

The data was analyzed using PLS-SEM, which was chosen for its applicability to theory testing and development, particularly in cases involving non-normal data distributions (Hair et al., 2019). Reflective indicators were used to measure latent constructs since they represent fundamental notions and are likely to be highly associated (Urbach & Ahlemann, 2010). Using this analytical method, this study was able to verify hypotheses about moderation effects while also explaining a lot about sustainable consumer behavior in a rising economy.

3.2. Sample, Data Collection, and Protocol

The study addressed a gap in empirical data about emerging nations, namely in Viet Nam. Participants had to be 18 years or older, interested in green products such as organic, recycled, and energy-saving, etc., and live in the three largest cities in Vietnam (Hanoi, Da Nang, and Ho Chi Minh City), as these cities have higher income levels, increased environmental consciousness, and better access to green products (Hoang & Tung, 2024). Surveys were collected from October 2024 to January 2025. Participants were told about the study's goal, and participation was entirely voluntary. We assured that all data and replies would be kept secure and anonymous and used solely for research purposes. We used a non-probability, convenience sampling, which is often chosen for studying green consumption because it saves money and time (Chanda, 2024; Hoang & Tung, 2024; Van Hoang & Le Thanh, 2024), especially when it's difficult to identify a complete list of consumers interested in green products or when potential customers are spread out over different areas (Chanda, 2024). To address concerns about common method bias (CMB), we used Harman's single-factor test. The results indicate that the first unrotated component made up 28.664%, which is less than 50% (Podsakoff et al., 2003), and the VIF values for all the main variables ranged from 1.647 to 2.947. These results are much lower than the critical threshold of 3.3 (Hair et al., 2019). The findings of both studies present compelling evidence that CMB does not represent a risk.

Table 2: Demographic characteristics of the respondents

Characteristics	Number	Frequency	Characteristics	Number	Frequency
Gender					
Male	211	43.4%	Officer	114	23.5%
Female	275	56.6%	Sales/Household	52	10.7%
Regions					
The Northern	122	25.1%	Student	142	29.2%
The Central	87	17.9%	Worker	54	11.1%
The Southern	277	57%	Manager	46	9.5%
Income					
<15 million VND	233	47.9%	High School	116	23.9%
From 15 million to < 30 million VND	172	35.4%	University	286	58.8%
≥ 30 million VND	81	16.7%	Postgraduate	84	17.3%

Source: Primary data.

We conducted quality control for the data before processing the responses. Specifically, we checked for missing values or careless responses and discarded those surveys with grave problems. After rigorous filtering for data of this nature, we were able to arrive at a reliable sample of 486 solid responses out of 527, thereby achieving a response rate of 92.2%. This sample is very varied and offers informative details about customers' environmentally conscious buying behaviors throughout Vietnam. Table 2 delineates the demographic features of the respondents. Among the respondents, 56.6% were female, 57% lived in the southern area, and 58.8% possessed a bachelor's degree. Furthermore, 47.9% of interviewees indicated an average monthly income of less than 15 million VND.

4. RESULTS AND DISCUSSION

4.1. Reliability and Validity Assessment

Table 3, Convergent and discriminant validity were assessed to confirm the measurement model's robustness. Cronbach's alpha scores ranged from 0.837 to 0.890, while CR ranged from 0.861 to 0.924, both exceeding the suggested standard of 0.70, indicating strong internal consistency. For convergent validity, factor loadings exceeded 0.708, while AVE values varied from 0.632 to 0.755, demonstrating satisfactory convergence (Hair et al., 2019). VIF was also evaluated, and all values were less than the 3.3 threshold provided by Kock (2015), indicating that the model is devoid of both vertical and lateral multicollinearity. Hypothesis testing results were regarded as valid when the direction of relationships matched theoretical assumptions and reached statistical significance

