

Factors Influencing Young Consumers' Intention to Choose Green Products: Evidence from Hanoi

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Abstract

This study examines the factors influencing young consumers' intention to choose green products in Hanoi, Vietnam. Drawing on the Theory of Planned Behavior and the green consumption literature, the study evaluates five groups of antecedents: personal factors, social influence, environmental awareness, green product attributes, and government policy. A quantitative cross-sectional survey was conducted with 253 valid responses from young consumers in Hanoi. The data were analysed using SPSS 22 through exploratory factor analysis, Pearson correlation analysis, and multiple linear regression. The findings show that all five predictors are positively associated with young consumers' intention to choose green products. In the regression model, green product attributes emerge as the strongest predictor, followed by social influence, personal factors, environmental awareness, and government policy. This indicates that young consumers are not motivated solely by environmental concerns; they also consider practical product-related values such as quality, safety, convenience, eco-friendly packaging, and transparent information. In addition, peer communication, social media, community influence, and personal motivation play important roles in shaping green product choice intention. The study contributes to the green consumption literature by examining five antecedent groups within a single empirical model in the urban context of an emerging market. The results suggest that young consumers' green product choices are mainly driven by tangible product value, social reinforcement, and personal motivation, while government policy has a positive but weaker effect. From a practical perspective, the findings imply that businesses should improve the functional value, credibility, and visibility of green products. Retailers, universities, and policymakers should also strengthen communication, education, eco-label recognition, and supportive policies to encourage sustainable consumption among young consumers.

Keywords: green products, green purchase intention, young consumers, environmental awareness, social influence, Hanoi

1. Introduction

Green consumption has become a central topic in marketing, consumer behavior, and sustainability research. As environmental degradation, plastic waste, resource depletion, and climate-related concerns become more visible, consumers are increasingly encouraged to evaluate not only price and functional quality, but also the environmental consequences of purchase, use, and disposal. Green products are usually understood as products that reduce adverse environmental impacts through cleaner production, safer materials, recyclable or biodegradable packaging, lower emissions, or more responsible end-of-life practices (Ottman et al., 2006; Peattie & Crane, 2005; Sharma et al., 2023).

Young consumers are particularly relevant for green consumption research because they are active users of digital media, are exposed to global sustainability narratives, and often influence household purchase decisions. Nevertheless, positive environmental attitudes do not automatically translate into green purchases. Prior research repeatedly identifies an attitude-behaviour or value-action gap, where consumers express concern for the environment but hesitate to buy green products because of high price, low trust, limited availability, weak product information, or convenience barriers (Barbarossa & Pastore, 2015; Gleim et al., 2013; Joshi & Rahman, 2015; Patino-Toro et al., 2024; Young et al., 2010).

In Hanoi, green consumption is receiving increasing attention from businesses, universities, policymakers, and civil-society campaigns. Hanoi provides a useful urban setting because young consumers in the city are exposed to green product information, social-media campaigns, university-based environmental activities, and modern retail channels. Recent Vietnam-based evidence also suggests that green trust and green packaging are relevant to young consumers' green purchase behaviour (Nguyen et al., 2021; Son et al., 2024). However, evidence on the relative importance of product attributes, personal factors, social influence, environmental awareness, and government policy remains limited. Understanding these relationships is important for designing marketing strategies and policy interventions that are realistic and evidence-based.

Therefore, this study aims to identify the factors influencing young consumers' intention to choose green products in Hanoi. The study contributes to the literature by testing an extended behavioural model in an emerging-market urban context and by clarifying which predictors remain statistically significant when they are examined simultaneously. Practically, the findings help firms prioritize product quality, transparency, and social communication, while helping policymakers improve the visibility and credibility of green consumption initiatives.

2. Literature Review and Hypothesis Development

2.1 Green Products and Green Consumer Choice

Green products are products designed, produced, distributed, and consumed with lower environmental impact than conventional alternatives. They may include energy-efficient goods, organic or natural products, products with recyclable packaging, refillable or reusable items, and goods certified by credible eco-labels. From a consumer perspective, many green products function as credence goods because buyers cannot easily verify environmental claims before or after consumption. This increases the importance of transparent information, certification, trust, and perceived value (Chen & Chang, 2012, 2013; Gorton et al., 2021; Testa et al., 2015).

