

## **The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness**



**Quan Nguyen Van<sup>1</sup>, Linh Vu Hoang<sup>2</sup>**

<sup>1</sup>Faculty of Business Administration, Academy of Policy and Development, Hanoi, Vietnam

<sup>2</sup>Ha Long High School for Gifted Students, Quang Ninh, Vietnam

**ABSTRACT:** The importance of green lifestyles and environmentally friendly consumption behaviors is increasingly attracting the attention of many people, especially Gen Z. In Vietnam, handmade bamboo and rattan products have always been considered famous traditional products with a strong growth market, and today's young people are extremely interested in such environmentally friendly products. This study applies TPB theory to examine the moderating role of environmental awareness in the relationship between green lifestyle and Generation Z's purchase behavior towards handmade bamboo and rattan products in Vietnam. Through a survey of 402 Gen Z consumers, quantitative data was processed through SmartPLS 4. The research results emphasize the direct positive impact of green lifestyle on consumer behavior of handmade bamboo and rattan products in Vietnam. Along with that, the positive moderating role of environmental awareness in the above relationship was also found. From there, appropriate managerial and policy implications are proposed, such as raising environmental awareness through educational initiatives, influencers, as well as tightening environmental-related policy institutions. Businesses should also integrate sustainability into their brand identity and supply chain management to enhance their reputation and trust among today's young consumers.

**KEYWORDS:** Environmental awareness, generation Z, green lifestyle, handmade bamboo and rattan products, purchase behavior.

### **I. INTRODUCTION**

In recent years, sustainability has emerged as a critical global concern, prompting individuals and businesses to adopt environmentally friendly practices. Among these shifts, the concept of a green lifestyle has gained significant traction, particularly among younger generations (United Nations, 2022). A green lifestyle, characterized by environmentally conscious behaviors and consumption patterns, reflects an individual's commitment to reducing their ecological footprint (Roman, 2015). As the custodians of future environmental health, Generation Z (Gen Z) has been at the forefront of this movement, leveraging their collective influence to demand change and champion sustainability in various aspects of life (Jones et al., 2017). With rapid economic growth, environmental issues have become more pressing (Wang et al., 2021). Humans are facing many environmental challenges such as climate change, water pollution, global warming, and hazardous waste disposal, impacting both psychology and consumer behavior (Wang et al., 2021; Nguyen et al., 2018). While industrial pollution has declined in the post-industrial era, pollution from consumer activities has risen steadily, with individual consumption contributing over 30% to environmental problems (Li, 2020; Grunert, 1999).

In Vietnam, handmade bamboo and rattan products, rooted in cultural heritage, are gaining popularity as sustainable alternatives to environmentally harmful goods. Growing awareness of green lifestyles, particularly among Gen Z, is driving this shift, highlighting the link between eco-conscious living and purchasing behavior. According to the global market report 2024, The global bamboo market is experiencing strong growth, increasing from \$70.59 billion in 2023 to an estimated \$75.12 billion in 2024 (CAGR 6.4%) and reaching \$97.78 billion by 2028 (CAGR 6.8%). Along with the growth of rattan, the rattan products market is expected to have a CAGR of 6.5% from 2023 to 2029. This growth is driven by environmental awareness, bamboo and rattan's versatility, government support, and sustainable development trends. The Theory of Planned Behavior (TPB), introduced by Ajzen (1985), explains human behavior through attitudes, subjective norms, and perceived behavioral control, which shape

# **The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness**

behavioral intentions. This study applies TPB to explore how these factors influence Vietnamese Gen Z's intentions to purchase handmade bamboo and rattan products, representing sustainable consumption. It also integrates environmental awareness as a moderating factor, enhancing the model by highlighting its role in strengthening positive attitudes, social norms, and perceived ease of eco-friendly behavior. The findings aim to provide insights into promoting green consumption among Gen Z in Vietnam.

In recent times, a study on the components and influencing factors, as well as the mechanisms of consumers' green purchasing behavior towards products has been conducted (Ogiemwonyi & Harun (2021). The present research attempts to understand the young consumers' intention toward buying green products in a developing nation (Yadav & Pathak, 2017). As consumers have become more concerned about the environment and increasingly prefer eco-friendly products and services (Kim & Lee (2023), this growing awareness has led to the rise of eco-friendly consumption, often referred to as 'green consumerism' (Moisander, 2007). Despite increasing interest in green consumer behavior, few studies (Khare, 2015) have examined responses to environmentally friendly handmade products, particularly in Vietnam. This study addresses this gap by applying the TPB to investigate young consumers' purchase intentions, identifying TPB constructs as key antecedents. Unlike previous research, it incorporates environmental concern and knowledge (Diamantopoulos et al., 2003; Scott and Vigar-Ellis, 2014), recognizing their critical roles in shaping green purchase decisions.