Table 3: The reliability and validity assessment

Constructs	Items	Outer loading	VIF	Cronbach's Alpha	CR	AVE	R ² Adjusted	Q ²
ECS (Cheung & To, 2019)	ECS1	0.889	2.380	0.837	0.902	0.755		
	ECS2	0.829	1.647					
	ECS3	0.887	2.278					
PEA (Shin et al., 2017)	PEA1	0.797	1.837	0.855	0.861	0.632	0.134	0.083
	PEA2	0.788	1.693					
	PEA3	0.828	2.138					
	PEA4	0.805	1.874					
	PEA5	0.754	1.863					
AGP (Varah et al., 2021)	AGP1	0.851	2.223	0.890	0.924	0.751	0.156	0.114
	AGP2	0.874	2.584					
	AGP3	0.895	2.642					
	AGP4	0.846	2.293					
GPB (Yadav & Pathak, 2017)	GPB1	0.868	1.993	0.829	0.898	0.745	0.121	0.090
	GPB2	0.835	1.700					
	GPB3	0.886	2.160					
PS (Srivastava & Gupta, 2023)	PS1	0.835	2.383	0.876	0.915	0.729		
	PS2	0.885	2.479					
	PS3	0.910	2.947					
	PS4	0.778	1.661					

Source: Results from Smart PLS 3

We also assessed discriminant validity using the HTMT ratio. HTMT seeks to establish a true relationship between any two structures. According to Henseler et al. (2016), a threshold of 0.85 or 0.90 is often the basis for establishing discriminant validity. Table 4 shows that all HTMT values were below the 0.85 threshold, indicating satisfactory discriminant validity.

Table 4: The HTMT value

	AGP	AGP*PS	ECS	GPB	PEA	PEA*PS
AGP*PS	0.400					
ECS	0.456	0.167				
GPB	0.264	0.043	0.323			
PEA	0.248	0.152	0.430	0.272		
PEA*PS	0.135	0.168	0.073	0.054	0.269	
PS	0.286	0.138	0.222	0.202	0.151	0.167

Source: Results from Smart PLS 3

4.2. Evaluating the research model

By using the PLS approach, the structural model was estimated to examine the interactions between the components. The non-parametric bootstrapping approach was used to correctly measure the model with 5000 resamples. f^2 values range from [0.014–0.187]. Cohen (1988) defined the f^2 values, stating that 0.35 represents a high effect size, 0.15 represents a medium effect size, and 0.02 represents a small effect size. The R^2 value should be greater than 0.10; if it increases by more than 15%, the R^2 value is sufficient to achieve a satisfactory level of explanatory power (Falk & Miller, 1992). In this study, the R^2 values from the structural model show that the independent variables explain 15.6% of the changes in AGP, 13.4% in PEA, and 12.1% in GPB. The data prove that the model has acceptable explanatory power for behavioral studies (Table 3). Q^2 values greater than 0 indicate significant predictability, with PEA at 0.083, GPB at 0.090, and AGP at 0.114. SRMR = 0.071 < 0.08 showed that the model fit was satisfactory (Henseler et al., 2016). The PLS-SEM result is shown below.

Table 5: The result of PLS-SEM

Variables	Hyp	Beta	STDEV	t-statistics	P-values	Result	
ECS->PEA	H1	+	0.369	0.044	8.472	0.000	Accepted
ECS->AGP	H2	+	0.397	0.042	9.347	0.000	Accepted
PEA->GPB	H3	+	0.219	0.054	4.307	0.000	Accepted
AGP->GPB	H4	+	0.208	0.053	3.839	0.010	Accepted
Moderating PEA*PS --> GPB	H5	+	0.110	0.049	2.263	0.024	Accepted
Moderating AGP*PS --> GPB	H6	+	0.107	0.053	2.046	0.041	Accepted

Source: Data analysis result at 5% significance

4.3. Discussion

At 5% significance, all hypotheses are validated (Table 5). The findings of this study align with the outcomes of previous studies. H1 (ECS->PEA; $\beta = 0.369$, $p < 0.05$) and H2 (ECS->AGP; $\beta =$

