

**Sustainable Development: Young Vietnamese People and Factors Affecting Green Consumerism**

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**Abstract.** Modernity is spreading at a rapid pace and putting the world's environmental sustainability on the verge of extinction. In Vietnam, people start to recognize that their purchase habits somewhat affect the ecosystem; as a result, people adjust their buying behavior and strive to become green consumers. Environmentally friendly products and services have recently become popular all over the world, and they help to protect and preserve the environment. This study investigates the green buying behavior of young Vietnamese people by examining five relevant factors, including environmental concerns, attitudes toward green products, subjective norms, perceived behavioral control, and purchase intention. Data (sample size of 311 respondents) was obtained from persons aged ranging between seventeen to thirty in Ho Chi Minh city, Vietnam. According to the findings, all five factors have proven to influence purchasing behavior, with the perceived importance of environmental concerns being the most influential element leading to green purchasing behavior of young people in Vietnam.

**Keyword:** green consumerism, purchasing behavior, young people, developing country, sustainable development

**Introduction**

The rapid destruction of the environment is regarded as the most critical issue confronting the entire globe today. Many people now consider environmental concerns to be the most pressing topic (Paetz et al., 2012). This critical scenario is caused by a variety of factors, among them, the principal reason has a substantial link with consumer's purchasing behavior, since Grunert (1995) discovered that home consumption was responsible for 40% of environmental harm. Fortunately, people are becoming more aware that their purchasing behavior have significant impacts to the ecosystem (Abdul Wahid et al., 2011). Therefore, as consumers need to maintain a healthy lifestyle and thereby protect the environment, this subsequently led to a shift in behavior to the adoption of sustainable products (Cerri et al., 2018), then the green purchasing behavior of consumers has been shaped.

Vietnam is no exception when it comes to environmental challenges. Vietnam is also one of the countries confronted with environmental and sustainable development issues (Nguyen et al., 2017). Young Vietnamese people are becoming more aware of environmental concerns. Nowadays, many Vietnamese individuals bring their personal bags to supermarkets or shopping malls instead of taking the plastic bags provided by these establishments. It is observed that Vietnamese consumers have begun to adopt the demand for sustainable consumption and have shifted their focus to green packaging. Consumers prefer to purchase at stores that utilize paper bags and paper boxes for packing rather than plastic bags and boxes. This has also led some significant firms in Vietnam, such as PepsiCo Vietnam, Nestlé Vietnam, etc., to take steps to reach zero waste in the future (Vietnam Investment Review, 2019).

As the economy grows, so does people's awareness of the relationship between greener consumption and the wellbeing of themselves and the society. Green consumption is the consumption of goods and services which fulfill fundamental requirements while also give a higher quality of life without jeopardizing future generations' needs (i.e.: limiting the use of environmental assets and dangerous chemicals, as well as the production of waste and pollutants). In other words, humanity cannot continue to deplete the planet's resources, waste,

poison, and pollute without considering the future and future generations. This research aims to get a deeper understanding of the five primary aspects, including environmental concerns, attitudes toward green products, subjective norms, perceived behavioral control, and purchase intention that may contribute to encouraging, spreading, and supporting green purchasing behavior among young Vietnamese people aged between eighteen and thirty years old. Relevant businesses might find this case study's results useful when consider establishing green marketing or green strategies to attract more consumers.

### Literature Review

According to Schaefer and Crane (2005), the Brundtland Commission Report's description of sustainable development is more regularly quoted of all many explanations of the term; the study identifies sustainable development as progression that fulfills the demands of the present generation without jeopardizing the capacity of later generations to satisfy the present needs. Cerin (2006) suggests that sustainable development is a basic idea of worldwide growth strategy. As a result, civilization is able to engage with the environment without endangering a valuable asset. The loss of biodiversity, air and water contamination, can have a negative impact on the natural environment and cause global warming and loss of species. Those are examples of ecosystem challenges that must be avoided in order to achieve the goal of increasing human well-being without compromising the planet's resources (Benaim et al., 2008; Browning & Rigolon, 2019).