The growing environmental challenges in Vietnam and the emphasis on sustainable consumption underscore the need to understand Gen Z's purchasing behavior toward eco-friendly products. Handmade bamboo and rattan products, known for their sustainability and cultural value, offer green businesses an opportunity to align with Gen Z's values. However, the influence of a green lifestyle on their purchasing decisions and the moderating role of environmental awareness remain underexplored. This study investigates these relationships, focusing on Gen Z, a key demographic expected to make up 25% of Vietnam's labor force (approximately 15 million people) by 2025 (Nielsen, 2018). As future policymakers and educators (Kabaday et al., 2015), Gen Z holds immense potential for driving sustainable consumption, making them the focal point of this research. The study aims to explore how a green lifestyle influences Gen Z's purchasing behavior toward handmade bamboo and rattan products in Vietnam, focusing on the moderating role of environmental awareness. The research aims to provide insights for promoting sustainable consumption and fostering environmentally conscious behavior in this key demographic, supporting a greener economy. The research is divided into introduction, development of hypothesis and conceptual framework, methodology, results and discussion and conclusions.

## **II. CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT**

### **Green Lifestyle**

Green lifestyle refers to the adoption of practices and behaviors that prioritize environmental sustainability and minimize negative impacts on the environment. This lifestyle encompasses a wide range of activities, including waste reduction, energy efficiency, eco-friendly purchasing decisions, and the prioritization of sustainable alternatives (Gilg et al., 2005; Kollmuss & Agyeman, 2002). Rooted in pro-environmental attitudes and values, a green lifestyle reflects an individual's commitment to minimizing the negative environmental impacts of their daily activities while fostering long-term ecological balance (Gifford & Nilsson, 2014). Such behavior is strongly linked to consumer preferences for products made from renewable, biodegradable, and sustainably sourced materials, as these align with the principles of environmental stewardship. Among Generation Z, a cohort noted for its heightened environmental awareness and active participation in sustainability initiatives, adopting a green lifestyle significantly influences purchasing decisions, particularly in the context of eco-friendly and culturally meaningful products like handmade bamboo and rattan items (Nguyen et al., 2018). This theoretical understanding of a green lifestyle provides a foundation for examining its impact on consumer behavior, especially when moderated by environmental awareness (Diamantopoulos et al., 2003). Thus, understanding the role of a green lifestyle is critical in analyzing Gen Z's purchasing tendencies in the context of sustainable consumption.

### **Green Purchasing Behavior**

Environmentally Preferable Purchasing (EPP), commonly known as "green purchasing," involves the intentional selection and procurement of products and services that minimize adverse environmental impacts throughout their lifecycle, encompassing production, transportation, usage, recycling, and disposal (Vazifehdoust et al., 2013). This approach prioritizes environmentally friendly attributes, such as energy and water conservation, waste reduction, and minimization of pollutant emissions. Green products may include those made from recycled or recyclable materials, renewable energy sources like solar and wind power, alternative fuel vehicles, and items that replace hazardous chemicals or biohazardous agents. In essence, green purchasing integrates environmental considerations alongside traditional factors such as price and performance in decision-making

## **The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness**

processes. The overarching objective of EPP is to mitigate environmental impacts associated with procurement activities while enhancing resource efficiency. By applying environmental criteria to the selection of goods and services, green purchasing practices can range from straightforward measures to more complex strategies. It is increasingly recognized as a corporate norm, particularly among larger organizations, and continues to gain traction as a sustainable business practice (Shah, 2023).

### **Handmade Bamboo and Rattan Products**

Handmade bamboo and rattan products carry a rich historical legacy, underscoring their versatility and cultural significance. Bamboo, in particular, has been used for a wide range of purposes, from fuel and food production to fencing, baskets, and decorative items (Trinh & Vu, 2024). In modern times, its applications have expanded to include paper production, construction materials, furniture, and a central role in the handicraft industry. Bamboo stems are utilized in construction as structural frameworks or processed through methods like splitting, peeling, and core extraction to create products such as mats and woven baskets (Erkol, 2021). The craft of bamboo weaving is highly diverse, ranging from the construction of bridges and baskets to the creation of fish traps and furniture. These woven bamboo products not only have practical and economic value but are deeply integrated into the livelihoods of rural communities, providing essential income and contributing significantly to local cultural and economic life (Vietnam News, 2023). Today, the global market for handmade bamboo and rattan products is experiencing robust growth, driven by increasing consumer demand for sustainable and eco-friendly materials. These products are valued for their versatility, durability, and alignment with environmentally conscious lifestyles, contributing to their growing popularity in both domestic and international markets (Vietnam Handicraft Exporters Association, 2023). In Vietnam, a country with a strong tradition of bamboo and rattan craftsmanship, these industries are crucial for supporting rural economies and preserving cultural heritage. With over 1.4 million hectares of bamboo and rattan plantations (UNIDO, 2023) and more than 1.35 million workers engaged in the handicraft sector, these materials play a vital role in rural livelihoods and sustainable development. Vietnam exports approximately \$520 million worth of bamboo and rattan products annually, with key markets including the United States, Japan, and Europe (Vietnam Handicraft Exporters Association, 2023). Domestically, demand for these eco-friendly goods is also rising due to their durability, versatility, and alignment with minimalist, sustainable lifestyles. However, challenges such as ensuring sustainable resource management and optimizing supply chain operations remain critical issues that must be addressed to ensure the sector's long-term growth and global competitiveness (UNIDO, 2023).