0.397, $p < 0.05$) confirm the similarities of the findings of Khan (2024) and Cheung and To (2019), which show that ECS has a positive impact on PEA and AGP. Fostering ECS can elevate PEA by increasing consciousness and understanding of ecological issues (Laheri et al., 2024). This heightened consciousness can serve as a value for cultivating broader positive PEAs, including those related to green products and sustainable consumption. This increased consciousness can change their environmental values, beliefs, and judgments, resulting in more favorable attitudes towards the environment and products (Cheung & To, 2019; Khan, 2024). The result of H3 (PEA->GPB; $\beta = 0.219$, $p < 0.05$) was similar to the study of Ogiemwonyi et al. (2023). On the other hand, PEA will show a greater willingness to consider the environmental impact of purchases through purchasing green products (Shin et al., 2017). The results of H4 (AGP->GPB; $\beta = 0.208$; $p < 0.05$) are accepted in line with the study of Chaihanchanchai and Anantachart (2023), in that AGP has a positive impact on GPB. Consumers with positive ECS tend to choose more environmentally friendly products (Van Hoang & Le Thanh, 2024).

Figure 2: Moderating impact of PEA on GPB

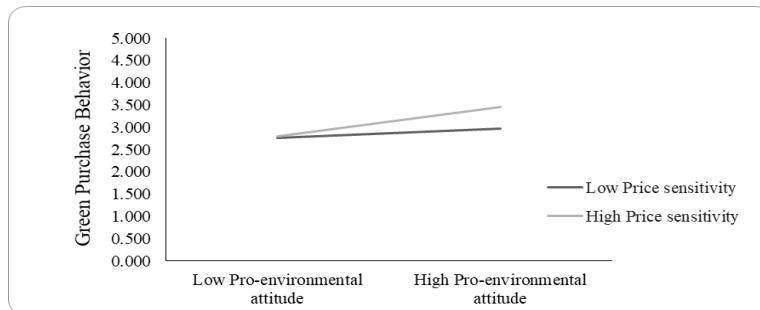
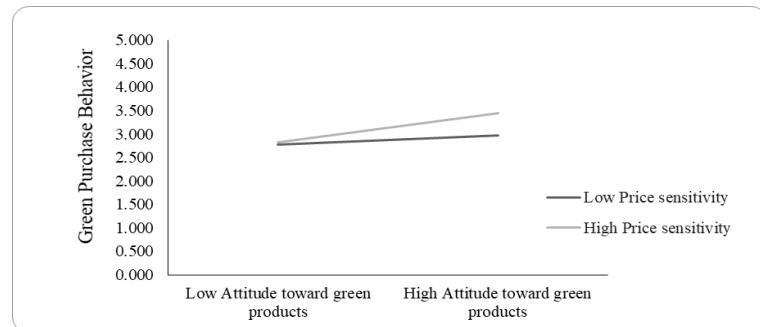


Figure 3: Moderating impact of AGP on GPB



Figures 2 and 3 depict the interaction effects of PEA/AGP and PS on GPB. The interaction slope demonstrates that the positive relationship between PEA/AGP and GPB is higher among price-sensitive consumers. The findings confirm H5 (PEA \times PS \rightarrow GPB; $\beta = 0.110$, $p < 0.05$) and H6 (AGP \times PS \rightarrow GPB; $\beta = 0.107$, $p < 0.05$). This study demonstrates that, in the context of increasing environmental concerns, price-sensitive consumers can overcome cost aversion when their environmental values are significantly activated, challenging the popular notion that they are unwilling to pay more for green items (Van Hoang & Le Thanh, 2024). A favorable attitude based

on environmental consciousness and emotional connection can have a major influence on the buying behavior of cost-conscious consumers (Hsu et al., 2017). These findings suggest that customers' purchase intentions can be improved when they perceive the benefits of environmentally friendly products, especially when price sensitivity forces them to evaluate the trade-offs more carefully. Reframing green environmental purchases as value-driven decisions rather than just cost considerations will facilitate the adjustment of attitudes to behavior.