Green product choice is not driven by environmental concern alone. Consumers also evaluate functional performance, safety, price fairness, convenience, aesthetic appeal, brand credibility, and perceived personal benefits. Lin and Huang (2012) show that consumption values influence green product choice, while Biswas and Roy (2015) and Kumar et al. (2017) highlight the role of perceived value and consumer attitudes in emerging-market green

consumption. This multidimensional nature explains why product attributes and communication cues can be as important as environmental values in predicting purchase intention.

2.2 Theoretical Foundation

The Theory of Planned Behavior (TPB) provides a useful foundation for explaining green product choice. According to TPB, behavioural intention is shaped by attitudes toward the behaviour, subjective norms, and perceived behavioural control (Ajzen, 1991). In green consumption research, personal attitudes and awareness reflect internal evaluation; social influence reflects subjective norms; and product attributes, price, convenience, and policy support reflect external conditions that facilitate or constrain choice.

Recent green-consumption studies extend TPB by adding environmental concern, green trust, perceived value, perceived risk, eco-label knowledge, and social-media influence. For example, Paul et al. (2016), Yadav and Pathak (2017), and Maichum et al. (2016) show that extended TPB frameworks improve the explanation of green purchase intention in developing or emerging-market settings. Liobikiene et al. (2016) further demonstrate that the strength of TPB relationships may vary across social and cultural contexts. Accordingly, the present study proposes an extended model in which green product choice intention is influenced by five groups of factors, including personal factors, social influence, green product attributes, environmental awareness, and government policy.

2.3 Personal Factors

Personal factors include consumers' knowledge, attitudes, perceived responsibility, habits, health-related motivations, perceived consumer effectiveness, and willingness to pay for products that are safer or more environmentally responsible. Consumers with stronger pro-environmental attitudes are more likely to evaluate green products positively and to perceive green purchase as consistent with their self-image and moral values (Chan, 2001; Haws et al., 2014; Kanchanapibul et al., 2014). Studies of young consumers also show that confidence, values, and perceived effectiveness can strengthen sustainable purchase intention (Naderi & Van Steenburg, 2018; Vermeir & Verbeke, 2008).

At the sub-factor level, personal factors cover environmental/product knowledge, positive attitudes, consumption habits, perceived health and safety benefits, and willingness to pay a price premium. These dimensions are important because young consumers may support sustainability in principle but still require a clear personal reason to choose green products, especially when green alternatives are more expensive or less familiar (Chekima et al., 2016; Laroche et al., 2001).

H1: Personal factors have a positive effect on young consumers' intention to choose green products.

2.4 Social Influence

Social influence refers to the impact of family, friends, peers, online communities, influencers, celebrities, and wider social norms on consumers' decisions. Young consumers are particularly exposed to social-media content and peer comparison. When green consumption becomes socially visible and positively evaluated, it may create normative pressure and strengthen the perceived desirability of green products. This is consistent with the subjective-norm component of TPB and with research showing that sustainable behaviours can be encouraged by social influence, identity, and communication cues (White et al., 2019; Young et al., 2010).

Social sub-factors include social media exposure, influencer/KOL communication, perceived green consumption trends, environmental campaigns, and green learning or working environments. Digital platforms make these influences more immediate; social-media information sharing can increase green purchase intention among Generation Z by strengthening perceived green value and subjective norms (Sun & Xing, 2022). Influencers and celebrity endorsers may also affect credibility and purchase intention when their messages are perceived as authentic (Jin & Phua, 2014; Lee & Watkins, 2016).

H2: Social influence has a positive effect on young consumers' intention to choose green products.