### **Hypothesis Development**

A green lifestyle reflects an individual's commitment to environmentally sustainable practices and the consumption of eco-friendly products. Among Generation Z in Vietnam, this lifestyle plays a pivotal role in shaping their purchasing behavior, particularly toward handmade bamboo and rattan products (Yadav & Pathak, 2017). These products, celebrated for their renewable, biodegradable, and sustainable attributes, align closely with the values of a green lifestyle. Generation Z, known for their heightened environmental awareness and social responsibility often seeks products that not only meet functional needs but also resonate with their ecological principles (Seemiller & Grace, 2018). This alignment fosters a positive effect on their purchase behavior, encouraging them to support handmade bamboo and rattan items (Hoang & Tung, 2024) that contribute to environmental conservation while embracing Vietnam's cultural heritage. Thus, a green lifestyle acts as a catalyst, driving Generation Z's preference for sustainable, handcrafted goods in Vietnam. Based on these findings, the authors proposed the hypothesis:

H1: Green lifestyle has a positive effect on Generation Z's purchase behavior towards handmade bamboo and rattan products in Vietnam.

Environmental awareness refers to the level of understanding and knowledge individuals have about the environment and the various ecological challenges it faces (Fryxell & Lo, 2003; Kollmuss & Agyeman, 2002). This awareness is crucial in shaping how people and groups respond to environmental issues and adopt sustainable practices. Environmental awareness plays a critical moderating role in the relationship between a green lifestyle and Generation Z's purchase behavior toward handmade bamboo and rattan products in Vietnam. While a green lifestyle reflects the adoption of sustainable habits and eco-friendly values, the degree to which these values translate into actual purchasing decisions often depends on an individual's level of environmental awareness (Yadav & Pathak, 2017). Generation Z individuals with higher environmental awareness are more likely to recognize the environmental benefits of using renewable and biodegradable materials like bamboo and rattan (Hoang & Tung, 2024), reinforcing their alignment with a green lifestyle. This heightened awareness strengthens the positive impact of green lifestyle choices on their purchasing behavior, encouraging them to support products that contribute to sustainability and cultural preservation. Thus, environmental awareness amplifies the influence of a green lifestyle on Generation Z's preference

# The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness

for sustainable, handcrafted goods in Vietnam. Studies have shown that environmental consciousness significantly influences the intention to purchase green products (Dagher et al., 2015). Based on these findings, the authors proposed the hypothesis:

H2: Environmental awareness moderates the effect of green lifestyle on Generation Z's purchase behavior towards handmade bamboo and rattan products in Vietnam

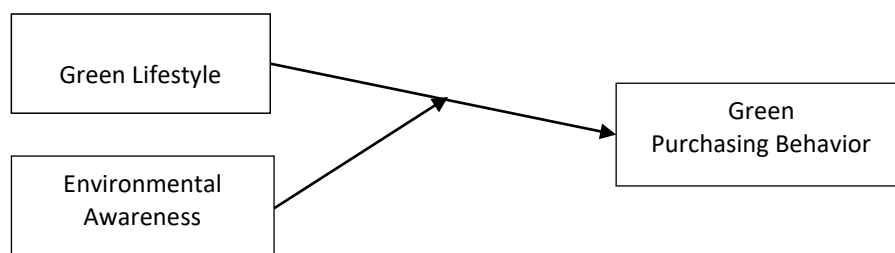


Figure 1. Proposed Research Model

## III. METHODOLOGY

### Measurement Instrument and Questionnaire Design

This study used quantitative analysis, utilizing a convenient sampling approach to obtain and assess information. To address potential response bias, a back-translation procedure was implemented (Tyupa, 2011). Initially, a team of two experts independently translated the 14 original observed variables from English into Vietnamese based on previous studies, and vice versa. A group of three marketing specialists thoroughly examined both versions, addressing any discrepancies before conducting the survey. Before the official data compilation, a preliminary survey involving 100 samples was administered. Additionally, concise explanations were provided to ensure respondents had a clear understanding of the conceptual frameworks. The measuring scale utilized in this study was modified from previous research to align with the particular circumstances of Vietnam.