5. CONCLUSION

This study contributes to the literature on green consumerism in several ways. First, this study applies the VAB model, focusing on ECS as one of the consumer environmental values that drive green purchasing behavior. Consumers' increasing awareness of important environmental issues such as pollution and climate change motivates them to consider the environmental impacts of their purchases, motivating them to seek solutions that address these concerns (Cheung & To, 2019). ECS determines how people perceive and respond to environmental challenges, which in turn influences their attitudes toward the environment and, as a result, their purchase of green goods (Laheri et al., 2024). Second, the results test the VAB model by confirming the validation of a chain of mediations: "ECS → PEA / AGP → GPB." ECS, being a reflected value in the VAB model, represents consumers' desire to minimize environmental harm (Cheung & To, 2019). Not only does this value enhance general environmental consciousness, but it also has a direct impact on whether customers buy green products and how much they are ready to pay more for them (Lavuri, 2022). Additionally, ECS evokes an emotional connection with environmental health, forcing consumers to express their concern in buying behavior (Laheri et al., 2024). Previous studies (Cheung & To, 2019; Van Hoang & Le Thanh, 2024; Khan, 2024) examined these attitudes in isolation, but the current study shows that ECS influences consumer behavior through various attitudinal lenses. This mediating function also accords with the implication that it is increasingly and more recognized as being a moral duty to conserve the environment, prompting positive attitudes and green consumer purchasing (Rana & Solaiman, 2023). Lastly, the positive moderating influence of PS confirms its mediation of the relationship between dual attitudes (PEA and AGP) and actual green buying behavior. This finding suggests attitudes by themselves among customers are not the only predictors of green purchasing; forces beyond also play a significant role. Although price is sometimes regarded as a barrier to obtaining green items, buyers frequently assess the advantages against the expenses before purchasing them (Riyaz et al., 2024). Those high levels of PS may be more inclined to pay higher costs for green items, particularly when such products closely align with their values (Lavuri, 2022). According to equity theory, customers are more inclined to tolerate perceived price discrepancies when they feel the value (output) they receive is congruent with their investment (input), which aligns with earlier findings. PS provides a mechanism to help explain the attitude-behavior gap by illustrating how consumers' willingness to pay extra aligns with their environmental values.

For managerial implications, ECS is a key factor in the development of favorable environmental attitudes and the purchasing of green items. This objective can be effectively achieved through diverse communication channels such as advertising campaigns, education programs, short films, and documentaries that not only highlight the environmental advantages of green products but also accentuate the detrimental effects of unsustainable consumption patterns (Srivastava & Gupta, 2023). Firms can reinforce their positive attitudes and become more confident and willing to accept

green products by educating consumers (Riyaz et al., 2024). Second, while the high price of green items is generally regarded as a barrier (Riyaz et al., 2024), the study adopts a more nuanced perspective in which price awareness can, under certain circumstances, play a positive role in bridging the gap between green attitudes and purchasing behavior. The results reveal that price-conscious consumers are more inclined to buy eco-friendly garments if they know more about environmental concerns or have already purchased eco-friendly items (Pardeshi et al., 2024). Therefore, managers should not focus only on cutting prices and should start talking about the overall value, better quality, and specific benefits that make the higher price worth it (Bhutto et al., 2022). Discounts or other incentives, such as green product status symbols, can also induce price-sensitive but environmentally conscious shoppers to make the effort to shop. Finally, the environmental and health benefits of goods need to be clearly communicated on product labels (Pardeshi et al., 2024). Such information is important to justify premium pricing and build customer trust, especially since price sensitivity can hinder green purchasing behavior (Van Hoang & Le Thanh, 2024). Recognizing customer heterogeneity, especially the diverse categories of green consumers discovered in market profile research, enables targeted promotional activities.