Using the organizational principle of achieving mankind growth objectives while maintaining the environmental systems' capacity to offer environmental resources in a sustainable manner (Evers, 2017); this is how sustainable development views its mission: to achieve social advancement, natural balance, and economic prosperity all at the same time (Zhai & Chang, 2019). Addressing the needs of sustainable development, Ukaga et al. (2011) stress the demand to shift away from negative economic activities but instead participate in activities with good environmental, economic and social benefits. It is believed that the importance of sustainable development increases each day since the population continues expanding but the environmental materials accessible for the fulfilment of our demands don't. Achieving economic growth while maintaining ecological quality and human well-being are the goals of sustainable development. According to Kolk (2016), this is attainable via the combination of economic, environmental, and social issues in decision-making procedures. However, it is typical for individuals to regard sustainability and sustainable development as counterparts and synonyms although the two ideas are different. Sustainability, according to Diesendorf (2000), refers to the end result or purpose of a procedure known as sustainable development. Gray (2010) underlines the idea by noting that, whereas "sustainability" refers to a condition, sustainable development refers to the process for obtaining this state.

Eco-innovation and the "circular economy" (reduce, recycle, and reuse) are two examples of sustainable development strategies that are advocated by businesses and accepted by customers, including the use of environment - friendly goods. For this reason, sustainable development promotes a two-way connection between eco-innovation on the side of producers and green consumption on the part of customers (Joshi & Rahman, 2015). In response to rising consumer demand for environmentally-friendly goods and increased stakeholder pressure, firms have made green marketing one of their most critical decision-making factors (Kang & Hur, 2012). In recent years, for instance, sales of recyclable containers and bottles have increased, plastic straws have been prohibited in several shops and cafes, and companies such as Evian or Coca-Cola have pledged to use packaging made with recycled substance (Embrandiri et al., 2022).

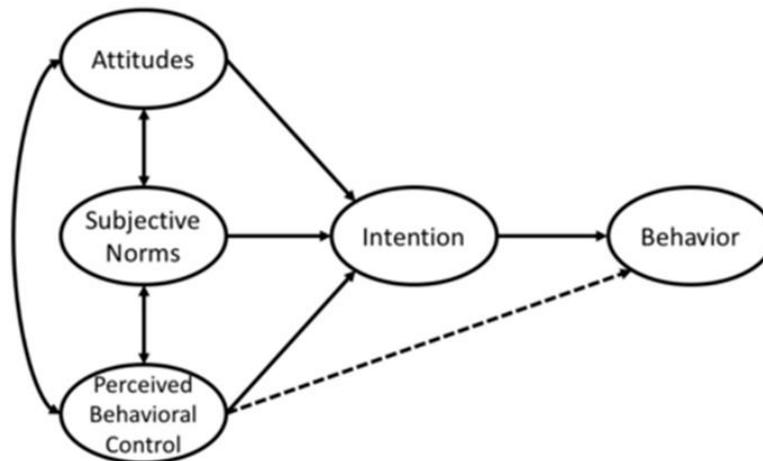
The goal to conserve resources for further generations while also improving people's quality of life motivates green consumerism. Consumers across the globe are progressively

shifting toward green, environmentally friendly items as a requirement for superior products and services. Consumers are prepared to spend more for items branded with environmentally friendly manufacturing standards. As worldwide enthusiasm in green goods grows, an increasing number of firms have started to manufacture ecologically friendly goods and demonstrate their commitment to environmental preservation. Governments are also attempting to develop a variety of programs to encourage green consumption; and most Asian emerging economies have enacted environmental legislation. Recent growth in the amount of people prepared to spend extra for environmentally friendly items indicates that the market for environmentally friendly products is rising.

Green purchasing behavior is known as the intention to purchase and use items that are composed by paper, glass, uncontaminated or recycled materials, recyclable materials, or even zero-waste materials. Mostafa (2007) describes green purchasing behavior as the consumption of environmentally beneficial items. In other words, consumers prefer to buy products that have little or no negative influence on the environment's long-term viability and development. According to Chan and Lau (2002), green purchasing behavior is environmentally beneficial behavior performed by customers to demonstrate their concern for the environment. In other words, it means the acquisition, usage, and distribution of ecologically friendly products which do not risk people's wellbeing or compromise the functionality or diversity of ecosystems. However, green consumption does not necessarily mean "use less," but rather "use more effectively, smarter, and with less materials." This is particularly accurate among lower-income groups, who have a stronger propensity to consume products and services. Many other development problems, including alleviating poverty, education, economic growth, and nature preservation, are tied closely to green consumerism. Therefore, green consumption involves satisfying consumer desires in a more efficient manner rather than reducing the consumption.