2.5 Green Product Attributes

Green product attributes include price, quality, safety, eco-friendly packaging, transparent information, certification, convenience, and reusability. Although environmental benefits are important, consumers still expect green products to perform well and to justify any price premium. Product-level value is therefore central to green purchase intention (Kumar & Ghodeswar, 2015; Kumar et al., 2017). If a green product is perceived as lower quality, difficult to access, or more expensive without clear benefits, intention may weaken even among environmentally concerned consumers (Joshi & Rahman, 2015).

At the sub-factor level, price and perceived value influence whether young consumers view green products as affordable and worthwhile. Quality and safety determine whether products can compete with conventional alternatives. Eco-packaging, transparent information, eco-labels, and certification reduce uncertainty and greenwashing concerns (Chen & Chang, 2012, 2013; D'Souza et al., 2007; Taufique et al., 2017). Packaging also matters because eco-designed packaging increases perceived environmental friendliness and can influence product evaluation (Magnier & Crie, 2015). Convenience and reusability further affect whether a green choice can become an everyday habit.

H3: Green product attributes have a positive effect on young consumers' intention to choose green products.

2.6 Environmental Awareness

Environmental awareness captures consumers' concern about pollution, climate change, resource depletion, and the ecological consequences of consumption. Higher environmental awareness can increase the perceived importance of choosing products that reduce waste and emissions. Environmental psychology research suggests that awareness, attitudes, norms, and perceived ability are relevant to pro-environmental behaviour (Steg & Vlek, 2009). In green purchasing, environmental concern has also been identified as a recurring predictor of intention (Jaiswal & Kant, 2018; Zhuang et al., 2021).

The environmental awareness construct includes positive environmental attitudes, perceived social responsibility, community responsibility, and climate-change concern. These sub-factors help explain why green products may be perceived not only as private consumption choices but also as symbolic actions that reduce harm and express responsibility to society. Nevertheless, awareness may not be sufficient by itself if consumers encounter high prices, low trust, weak availability, or unclear product claims (Chekima et al., 2016; Tanner & Wolfing Kast, 2003; White et al., 2019).

H4: Environmental awareness has a positive effect on young consumers' intention to choose green products.

2.7 Government Policy

Government policy may influence green consumption through eco-label regulation, public communication, tax incentives, subsidies, product standards, and environmental education. Policy can increase market confidence by reducing information asymmetry and encouraging firms to improve environmental performance. Eco-label systems and transparent standards are particularly relevant because they make environmental claims more visible and verifiable at the point of purchase (Gorton et al., 2021; Testa et al., 2015; Taufique et al., 2017).

The policy construct includes tax incentives, government communication campaigns, state-recognized eco-labels or certification, and subsidy or price-support mechanisms. These sub-factors are important because policy may shape the supply and credibility of green products even when individual consumers are not fully aware of the policy design. In emerging markets, policy effects may operate indirectly through price, product availability, certification credibility, and retailer communication rather than directly through purchase intention.

H5: Government policy has a positive effect on young consumers' intention to choose green products.

Table 1 consolidates the Factors influencing young consumers' intention to choose green products.