Green lifestyle (GL) was evaluated using a five-item scale created by Wu et al. (2024). A five-item measure of Environmental awareness (EA) was developed by Borah et al. (2024) and Trivedi et al., (2018). Finally, four items for GPB from Trivedi et al. (2018) and Kim & Choi (2005) were used. The measurement items under all the constructs were responded to on a Likert scale of 1-Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree, and 5-Strongly agree. The study adopted the instruments/measurement scales already developed and used by prior researchers. The first part of the questionnaire focused on identifying and selecting suitable participants. The second part centered around the study's concepts. The last part was composed of five-point Likert scale questions representing all the measures of the study adopted from prior studies. Accordingly, the authors tested the research model and hypotheses using PLS-SEM analytic techniques. This technique is useful for making predictions and discovering new insights as it identifies latent variable scores, accurately predicts individual scores, and explains significant variances in indicators (Hair et al., 2019).

### Sample and Data Collection

The study focused on Gen-Z consumers in Vietnam, who represented a demographic cohort of persons born from 1997 to 2012. The data for the study was gathered in December 2024, a period in which the oldest Gen-Z consumer was expected to be 27 years of age, while the youngest was 12 years of age. To target this population group, the study focused on undergraduate university students, who were mostly aged 18–25. To ensure that only Gen-Z students were sampled for the study, the respondents' age was grouped into four; less than 18 years, 18– 22 years, 23–26 years, and above 26 years. The data collection spanned a period of 3 weeks, during which 458 consumers completed the survey. After data cleaning, 402 questionnaires were deemed fit to be used for the data analysis.

## IV. RESULTS AND DISCUSSION

### Demographics of Respondents

In order to gain a deeper understanding of the participants' characteristics, demographic information was gathered and analyzed. The study focuses specifically on Generation Z, as this group plays a crucial role in shaping sustainable consumption patterns and behaviors. Participants in this study are individuals aged between 18 and 27 years, a demographic known for their adaptability to change and heightened environmental awareness. With regards to gender, the survey results reveal that 41.8% of participants identify as male, while a larger proportion, 58.2%, identify as female. In terms of age, the majority of respondents

## The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness

(89%) fall within the age range of 18 to 22 years, which aligns with the younger subset of Generation Z. This group is often considered the most active and vocal about environmental and social issues. A smaller percentage (6.2%) are aged 23 to 26 years, followed by 1.5% who are 27 years old and above, indicating the study captures a predominantly youthful audience. Monthly income levels also provide key insights into the purchasing power of the participants. Most respondents (64.2%) report earning between 2 to 5 million VND, which suggests moderate spending ability, potentially aligning with products that are affordable yet sustainable. Meanwhile, 27.1% of participants earn less than 1 million VND, reflecting limited purchasing power, but still likely influenced by values such as environmental consciousness when making purchasing decisions. On the higher end, participants with income mainly from 2-5 million is 64.18% and 5.7% of respondents have a monthly income ranging from 5 to 10 million VND, and only 3.0% earn more than 10 million VND.

### Reliability and validity assessment

Table 1 provides a comprehensive summary of the test results. The measurement model was evaluated using several criteria, including reliability, convergent validity, and discriminant validity. According to Nunnally and Bernstein (1994), it is suggested that coefficient alpha levels exceeding 0.7 can be considered satisfactory. The values obtained for all constructs are above the designated threshold of 0.7, suggesting that the internal consistency reliability is adequate. The Average Variance Extracted (AVE) values for all constructs demonstrated convergent validity by surpassing the required threshold of 0.5. (Hair Jr et al., 2006; Tabachnick & Fidell, 2007). We assessed multicollinearity using VIF, the result showed all VIF values  $\leq 3$  which were acceptable.

**Table 1. Construct Reliability and Validity**

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
EA	0.914	0.915	0.936	0.745
GL	0.854	0.879	0.899	0.646
GPB	0.852	0.859	0.900	0.694
Moderating Effect 1	1.000	1.000	1.000	1.000

### Discriminant Validity Assessment

The HTMT (Heterotrait-Monotrait) values between each pair of constructs in this investigation are shown in Table 2. The greatest HTMT value recorded is 0.898 (GPB\_GL), which is less than 0.9 (Hair et al., 2019). This result implies that all constructs addressed in this study have demonstrated discriminant validity.

**Table 2. Heterotrait-Monotrait Ratio (HTMT) and Fornell-Larcker Criterion**

	Heterotrait-Monotrait Ratio (HTMT)				Fornell-Larcker Criterion			
	EA	GL	GPB	Moderating Effect 1	EA	GL	GPB	Moderating Effect 1
EA					0.863			
GL	1.055				0.945	0.804		
GPB	0.878	0.898			0.779	0.769	0.833	
Moderating Effect 1	0.495	0.513	0.506		-0.474	-0.468	-0.471	1.000