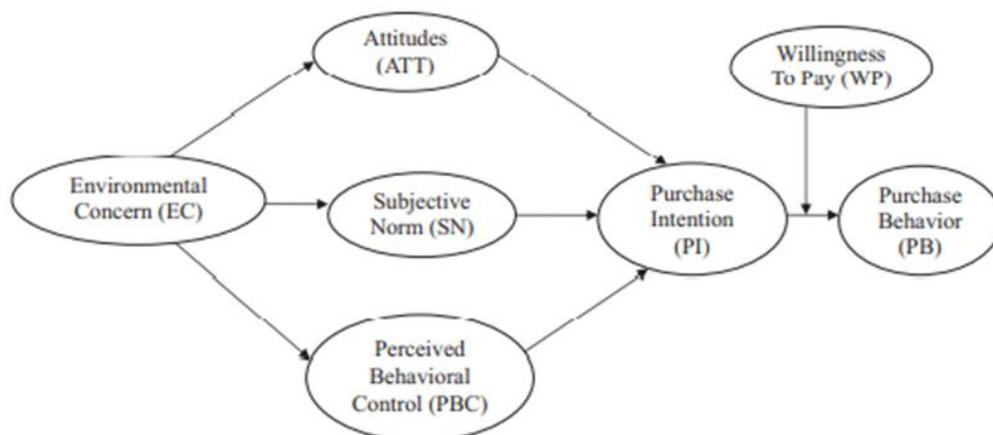
Recently, it can be considered as the tendency of the decade since environmental protection has been a priority for many governments worldwide. For the past years, attempts have been made to establish rules and plans that have effectively transformed the infrastructure, resulting in cleaner and more efficient production processes. Businesses, however, may only mitigate the environmental effects of production and could not impact the environmental effects associated with people's product choices, usage, and disposal. Therefore, consumption plays an extremely important role in resolving environmental issues; cooperation between manufacturers, customers, and other parties may improve the sustainability of the production-consumption system. People in Western nations like the United States and Europe are expressing their interest in environmentally friendly goods during past couple of decades (Lee, 2008). In Asia, there is a developing tendency that more Asian consumers are getting conscious from the environmental degradation and concerns like global warming and many more (Harris, 2006). Another note is that a younger generation of financially capable purchasers has emerged in the region, willing to spend more money than their predecessors.

In this study, first of all, the Planned Behavior Theory (TPB) is essential in understanding the origin of green consumer behavior. According to Ajzen (1991), this concept predicts future behavior based on three primary elements: attitude, perceived behavioral control (insight), and subjective norms. It is also noted that individuals are more inclined to engage in specific behaviors if they feel it will result in good repercussions (favorable attitudes) and social acknowledgment (subjective norms). It may explain why, in recent years, when individuals became more aware of the importance of environmental concerns, they have preferred green purchasing. In this study, we evaluate four parameters following the TPB. Therein, two of the four criteria are connected to the following perceptions: the severity of seeing environmental issues and the effectiveness of sensing environmental actions, while the others are selected for social acceptance: self-image and social influence / social pressure.



**Figure 1. Theory of Planned Behavior Model (Ajzen, 1991)**

On a different note, Chaudhary and Bisai (2021) have been able to construct a conceptual framework that integrates two independent factors, namely ‘environmental concern’ and ‘willingness to pay premium’ in order to study the impact of these factors on consumers' green purchase behavior.



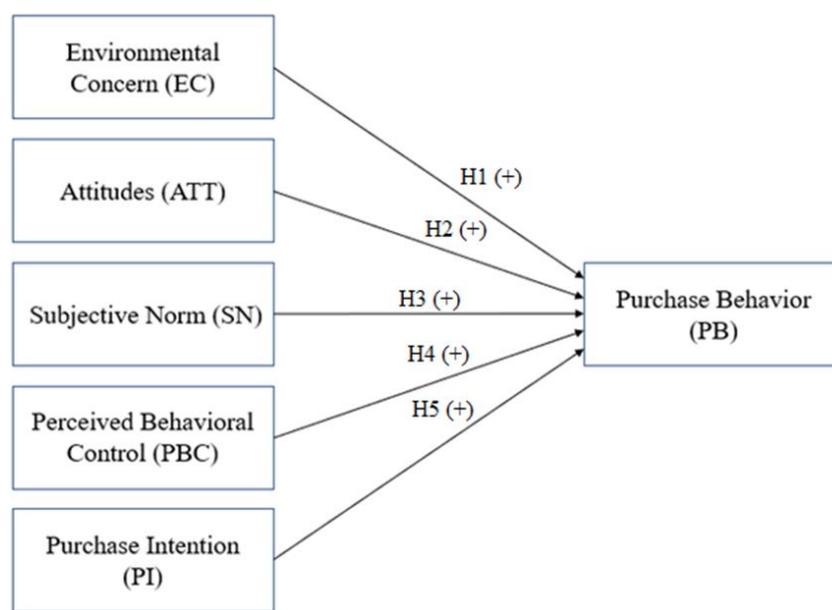
**Figure 2. Conceptual framework (Chaudhary & Bisai, 2021)**