Table 1. Factors influencing young consumers' intention to choose green products

Main factors	Sub-factors	Sources
Personal factors	Individual knowledge and awareness of green products	Chan (2001); Haws et al. (2014); Kanchanapibul et al. (2014)
	Positive attitude toward green products	Ajzen (1991); Paul et al. (2016); Yadav & Pathak (2017)
	Green consumption habits and green values	Vermeir & Verbeke (2008); Haws et al. (2014); White et al. (2019)
	Perceived health and safety benefits	Chen & Chang (2012); Kanchanapibul et al. (2014); Naderi & Van Steenburg (2018)
	Willingness to pay a price premium for green products	Laroche et al. (2001); Chekima et al. (2016); Dinh et al. (2021)
Social influence	Social-media exposure and online information sharing	Kaplan & Haenlein (2010); Sun & Xing (2022)
	Influencers, celebrities, and KOLs	Jin & Phua (2014); Lee & Watkins (2016)
	Green consumption trends and subjective norms	Ajzen (1991); Young et al. (2010); White et al. (2019)
	Environmental campaigns and green communication	Peattie & Crane (2005); Steg & Vlek (2009); White et al. (2019)
	Learning, working, and cultural environment	Lee (2008); Liobikiene et al. (2016); Naderi & Van Steenburg (2018)
Environmental awareness	Positive environmental attitude	Chan (2001); Jaiswal & Kant (2018); Zhuang et al. (2021)
	Social and environmental responsibility	Peattie & Crane (2005); Haws et al. (2014); Borah et al. (2024)
	Community responsibility and moral obligation	Vermeir & Verbeke (2008); White et al. (2019)
	Climate change and pollution concern	Kanchanapibul et al. (2014); Sharma et al. (2023); Zhuang et al. (2021)
Green product attributes	Price fairness and perceived value	Laroche et al. (2001); Chekima et al. (2016); Dinh et al. (2021)
	Product quality, performance, and safety	Ottman et al. (2006); Chen & Chang (2012); Kumar & Ghodeswar (2015)
	Eco-friendly packaging	Magnier & Crie (2015); Nguyen et al. (2021)
	Transparent product information and traceability	Chen & Chang (2013); Testa et al. (2015); Gorton et al. (2021)
	Eco-labels, green certification, and label trust	Delmas & Grant (2014); D'Souza et al. (2007); Taufique et al. (2017); Gorton et al. (2021)
	Convenience, ease of use, and reusability	Lin & Huang (2012); Joshi & Rahman (2015); White et al. (2019)
Government policy	Tax incentives for green products and producers	Chekima et al. (2016); Dinh et al. (2021); Gorton et al. (2021)
	Government communication and environmental education	Peattie & Crane (2005); Steg & Vlek (2009); White et al. (2019)
	State-recognized eco-labels and certification systems	Testa et al. (2015); Taufique et al. (2017); Gorton et al. (2021)
	Subsidies, discounts, and price-support mechanisms	Laroche et al. (2001); Chekima et al. (2016); Delmas & Grant (2014)

Source: Authors

3. Research Methods

3.1 Research Design and Sample

This study adopted a quantitative, cross-sectional survey design. The target respondents were young consumers living, studying, or working in Hanoi who had some awareness of green products. The final valid sample comprised 253 respondents, which is acceptable for exploratory factor analysis and multiple regression with the proposed number of predictors. This design is appropriate for examining associations among perceptions, attitudes, and purchase intentions; however, it does not permit strong causal claims.

3.2 Measurement

The questionnaire used multi-item measures on a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The independent variables were personal factors (PF), social influence (SI), environmental awareness (EA), green product attributes (GPA), and government policy (GP). The dependent variable was green product choice intention (GI). Higher scores indicate stronger agreement with each construct.

3.3 Data Analysis

The data analysis was conducted using SPSS 22. Exploratory factor analysis was first applied to assess the latent structure of the observed measurement items. Pearson correlation analysis was then performed to evaluate the direction and magnitude of the associations between the predictors and green product choice intention. Subsequently, multiple linear regression was employed to determine the independent contribution of each explanatory variable while accounting for the influence of the remaining variables. Potential multicollinearity among the predictors was examined through tolerance values and variance inflation factor (VIF) statistics.

The following regression model was estimated: $GI = \beta_0 + \beta_1PF + \beta_2SI + \beta_3EA + \beta_4GPA + \beta_5GP + \varepsilon$, where GI denotes green product choice intention (see Figure 1).