This study has certain limitations. First, the study's reliance on convenience sampling in big urban regions may restrict its generalizability. Future studies should include rural areas to ensure accurate results. Second, the current study centered on green products in general. Future study should concentrate on specific product categories to capture nuanced variances in customer motives and decision-making processes. Third, to fill the gap between "attitudes and behavior", in the future, research can also be done based on psychological and socio-economic factors with a comparison between effects concerning gender and generation. Finally, future research should investigate using mixed methods to verify an integrated framework. Such studies could include combining longitudinal quantitative and qualitative data to explore how positive environmental perceptions translate into better attitudes and ultimately sustainable purchasing behavior.

REFERENCES

Ahmad, W., Kim, W. G., Anwer, Z., & Zhuang, W. (2020). Schwartz personal values, theory of planned behavior and environmental consciousness: How tourists' visiting intentions towards eco-friendly destinations are shaped?. *Journal of Business Research*, 110, 228-236. <https://doi.org/10.1016/j.jbusres.2020.01.040>

Aschemann-Witzel, J., & Zielke, S. (2017). Can't buy me green? A review of consumer perceptions of and behavior toward the price of organic food. *Journal of Consumer Affairs*, 51(1), 211-251. <https://doi.org/10.1111/joca.12092>

Bhutto, M. H., Tariq, B., Azhar, S., Ahmed, K., Khuwaja, F. M., & Han, H. (2022). Predicting consumer purchase intention toward hybrid vehicles: testing the moderating role of price sensitivity. *European Business Review*, 34(1), 62-84. <https://doi.org/10.1108/EBR-10-2019-0274>

Chaihanchanchai, P., & Anantachart, S. (2023). Encouraging green product purchase: Green value and environmental knowledge as moderators of attitude and behavior relationship. *Business Strategy and the Environment*, 32(1), 289-303. <https://doi.org/10.1002/bse.3130>

Chanda, R. C., Isa, S. M., & Ahmed, T. (2024). Factors influencing customers' green purchasing intention: evidence from developing country. *Journal of Science and Technology Policy Management*, 15(5), 1056-1084. <https://doi.org/10.1108/JSTPM-03-2022-0044>

Chang, C. H., & Chen, Y. S. (2012). The determinants of green intellectual capital. *Management decision*, 50(1), 74-94. <https://doi.org/10.1108/00251741211194886>

Cheung, M. F., & To, W. M. (2019). An extended model of value-attitude-behavior to explain Chinese consumers' green purchase behavior. *Journal of Retailing and Consumer Services*, 50, 145-153. <https://doi.org/10.1016/j.jretconser.2019.04.006>

Činjarević, M., Kapo, A., & Turulja, L. (2022, June). Predicting sustainable consumption practices by value-attitude-behavior theory. In *International Conference on Sustainable Development* (pp. 163-178). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-031-17767-5_12

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. (2nd ed.). Lawrence Erlbaum Associates, New Jersey, USA. <https://doi.org/10.4324/9780203771587>

de Matos, C. A., Dalmoro, M., & Dutra de Barcellos, M. (2025). How pro-environmental consumption behaviour affects subjective wellbeing: the role of self-enhancement, ways of shopping and locavorism. *British Food Journal*, 127(2), 496-518. <https://doi.org/10.1108/BFJ-06-2024-0629>

Duong, C. D. (2022). Big Five personality traits and green consumption: bridging the attitude-intention-behavior gap. *Asia Pacific Journal of Marketing and Logistics*, 34(6), 1123-1144. <https://doi.org/10.1108/APJML-04-2021-0276>

ElHaffar, G., Durif, F., & Dubé, L. (2020). Towards closing the attitude-intention-behavior gap in green consumption: A narrative review of the literature and an overview of future research directions. *Journal of cleaner production*, 275, 122556. <https://doi.org/10.1016/j.jclepro.2020.122556>

Falk, R. F., & Miller, N. B. (1992). *A primer for soft modeling*. University of Akron Press.