The study seeks to comprehend the green purchasing behavior of knowledgeable millennials in India. In this case of Vietnamese people, we apply such study with certain alterations. In details, since all of the listed factors in the framework of Chaudhary and Bisai (2021) are proven to have a positive impact on purchasing behavior, this study will make use of the five independent variables to construct the research framework, including: ‘Attitudes’, ‘Environmental concern’, ‘Subjective norm’, ‘Purchase intention’, and ‘Perceived behavioral control’.

### **Methodology**

*Hypothesis 1 (H1): Environmental concern has a positive impact on green purchasing behavior.* Natural disasters and a scarcity of natural resources to maintain human life have substantially affected the public understanding of the gravity of environmental concerns. Because of this, individuals sometimes see actions that have a negative influence on the environment such as moral transgressions or even crimes. As a result, they will believe that green purchasing is a requirement. Based on this key reason, it is analyzed by Dunlap and Xiao

(2007) that the potential danger of ecological concerns is one of the variables used to examine public attitudes on environmental problems. It has also been found by Lee (2009) that Asian people regard their regional environmental issues to be more serious than some regions. In fact, according to Moser and Uzzell (2003), there is a strong link between this view and the media. The fast development of media in disseminating information and communication leads to an increase in this awareness since individuals can notice environmental challenges not only in their immediate surroundings but also throughout the world. As a result, the level of this view rises/becomes more significant from time to time.



**Figure 3. Proposed research model**

*Hypothesis 2 (H2): Attitude has a positive impact on green purchasing behavior.* Attitude is defined as "a person's evaluation of the outcomes of completing an activity" (Ajzen, 1991). Attitude is a state of mind that is molded by personal observation and has the power to regulate or dynamically alter an individual's behavior to things and events to which it is related. A creative extension of Schultz and Zelezny (2000) describes attitude as the act of expressing what customers like and hate, as well as care for the environment, both of which are anchored in a person's notion and degree of consciousness. The degree to which a person considers himself or herself as an important component of the natural environment refers to a consumer's purchasing intention, which is influenced by their environmental attitudes. In terms of sustainable consumption, attitude refers to consumers' feelings and views regarding using green products, as well as consumer attitudes that impact their purchasing behavior.

*Hypothesis 3 (H3): Subjective norms has a positive impact on green purchasing behavior.* Social influence is defined as the blending of a given group's individuals' social identities that make it possible to create socially approved knowledge, share a view over a point of view, particular mentality, and perform some concretely tangible actions that are considered acceptable and objective (Turner et al., 1994). According to this viewpoint, the collective identity of the members of a specific group constitutes a suitable and unbiased point of view or style of thinking. For example, if a member of one social group promotes green consumption as a healthy behavior that everyone should do, others may follow suit. According to one study, while purchasing green items, a person's interaction with social groups is crucial in explaining purchase behavior (Bartels & Onwezen, 2014). Furthermore, because an organization generates specific beliefs for its members, it produces unseen peer pressure on everyone to drive them to think in the same way. In fact, it can be shown that this influence comes primarily

from peers, such as current trends in school or on social media, whereas the pressure comes primarily from parents or relatives. Bartels and Hoogendam (2011) indicate that people who connect with environmentally friendly customers would have a favorable association with environmentally friendly food items and companies.

*Hypothesis 4 (H4): Perceived behavioral control has a positive impact on green purchasing behavior.* Behavioral control is described as an individual's assessment of the ease or difficulty of performing an activity. It reflects the degree of control over the behavior's performance rather than the outcome of the activity. Behavioral control in the context of green consumption explains consumers' views of the availability of essential resources, hurdles, and ease of green consumption. According to Ajzen (1991), behavioral control elements directly influence the likelihood to conduct the action, and if the subject accurately perceives his or her degree of control, behavioral control also predicts the behavior. Straughan and Roberts (1999) have investigated the issue and claimed that those who concern about the environment only demonstrate environmental behavior if they believe that a single individual action may contribute to the resolution of shared environmental problems.

*Hypothesis 5 (H5): Purchase intention has a positive impact on green purchasing behavior.* Intention indicates a person's willingness to engage in a certain action (Yadav & Pathak, 2017). It captures incentives to do an action such as desire to participate and the level of effort that person is willing to expend. TPB states that when a behavior is natural, its execution is the outcome of intentions. Yadav and Pathak (2017) have found evidence for a favorable link between behavioral intentions and green purchasing behavior in the case of green products.