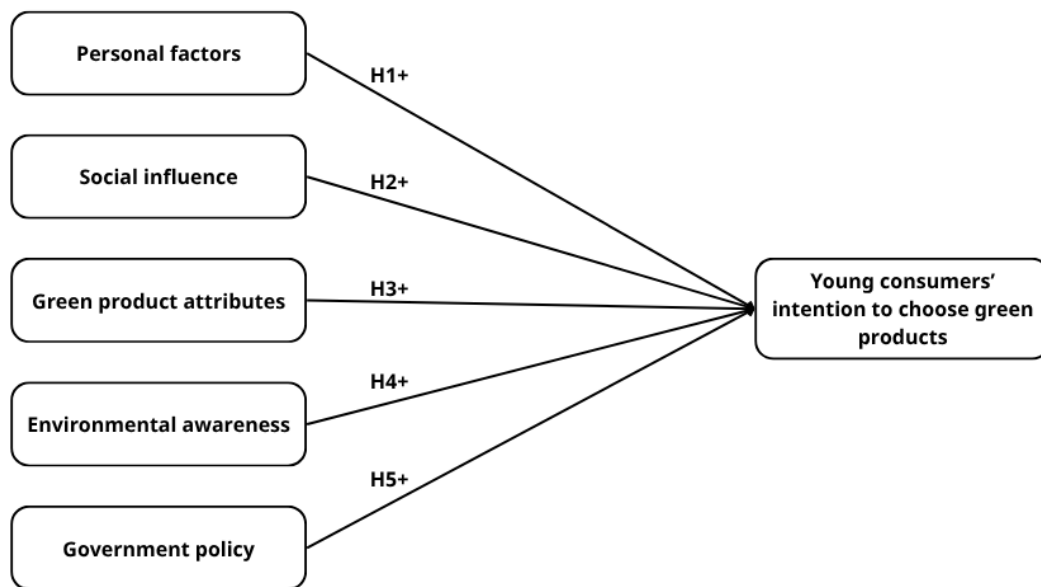


Figure 1. Research model proposal. Source: Authors

4. Results

4.1 Exploratory Factor Analysis

The Kaiser-Meyer-Olkin statistic reached 0.855, which is above the commonly accepted minimum value of 0.50, confirming the appropriateness of the dataset for factor analysis. In addition, Bartlett's test of sphericity was statistically significant ($p < 0.001$), indicating that the correlation matrix differed from an identity matrix. This result demonstrates that the variables were sufficiently interrelated and contained adequate shared variance to proceed with factor extraction.

As shown in Table 2, the rotated factor matrix indicates that the retained measurement items loaded satisfactorily onto their respective constructs, with factor loadings generally exceeding the minimum acceptable threshold of 0.50. This provides preliminary evidence that the observed items were meaningfully associated with their intended latent factors. Green product attributes and social influence each retained five items, indicating relatively stable measurement structures. Government policy retained four items, while environmental awareness retained three items with consistently strong loadings. Although PF1 showed a cross-loading issue, its loading remained above the acceptable level; therefore, it was retained with caution due to its theoretical relevance to the personal factor construct. Overall, the EFA results support the five-factor structure used in the subsequent correlation and regression analyses.

Table 2. Summary of retained factor loadings from the rotated matrix

Sub-factors	Factor loading	Retained construct
GPA4	0.778	Green product attributes
GPA5	0.761	Green product attributes
GPA6	0.755	Green product attributes
GPA2	0.715	Green product attributes
GPA3	0.630	Green product attributes
SI3	0.793	Social influence
SI4	0.732	Social influence
SI5	0.686	Social influence
SI1	0.681	Social influence
SI2	0.643	Social influence
GP1	0.797	Government policy
GP4	0.767	Government policy
GP3	0.762	Government policy
GP2	0.738	Government policy
PF2	0.834	Personal factors
PF5	0.761	Personal factors
PF4	0.590	Personal factors
PF1	0.552	Personal factors; cross-loading noted
EA1	0.798	Environmental awareness
EA2	0.795	Environmental awareness
EA3	0.723	Environmental awareness

Source: Results of data analysis on SPSS 22

4.2 Pearson Correlation Analysis

In Table 3, Pearson correlation analysis indicates that all five independent variables have very strong positive bivariate relationships with young consumers' intention to choose green products. Based on the revised correlation table, the strongest zero-order relationship is observed for personal factors (PF, $r = 0.902$), followed by green product attributes (GPA, $r = 0.890$), social influence (SI, $r = 0.876$), government policy (GP, $r = 0.845$), and environmental awareness (EA, $r = 0.836$). These results suggest that the five predictors move in the same direction as green product choice intention at the bivariate level.