# The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness

## Structural Measurement Assessment and PLS-SEM Result

In this work, two hypotheses were formulated and examined using the bootstrapping function of SmartPLS. The findings of the investigation are displayed in Table 3 and Figure 2. The primary aim of the structural model evaluation was to assess the associations between the constructs in the research model and determine their level of explanatory capacity. Table 3 illustrates the findings obtained from doing an analysis of the structural model. This table provides information on many metrics, such as path coefficients, t-statistics, p-values,  $R^2$  Cohen (1988),  $f^2$ , for each relationship. The findings of this study indicate a statistically significant and positive association between Green Lifestyle (GL) and Green purchasing behavior (GPB) ( $\beta = 0.283$ ,  $p = 0.003$ ). At a 95% confidence level, the tstatistic value of 2.940 surpasses the crucial value of 1.96, so offering further support for the relevance of this relationship. The present finding posits that generation Z consumers possess a heightened inclination towards buying green products and environmental concerns (Dragolea et al., 2023). Numerous factors can be responsible for these results. Growing up at a time when environmental responsibility and sustainability are becoming more and more important is a challenge for Generation Z. Individuals tend to exhibit a general enthusiasm towards adopting environmentally friendly products, primarily driven by the overarching narrative of promoting positive transformation that is closely linked to such choices (Nguyen, 2021). The inclination of Generation Z towards green products can be attributed to their aspiration to participate in a purposeful and influential movement. Individuals perceive their consumer decisions as a means of actively engaging in the pursuit of a more sustainable and improved future (Dragolea et al., 2023).

The findings indicate a positive and statistically significant link between Environmental awareness (EA) and Green purchasing behavior (GPB) which  $\beta = 0.453$ , and  $p = 0.000$ . The tstatistic value of 4.515 exceeded the threshold value of 1.96. The calculated  $f^2$  value of 0.058 in connection to the GL-GPB association suggests a small effect size, implying that the influence of GL on GPB may have less effect. These finding indicates that generation Z consumers' behaviors to purchase green products are positively influenced by environmental awareness and expectations related to green consumption (Liang et al., 2022). Generation Z consumers exhibit a greater understanding of the dominant values and expectations that exist among their peer groups and society at large (Lavuri, Jusuf, & Gunardi, 2021). Consequently, these factors significantly influence their of consumption behavior. Moreover, the relationship exhibits a strong interconnectivity facilitated by social media and digital platforms, wherein sustainability and eco-consciousness emerge as prevalent subjects of discourse (Abrar et al., 2021; Liang et al., 2022). Consequently, individuals are subjected to and impacted by a societal context that promotes and occasionally extols environmentally conscious decisions. Moreover, individuals' inclination to adhere to cultural norms concerning environmentally friendly consumption is intricately linked to their perception of social identity and affiliation (Liang et al., 2022). Generation Z frequently has a propensity for seeking association with others who possess similar ideologies and apprehensions regarding environmental matters. Consequently, individuals' inclination to acquire environmentally friendly products is bolstered by their aspiration to conform and harmonize with the predominant eco-conscious ethos within their social circle.

**Table 3. Structural Equation Modelling Results Estimates**

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Adj R <sup>2</sup>	f <sup>2</sup>	Result
EA -> GPB	0.453	0.446	0.100	4.515	0.000	0.626	0.058	Accepted
GL -> GPB	0.283	0.290	0.096	2.940	0.003		0.023	Accepted
Moderating Effect 1 -> GPB	-0.066	-0.067	0.017	4.005	0.000		0.032	Accepted

The moderating effect coefficient (-0.066), being negative, indicates that Environmental Awareness (EA) slightly weakens the direct impact of Green Lifestyle (GL) on Green Purchasing Behavior (GPB). This suggests that for individuals with high environmental awareness, green purchasing behavior is influenced not only by their green lifestyle but also by other factors such as environmental values, social responsibility awareness, or perceptions of sustainable benefits. However, with a t-statistic of



# The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness

4.005 and a P-value of 0.000 (less than 0.05), the moderating effect of EA is statistically significant, affirming its critical role in moderating the relationship between GL and GPB. Moreover, EA also demonstrates a strong direct effect on GPB (coefficient 0.453, t-statistic = 4.515, P-value = 0.000), indicating that consumers with high environmental awareness are more likely to prioritize environmentally friendly products, such as bamboo and rattan items. This finding highlights that as EA increases, the dependency of GPB on GL decreases, as consumers tend to rely more on their environmental awareness and sense of responsibility rather than solely on their personal lifestyle choices. In summary, EA not only directly influences green purchasing behavior but also moderates the relationship between GL and GPB, underscoring the importance of environmental awareness in promoting sustainable consumer behavior.

In relation to the adequacy of the model, the Adjusted R<sup>2</sup> coefficient of 0.626 indicates that the model accounts for approximately 62.6% of the variability observed in the dependent variable GPB. This level of explanatory capability can be regarded as good. In summary, the assessment of the structural model yielded valuable insights into the interconnections among the constructs inside the model. The research conducted an examination of hypotheses by utilizing the SmartPLS bootstrapping algorithm. The outcomes of this analysis are presented in Table 3 and Figure 2. The t-statistics values for 2 hypothesized trajectories exhibited statistical significance at the p 0.05 level, with a t-value greater than 1.96 (two-tailed). The study indicates that Generation Z's purchase behavior towards handmade bamboo and rattan products is influenced by 2 key factors "Green lifestyle" and "Environmental awareness". The discussed factors revealed positive and statistically significant impact. Consequently, it was discovered that hypotheses H1 and H2 are both significant and supported. The collective findings indicate that green lifestyle and environmental awareness to buy together drive green buying behavior among Gen Z consumers.