Habib, M. D., Kaur, P., Sharma, V., & Talwar, S. (2023). Analyzing the food waste reduction intentions of UK households. A Value-Attitude-Behavior (VAB) theory perspective. *Journal of Retailing and Consumer Services*, 75, 103486. <https://doi.org/10.1016/j.jretconser.2023.103486>

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, T. I., & Stoel, L. (2017). Explaining socially responsible consumer behavior: A meta-analytic review of theory of planned behavior. *Journal of International Consumer Marketing*, 29(2), 91-103. <https://doi.org/10.1080/08961530.2016.1251870>

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: updated guidelines. *Industrial management & data systems*, 116(1), 2-20. <https://doi.org/10.1108/IMDS-09-2015-0382>

Hoang, D. V., & Tung, L. T. (2024). Environmental concern, perceived marketplace influence and green purchase behavior: the moderation role of perceived environmental responsibility. *International Journal of Sociology and Social Policy*, 44(11/12), 1024-1039. <https://doi.org/10.1108/IJSSP-03-2024-0111>

Hsu, C. L., Chang, C. Y., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. *Journal of retailing and consumer services*, 34, 145-152. <https://doi.org/10.1016/j.jretconser.2016.10.006>

Hughner, R. S., McDonagh, P., Prothero, A., Shultz, C. J., & Stanton, J. (2007). Who are organic food consumers? A compilation and review of why people purchase organic food. *Journal of Consumer Behaviour: An International Research Review*, 6(2-3), 94-110. <https://doi.org/10.1002/cb.210>

Karuppiah, V., & Ramayah, T. (2023). Modeling hybrid cars adoption using an extended version of the theory of planned behavior. *Transportation Letters*, 15(7), 780-792. <https://doi.org/10.1080/19427867.2022.2091677>

Kautish, P., & Sharma, R. (2021). Study on relationships among terminal and instrumental values, environmental consciousness and behavioral intentions for green products. *Journal of Indian Business Research*, 13(1), 1-29. <https://doi.org/10.1108/JIBR-01-2018-0013>

Khan, A. N. (2024). Elucidating the effects of environmental consciousness and environmental attitude on green travel behavior: Moderating role of green self-efficacy. *Sustainable Development*, 32(3), 2223-2232. <https://doi.org/10.1002/sd.2771>

Kim Loan. (2023). Green economy expected to reach US\$300 bln by 2050. Retrieved April 14, 2025 from: <https://en.baochinhphu.vn/green-economy-expected-to-reach-us300-bln-by-2050-11123041910272237.htm>

Kim, M. J., & Hall, C. M. (2021). Do value-attitude-behavior and personality affect sustainability crowdfunding initiatives?. *Journal of Environmental Management*, 280, 111827. <https://doi.org/10.1016/j.jenvman.2020.111827>

Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (ijec)*, 11(4), 1-10. <https://doi.org/10.4018/ijec.2015100101>

Laheri, V. K., Lim, W. M., Arya, P. K., & Kumar, S. (2024). A multidimensional lens of environmental consciousness: towards an environmentally conscious theory of planned behavior. *Journal of Consumer Marketing*, 41(3), 281-297. <https://doi.org/10.1108/JCM-03-2023-5875>

Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of consumer marketing*, 18(6), 503-520. <https://doi.org/10.1108/EUM0000000006155>

Lavuri, R. (2022). Organic green purchasing: Moderation of environmental protection emotion and price sensitivity. *Journal of Cleaner Production*, 368, 133113. <https://doi.org/10.1016/j.jclepro.2022.133113>

Monroe, K. B. (1973). Buyers' subjective perceptions of price. *Journal of marketing research*, 10(1), 70-80. <https://doi.org/10.1177/002224377301000110>

Ogiemwonyi, O., Alam, M. N., Alshareef, R., Alsolamy, M., Azizan, N. A., & Mat, N. (2023). Environmental factors affecting green purchase behaviors of the consumers: Mediating role of environmental attitude. *Cleaner Environmental Systems*, 10, 100130. <https://doi.org/10.1016/j.cesys.2023.100130>