The Pearson results should not be interpreted as evidence of unique causal effects. Correlation analysis examines each predictor separately, whereas multiple regression estimates the contribution of each predictor after the remaining predictors are controlled. Therefore, the regression model is necessary to determine which factors retain significant explanatory power when they are examined simultaneously.

Table 3. Pearson correlations with green product choice intention

Predictor	Pearson r with green product choice intention	Direction/strength	Rank
Personal factors (PF)	0.902	Very strong positive	1
Green product attributes (GPA)	0.890	Very strong positive	2
Social influence (SI)	0.876	Very strong positive	3
Government policy (GP)	0.845	Very strong positive	4
Environmental awareness (EA)	0.836	Very strong positive	5

Source: Results of data analysis on SPSS 22

4.3 Regression Model

As reported in Table 4, the regression model has an adjusted R-squared of 0.634, meaning that the five predictors explain 63.4% of the variance in young consumers' intention to choose green products. This indicates a substantial level of explanatory power for an exploratory behavioural study using cross-sectional survey data.

Table 4. Model summary

Model	R	R-squared	Adjusted R-squared	Std. error of estimate
1	0.801	0.642	0.634	0.41346

Source: Results of data analysis on SPSS 22

Table 5 presents the ANOVA results for the multiple regression model. The model is statistically significant ($F = 88.484$, $p < 0.001$), indicating that the five independent variables jointly explain a significant proportion of variance in green product choice intention. This result confirms the overall suitability of the regression model and supports the interpretation of the individual coefficients reported in Table 6.

Table 5. ANOVA results

Source	Sum of squares	df	Mean square	F	Sig.
Regression	75.630	5	15.126	88.484	<0.001
Residual	42.224	247	0.171		
Total	117.854	252			

Source: Results of data analysis on SPSS 22

As shown in Table 6, all five predictors have positive and statistically significant effects on green product choice intention. Green product attributes exert the strongest standardized effect, followed by social influence, personal factors, environmental awareness, and government policy. This ranking suggests that young consumers' intention is driven most strongly by product-level value and social reinforcement, while policy support has a weaker but still positive direct effect. The VIF values are all below commonly accepted thresholds, indicating that severe multicollinearity is not present in the model.

Table 6. Regression coefficients

Predictor	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
Constant	1.152	0.139		8.294	<0.001		
Personal factors (PF)	0.179	0.042	0.234	4.234	<0.001	0.473	2.115
Social influence (SI)	0.221	0.051	0.259	4.304	<0.001	0.400	2.500
Environmental awareness (EA)	0.100	0.038	0.138	2.646	0.009	0.535	1.868
Green product attributes (GPA)	0.230	0.053	0.270	4.302	<0.001	0.367	2.723
Government policy (GP)	0.027	0.008	0.038	3.341	<0.001	0.512	1.952

Source: Results of data analysis on SPSS 22

In addition, all VIF values range from 1.868 to 2.723, which is below the commonly used cut-off values. The corresponding tolerance values are also above the minimum acceptable level, suggesting that multicollinearity does not seriously threaten the stability of the regression estimates. Nevertheless, because the bivariate Pearson correlations are high, the coefficients should be interpreted as unique effects after controlling for overlap among the predictors. Based on the unstandardized coefficients, the estimated equation is:

$$GI = 1.152 + 0.179PF + 0.221SI + 0.100EA + 0.230GPA + 0.027GP + \varepsilon$$

Based on the standardized coefficients, green product attributes have the strongest significant unique effect, followed by social influence, personal factors, environmental awareness, and government policy. Although government policy is statistically significant in the updated hypothesis-testing table, it has the smallest standardized coefficient and should therefore be interpreted as a weak but positive predictor.