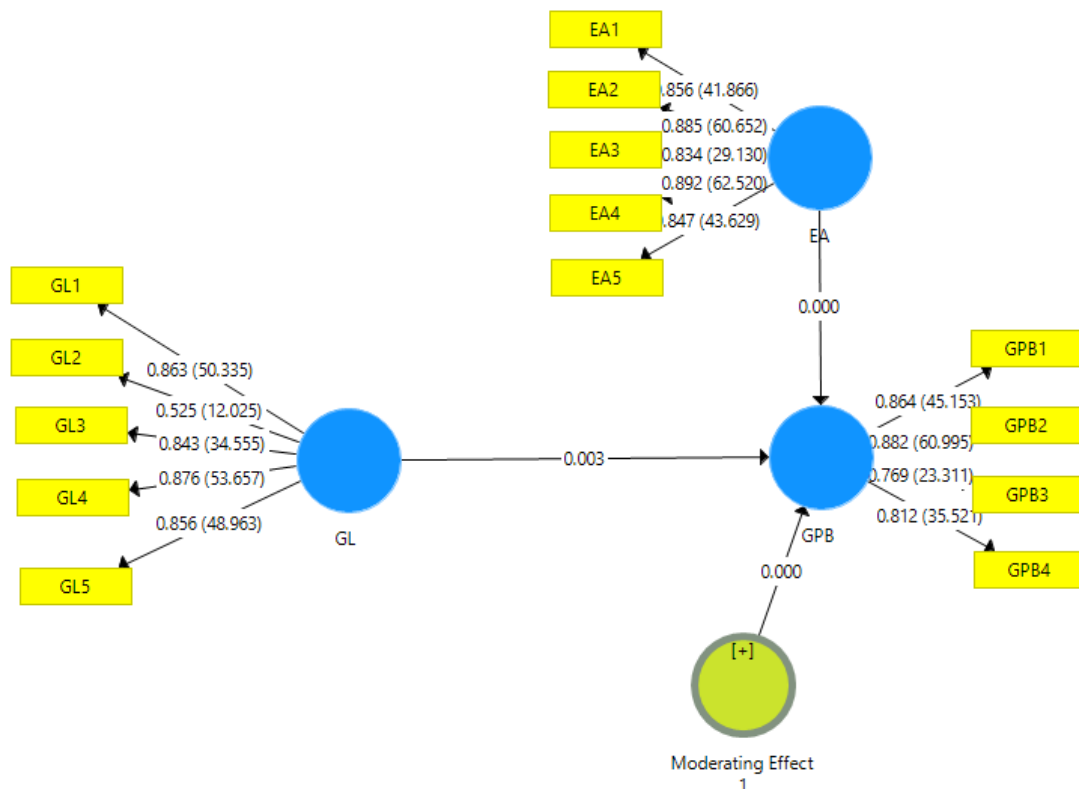


Figure 2. PLS Bootstrapping Model

## V. CONCLUSIONS

### Theoretical implications

This study contributes to the literature on green consumer behavior by integrating multiple theoretical perspectives into a single framework, examining the impact of Green Lifestyle (GL) on Generation Z's purchase behavior toward handmade bamboo and rattan products in Vietnam, with Environmental Awareness (EA) as a moderating factor. By testing this model for the first time in this context, the research enhances understanding of sustainable consumption. It also highlights the need for an interdisciplinary approach, emphasizing that a holistic perspective is crucial for comprehensively analyzing green purchasing behavior. Furthermore, by demonstrating the moderating role of Environmental Awareness, the study uses the Theory of

# The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness

Planned Behavior (TPB), offering new insights into how psychological and contextual factors influence sustainable consumer decisions.

## Managerial implications

This study provides valuable insights for businesses, policymakers, and other stakeholders aiming to promote handmade bamboo and rattan products among Generation Z consumers in Vietnam (Robichaud & Yu, 2022). The findings highlight the significant influence of Green Lifestyle (GL) on purchase behavior, with Environmental Awareness (EA) playing a moderating role. These insights offer practical recommendations for enhancing the adoption of sustainable products.