Pardeshi, V., Pardeshi, H., & Khanna, V. T. (2024). Impact of Environmental Knowledge, Past Sustainable Behavior and Social Influence on Sustainable Apparel Purchase Intention with Price Consciousness as Moderating Variable. *NMIMS Management Review*, 32(3), 185-196. <https://doi.org/10.1177/09711023241292475>

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879. <https://doi.org/10.1037/0021-9010.88.5.879>

Rana, S. S., & Solaiman, M. (2023). Moral identity, consumption values and green purchase behaviour. *Journal of Islamic Marketing*, 14(10), 2550-2574. <https://doi.org/10.1108/JIMA-01-2021-0030>

Riyaz, M., Jan, A., Khan, D., & Zahoor, A. (2024). Determinants of Purchase Intention for Green Consumer Durables: Investigating the Moderating Role of Price Sensitivity. *Jindal Journal of Business Research*, 22786821241264593. <https://doi.org/10.1177/22786821241264593>

Rokeach, M. (1973). *The nature of human values*. Free press.

Segev, S., & Liu, Y. (2022). The effect of temporal orientation on green purchase behavior: Comparing US and Chinese consumers. *Journal of International Consumer Marketing*, 34(1), 95-109. <https://doi.org/10.1080/08961530.2021.1917034>

Semprebon, E., Mantovani, D., Demczuk, R., Souto Maior, C., & Vilasanti, V. (2019). Green consumption: a network analysis in marketing. *Marketing Intelligence & Planning*, 37(1), 18-32. <https://doi.org/10.1108/MIP-12-2017-0352>

Shin, S., van Riper, C. J., Stedman, R. C., & Suski, C. D. (2022). The value of eudaimonia for understanding relationships among values and pro-environmental behavior. *Journal of Environmental Psychology*, 80, 101778. <https://doi.org/10.1016/j.jenvp.2022.101778>

Shin, Y. H., Moon, H., Jung, S. E., & Severt, K. (2017). The effect of environmental values and attitudes on consumer willingness to pay more for organic menus: A value-attitude-behavior approach. *Journal of Hospitality and Tourism Management*, 33, 113-121. <https://doi.org/10.1016/j.jhtm.2017.10.010>

Srivastava, V., & Gupta, A. K. (2023). Price sensitivity, government green interventions, and green product availability triggers intention toward buying green products. *Business strategy and the environment*, 32(1), 802-819. <https://doi.org/10.1002/bse.3176>

Statista (2023). Willingness to pay extra for sustainable products among people in Vietnam in 2023. Retrieved May 20, 2025 from: <https://www.statista.com/statistics/1320877/vietnam-willingness-to-pay-more-for-sustainable-products/>

Urbach, N., & Ahlemann, F. (2010). Structural equation modeling in information systems research using partial least squares. *Journal of Information Technology Theory and Application (JITTA)*, 11(2), 2.

Van Hoang, D., & Le Thanh, T. (2024). Relationship Between Environmental Concern, Green Perceived Value and Green Purchase Behaviour: The Moderating Role of Price Consciousness. *Organizations and Markets in Emerging Economies*, 15(2 (31)), 248-287. <https://doi.org/10.15388/omee.2024.15.12>

Varah, F., Mahongnao, M., Pani, B., & Khamrang, S. (2021). Exploring young consumers' intention toward green products: applying an extended theory of planned behavior. *Environment, Development and Sustainability*, 23, 9181-9195. <https://doi.org/10.1007/s10668-020-01018-z>

Wang, G., Yao, Y., Ren, L., Zhang, S., & Zhu, M. (2023). Examining the role of generativity on tourists' environmentally responsible behavior: an inter-generational comparison. *Journal of Hospitality and Tourism Management*, 57, 303-314. <https://doi.org/10.1016/j.jhtm.2023.10.008>

Yadav, R., & Pathak, G. S. (2017). Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecological economics*, 134, 114-122. <https://doi.org/10.1016/j.ecolecon.2016.12.019>