4.4 Hypothesis Testing

Table 7. Hypothesis testing results

Hypothesis	Standardized beta	p-value	Conclusion
H1: Personal factors -> green product choice intention	0.234	<0.001	Supported
H2: Social influence -> green product choice intention	0.259	<0.001	Supported
H3: Green product attributes -> green product choice intention	0.270	<0.001	Supported
H4: Environmental awareness -> green product choice intention	0.138	0.009	Supported
H5: Government policy -> green product choice intention	0.038	<0.001	Supported

Source: Results of data analysis on SPSS 22

The revised hypothesis-testing results indicate that all five hypotheses, namely H1, H2, H3, H4, and H5, are supported at the 5% significance level. Government policy has a positive and statistically significant effect on green product choice intention in the updated results ($\beta = 0.038$, $p < 0.001$). However, because its standardized coefficient is the smallest among the five predictors, its substantive influence should be interpreted cautiously. In other words, policy support matters, but its direct effect is weaker than the effects of green product attributes, social influence, personal factors, and environmental awareness.

5. Discussion

The findings show that green product attributes are the strongest significant predictor of young consumers' intention to choose a green product in the regression model. This result suggests that young consumers do not choose green products merely because they are labelled as environmentally friendly. They also require clear functional value, acceptable quality, trustworthy information, attractive packaging, and convenient use. This is consistent with research showing that perceived value, perceived quality, trust, and risk reduction are central to green purchase intention (Chen & Chang, 2012, 2013; Kumar & Ghodeswar, 2015; Testa et al., 2015).

Social influence is the second strongest significant predictor. This finding is theoretically consistent with the subjective norm component of TPB. In the Hanoi youth-consumer context, social networks, friends, online communities, and visible consumption trends may shape perceptions of what is desirable and socially approved. This is supported by evidence that social-media information sharing can increase green purchase intention among Generation Z through perceived green value and subjective norms (Sun & Xing, 2022). For firms, this implies that peer-based communication, credible influencers, and user-generated content can help normalize green consumption, provided that the messages are authentic and not perceived as greenwashing.

Personal factors also have a significant positive effect. Young consumers with stronger positive attitudes, health-related motivations, and willingness to support sustainable products are more likely to choose green products. This finding confirms the importance of education and consumer empowerment. Although personal factors show the strongest zero-order Pearson correlation in the revised correlation table, their standardized regression coefficient is lower than that of product attributes and social influence. This difference indicates that part of the bivariate association may overlap with other predictors in the model.

Environmental awareness has a significant but relatively smaller unique effect. This result does not imply that environmental awareness is unimportant. Rather, it suggests that awareness alone may not be sufficient to produce intention when consumers still face practical barriers such as price, availability, perceived risk, or uncertainty about product claims. Firms and policymakers should therefore translate abstract environmental messages into concrete consumer benefits, such as health, safety, waste reduction, and long-term value.

Government policy also has a positive and statistically significant effect on green product choice intention, although its standardized coefficient is the smallest in the model. This finding suggests that policy signals can support young consumers' green choices, but their influence is weaker than product-level value and social reinforcement. In practical terms, tax incentives, subsidies, eco-label regulation, and public communication are unlikely to be fully effective unless young consumers can clearly recognize them at the point of purchase. Government support should therefore be made more consumer-facing through recognizable eco-labels, public education, transparent standards, and cooperation with retailers and universities.

5.1 Theoretical Implications

This study extends the green consumption literature by comparing five antecedent groups in a single empirical model. The results support the relevance of an extended TPB framework, while also showing that product-level cues and social influence have stronger unique effects than environmental awareness and government policy. The relatively weak but significant policy effect suggests that institutional support can directly contribute to green product choice intention, but its impact may depend on product availability, price support, certification credibility, and communication visibility.

5.2 Practical Implications

This study has practical implications for key stakeholders involved in promoting green product choice among young consumers. Firms should improve product quality, safety, eco-packaging, convenience, and information transparency, while avoiding vague environmental claims that may weaken green trust. Marketers should use credible peer communication, social-media storytelling, and authentic influencer partnerships to make green product choices more socially visible. Retailers should enhance shelf visibility, provide clear comparison information, and make green products easier to identify at the point of purchase. Policymakers should strengthen public recognition of eco-labels, improve certification standards, and communicate incentives in ways that are accessible to young consumers. Finally, universities and social organizations can support long-term behavioral change by integrating green consumption education into campaigns, student activities, and community-based sustainability programs.