First, increasing environmental awareness through targeted educational initiatives is essential. Companies should actively communicate the long-term ecological benefits of using bamboo and rattan products via eco-labeling, storytelling, and digital content marketing. Collaborating with influencers and sustainability advocates can further amplify awareness and foster a deeper connection with young consumers (Rahman et al., 2015). Second, policymakers can support green consumption by implementing awareness programs and policies that encourage sustainable choices. Government incentives for businesses adopting eco-friendly practices, combined with stricter regulations on non-sustainable alternatives, can contribute to the overall growth of the green market (Harjadi & Gunardi, 2022). Finally, businesses should integrate sustainability into their brand identity and supply chain management to enhance credibility and trust. Promoting transparency in material sourcing, production processes, and environmental impact will not only attract eco-conscious consumers but also strengthen long-term brand loyalty. By strategically positioning green products in alignment with Generation Z's lifestyle preferences, companies can effectively stimulate demand and contribute to a more sustainable consumption culture (Chen & Chang, 2013).

## Limitation and future research directions

While this study offers valuable insights into the impact of green lifestyles on Generation Z's purchase behavior toward handmade bamboo and rattan products in Vietnam, certain limitations open avenues for further research. First, the study primarily focuses on young Vietnamese consumers, which may restrict the generalizability of the findings to other age groups or cultural contexts. Future research could explore the effects of green lifestyles on different generations, such as Generations X and Y, to provide a broader perspective. Additionally, gender-based analyses and cross-cultural comparisons could yield deeper insights into the variations in green purchasing behavior. Expanding the geographic scope beyond Vietnam to other Southeast Asian countries would also allow for comparative analyses of green lifestyle influences across different markets.

## REFERENCES

- 1) Abrar, M., Sibtain, M. M., & Shabbir, R. (2021). Understanding purchase intention towards eco-friendly clothing for generation Y & Z. *Cogent Business & Management*, 8(1), 1997247.
- 2) Borah, P. S., Dogbe, C. S. K., & Marwa, N. (2024). Generation Z's green purchase behavior: Do green consumer knowledge, consumer social responsibility, green advertising, and green consumer trust matter for sustainable development?. *Business Strategy and the Environment*.
- 3) Chen, Y. S., & Chang, C. H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. *Journal of business ethics*, 114, 489-500.
- 4) Cohen, J. (1988). Set correlation and contingency tables. *Applied psychological measurement*, 12(4), 425-434.
- 5) Dagher, G., Itani, O. S., & Kassab, A. N. (2015). The impact of environment concern and attitude on green purchasing behavior: Gender as the moderator. *Contemporary Management Research*.
- 6) Diamantopoulos, A., Schlegelmilch, B. B., Sinkovics, R. R., & Bohlen, G. M. (2003). Can socio-demographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation. *Journal of Business research*, 56(6), 465-480.
- 7) Dragolea, L. L., Butnaru, G. I., Kot, S., Zamfir, C. G., Nuță, A. C., Nuță, F. M., & Ștefănică, M. (2023). Determining factors in shaping the sustainable behavior of the generation Z consumer. *Frontiers in Environmental Science*, 11, 1096183.
- 8) Erkol, Y. A. (2021). Bamboo: a socio-material approach to past and present bamboo cultures. Technische Universitaet Berlin (Germany).
- 9) Fryxell, G. E., & Lo, C. W. (2003). The influence of environmental knowledge and values on managerial behaviours on behalf of the environment: An empirical examination of managers in China. *Journal of business ethics*, 46, 45-69.
- 10) Grunert, K. G., & Beckmann, S. C. (1999). A comparative analysis of the influence of economic culture on East and West German consumers' subjective product meanings. *Applied Psychology*, 48(3), 367-390.