6. Conclusion

This study investigated the determinants of young consumers' intention to choose green products in Hanoi. Pearson correlation analysis showed very strong positive bivariate relationships between all five predictors and green product choice intention, with personal factors showing the strongest zero-order association in the revised correlation table. The multiple regression results further indicated that green product attributes, social influence, personal factors, environmental awareness, and government policy were all significantly and positively influenced green product choice intention. Among these factors, green product attributes had the largest standardized coefficient, indicating that young consumers expect green products to deliver both environmental and practical value. Government policy has the weakest yet still statistically significant unique effect, suggesting that policy support should become more visible, trustworthy, and directly connected to consumer decision-making.

The study provides useful implications for firms and policymakers. Businesses should not rely solely on environmental messages; they need to ensure product quality, convenience, transparent information, and credible green claims. Social media campaigns and peer-based communication can also be effective when they are authentic and supported by real product value. Policymakers should strengthen eco-label systems, consumer education, and public communication to make policy support more visible to young consumers.

The study has several limitations. First, the cross-sectional design prevents strong causal inference. Second, the sample is limited to young consumers in Hanoi, so the findings may not be generalized to all Vietnamese consumers or to older consumer groups. Third, the study relies on self-reported perceptions and intentions rather than observed purchase behavior, which may create common-method concerns. Fourth, the high bivariate correlations indicate that some predictors may overlap conceptually, even though VIF statistics do not suggest severe multicollinearity. Future studies should use larger and more diverse samples, compare different regions and product categories, and apply structural equation modelling to test mediation mechanisms such as green trust, perceived value, and attitude. Longitudinal or experimental designs would also help clarify how environmental awareness and social influence translate into actual green purchasing behavior over time.

Limitations and Future Research

First, the cross-sectional design identifies contemporaneous associations but cannot establish temporal order or causality. Reverse or reciprocal relationships remain plausible; for example, an existing preference for green products may heighten consumers' attention to green attributes and supportive policies. Second, all predictor and outcome measures were self-reported by the same respondents in one questionnaire. This creates potential common-method variance, social-desirability bias, and an intention-behaviour gap. Future studies should strengthen procedural controls through anonymity assurances, temporal or psychological separation of predictor and outcome measures, counterbalanced item order, and varied response formats. They should also combine surveys with observed purchases, experiments, or retailer data. Harman's single-factor test may be reported as a preliminary diagnostic, but marker-variable procedures or a common latent method factor in confirmatory factor analysis would provide more informative statistical assessments.

Third, the city-specific sample of 253 young consumers limits external validity. Hanoi's retail infrastructure, income distribution, educational profile, digital exposure, and environmental campaigns may differ from those in Ho Chi Minh City, Da Nang, secondary cities, and rural provinces. Older consumers may also weigh price, trust, convenience, and policy support differently. Future research should use larger probability-based or stratified samples across regions, urban and rural settings, age cohorts, income groups, and product categories. Cross-regional and cross-cohort comparisons should first establish measurement invariance and may then use multi-group structural equation modelling to test whether the relationships differ across contexts.

Fourth, the very high bivariate correlations and conceptual adjacency of the predictors indicate that their boundaries require stronger validation. Exploratory factor analysis and acceptable VIF values do not establish discriminant validity. Future studies should use confirmatory factor analysis and structural equation modelling to separate measurement error from structural relationships and to test mediation through green trust, perceived value, attitude, or price sensitivity. Longitudinal panel or cross-lagged designs could examine how intentions and actual purchases change over time, while field or survey experiments could

manipulate eco-label information, price premiums, influencer credibility, or policy signals. Replication across product categories and regions would show whether the present pattern is robust or context dependent.

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Author contributions

Dr. Huyen Thi Thanh Le was responsible for the research model, discussion, conclusion, research summary, and research synthesis. Master's student Dang Hai Le prepared the literature review and results. Master Huyen Thi Thu Nguyen prepared the introduction and a part of the literature review. Student Linh Ngoc Dan Nguyen was responsible for the hypothesis development and the references. Chi Khanh Nguyen drew the model and was responsible for the hypothesis development and the research methods.

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The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

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