## **The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness**

- 11) Harjadi, D., & Gunardi, A. (2022). Factors affecting eco-friendly purchase intention: subjective norms and ecological consciousness as moderators. *Cogent Business & Management*, 9(1), 2148334.
- 12) Gifford, R., & Nilsson, A. (2014). Personal and social factors that influence pro-environmental concern and behaviour: A review. *International journal of psychology*, 49(3), 141-157.
- 13) Gilg, A., Barr, S., & Ford, N. (2005). Green consumption or sustainable lifestyles? Identifying the sustainable consumer. *Futures*, 37(6), 481-504.
- 14) 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.
- 15) Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6).
- 16) Hoang, V. D. (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 & Administration*, 32(1).
- 17) Jones, P., Hillier, D., & Comfort, D. (2017). The sustainable development goals and the tourism and hospitality industry. *Athens Journal of Tourism*, 4(1), 7-18.
- 18) Khare, A. (2015). Antecedents to green buying behaviour: a study on consumers in an emerging economy. *Marketing Intelligence & Planning*, 33(3), 309-329.
- 19) Kim, Y., & Choi, S. M. (2005). Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE. *ACR North American Advances*. In G. Menon & A. R. Rao (Eds.), *NA - Advances in Consumer Research Volume 32* (pp. 592–599). Association for Consumer Research.
- 20) 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.
- 21) Kollmuss, A., & Agyeman, J. (2002). Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behavior?. *Environmental education research*, 8(3), 239-260.
- 22) Lavuri, R., Jusuf, E., & Gunardi, A. (2021). Green sustainability: Factors fostering and behavioural difference between millennial and Gen Z: Mediating role of green purchase intention. *Ekonomia i Środowisko*.
- 23) Li, Z. (2020). Role of Affective Mediators in the Effects of media Use on Proenvironmental Behavior. *Sci. Commun.* 43 (3), 64–90. doi:10.1177/1075547020971646.
- 24) Liang, J., Li, J., & Lei, Q. (2022). Exploring the influence of environmental values on green consumption behavior of apparel: A chain multiple mediation model among Chinese Generation Z. *Sustainability*, 14(19), 12850.
- 25) Nguyen, N. M. D. (2021). Factors influencing Finnish Generation Z consumer behaviors towards green purchase of cosmetics.
- 26) Nguyen, T. N., Lobo, A., & Nguyen, B. K. (2018). Young consumers' green purchase behaviour in an emerging market. *Journal of Strategic Marketing*, 26(7), 583-600.
- 27) Nunnally, J., & Bernstein, I. (1994). *Psychometric Theory* 3rd edition (MacGraw-Hill, New York).
- 28) Ogiemwonyi, O., & Harun, A. B. (2021). Theory of planned behaviour approach to understand pro-environmental behaviour among young green consumers in Malaysia. *Israel Journal of Ecology and Evolution*, 67(3-4), 168-181.
- 29) Rahman, I., Park, J., & Chi, C. G. Q. (2015). Consequences of "greenwashing": Consumers' reactions to hotels' green initiatives. *International Journal of Contemporary Hospitality Management*, 27(6), 1054-1081.
- 30) Robichaud, Z., & Yu, H. (2022). Do young consumers care about ethical consumption? Modelling Gen Z's purchase intention towards fair trade coffee. *British Food Journal*, 124(9), 2740-2760.
- 31) Scott, L., & Vigar-Ellis, D. (2014). Consumer understanding, perceptions and behaviours with regard to environmentally friendly packaging in a developing nation. *International journal of consumer studies*, 38(6), 642-649.
- 32) Shah, M. S. S. (2023). Green Supply Chain Management and Sustainable Performance: The Mediating Role of Green Corporate Social Responsibility in Pakistani Firms. *Digital Management Sciences Journal*, 1(1), 34-53.
- 33) Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston, MA, USA: Allyn & Bacon. Pearson Education. doi, 10(1037), 022267.
- 34) Trinh, M. H., & Vu, T. A. (2024). Nationalism in discursive legitimization: An analysis of the Vietnamese Communist Party's 'bamboo diplomacy' discourse on digital journalism. *Discourse & Society*, 35(3), 381-400.
- 35) Trivedi, R. H., Patel, J. D., & Acharya, N. (2018). Causality Analysis of media Influence on Environmental Attitude, Intention and Behaviors Leading to green Purchasing. *Journal of Cleaner Production*, 196, 11–22.

## The Effect of Green Lifestyle on Generation Z's Purchase Behavior Towards Handmade Bamboo and Rattan Products in Vietnam: Moderating Role of Environmental Awareness

- 36) Tyupa, S. (2011). A theoretical framework for back-translation as a quality assessment tool. *New Voices in Translation Studies*, 7(1), 35-46.
- 37) United Nations (2022). Sustainable development goals report 2022. United Nations Publications.
- 38) United Nations Industrial Development Organization (UNIDO). (2023). Sustainable development in Vietnam's bamboo and rattan sectors. *UNIDO Industrial Reports*.
- 39) Vazifehdoust, H., Taleghani, M., Esmailpour, F., & Nazari, K. (2013). Purchasing green to become greener: Factors influence consumers' green purchasing behavior. *Management Science Letters*, 3(9), 2489-2500.
- 40) Vietnam News. (2023). Phu Vinh preserves tradition of bamboo and rattan weaving. *Vietnam News*. Retrieved from <https://vietnamnews.vn/life-style/1663103/phu-vinh-preserves-tradition-of-bamboo-and-rattan-weaving.html>
- 41) Vietnam Handicraft Exporters Association. (2023). Vietnam's bamboo and rattan industry: Market trends and export potential. *Handicraft Industry Report*.
- 42) Wang Q. Q., Zhang, W., Tseng, C. P. M.-L., Sun, Y., & Zhang, Y. (2021). Intention in Use Recyclable Express Packaging in Consumers' Behavior: An Empirical Study. *Resources, Conservation and Recycling*, 164, 105115. doi:10.1016/j.resconrec.2020.105115.
- 43) Wu, J., Ahmad, S. F., Ali, Y. A., Al-Razgan, M., Awwad, E. M., & Ayassrah, A. Y. B. A. (2024). Investigating the role of green behavior and perceived benefits in shaping green car buying behavior with environmental awareness as a moderator. *Heliyon*, 10(9).
- 44) 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.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0)

(<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.