Ho Chi Minh City is the most populated city in Vietnam that is known as an important economic, cultural, and educational center of the country. It has a population of 9,227,598 people, and an age structure in the form of a young population pyramid with the sex ratio, males account for 48.7 percent and females for 51.3 percent. In addition, Ho Chi Minh City is regarded as one of Vietnam's most expensive cities, with high living standards that have been steadily improving over the years. As a result, consumers in Ho Chi Minh City are becoming more aware and increasingly interested in using healthy products, limiting their use of tobacco and alcohol, minimizing harmful substances, and reducing environmental pollution. With all of the aforementioned characteristics, relevant data obtained in Ho Chi Minh City is quite ideal to provide a wealth of interesting information regarding this issue.

The data was obtained via an online questionnaire survey, allowing relevant people an equal opportunity to participate in the research. Our study sample included Vietnamese consumer with independent buying power. After removing incorrect replies, 311 responses was marked eligible for further analysis, out of 313 completed questionnaires. In this regard, the questionnaire survey has two parts. The first section includes personal information such as: age, gender, income or allowance, relationship status in order to filter the target respondents and to have a general picture of the demographic of this study. The second part contains 23 questions from 6 sections that will help to determine the findings of this study. Adjustments had been made to the survey questions in order to make them be suitable for the study topic in the Vietnamese culture. The following sources were utilized to develop measurement items: 'Environmental concern' from Kilbourne and Pickett (2008), 'Attitude' from Paul et al. (2016), 'Subjective norms' from Chan and Lau (2002), 'Perceived behavioral control' from Paul et al. (2016), 'Purchase intention' from Paul et al. (2016) and 'Purchase behavior' from Wan et al. (2012).

**Table 1. Measurement Items**

Variables	Label	Environmental concern (EC)	Sources
Environmental concern (EC)	EC1	I am very concerned about the environment	Kilbourne & Pickett, 2008
	EC2	I would feel free to lessen my consumption to contribute in environmental protection.	
	EC3	Major social changes are necessary to protect the natural environment	
	EC4	The enforcement of anti-pollution regulations should be strengthened.	
Attitude (ATT)	ATT1	I prefer the idea of purchasing green	Paul et al., 2016
	ATT2	Purchasing green is a good idea	
	ATT3	I have a positive mindset toward purchasing a green version of a product	
Subjective norms (SN)	SN1	The majority of those who are important to me believe I should buy green items when I go shopping.	Chan & Lau, 2002
	SN2	The majority of those who are significant to me would want me to buy environmentally friendly items when I go shopping.	
	SN3	People whose views I respect wish that I buy environmentally friendly things.	
	SN4	My friend's positive opinion influences me to purchase green product	
Perceived behavioral control (PBC)	PBC1	I feel I am able to acquire environmentally friendly products.	Paul et al., 2016
	PBC2	If I make my own decisions, I am convinced that I would purchase green products	
	PBC3	I believe I will be able to purchase green products in the future.	
	PBC4	I have the means, time, and desire to buy environmentally friendly products.	
Purchase intention (PI)	PI1	In the future, I will consider purchasing things that are less polluting.	Paul et al., 2016
	PI2	I will review changing to eco-friendly brands for environmental grounds.	
	PI3	I intend to spend more on eco-friendly items than on conventional ones.	
	PI4	I anticipate purchasing a product in the future due to its good environmental impact.	
	PI5	I definitely want to purchase green products in near future	
Purchase behavior (PB)	PB1	I have been buying environmentally friendly items often.	Wan et al., 2012
	PB2	I make environmentally responsible purchases for my everyday requirements' items.	
	PB3	I have engaged in green purchasing behavior in the last six months.	

Source: Authors

The research uses measuring scales that have previously been verified in other publications. Chaudhary and Bisai (2021) employed a four-item, five-point Likert type scale adapted from Paul et al. (2016) to assess EC. Three questions with five-point Likert scale type from Chaudhary and Bisai (2021) are used to examine attitudes toward green products. SN is measured using four questions, five-point Likert scale adapted from Chan and Lau (2002). PBC is assessed using a four-item, five-point Likert scale measure adapted from Chaudhary and Bisai (2021). Similarly, PI is calculated using (Chaudhary & Bisai, 2021) five-item, five-point Likert scale. Finally, PB is calculated using Wan et al. (2018)'s three-item, five-point Likert scale. The study employs fundamental quantitative analytic techniques such as regression analysis, factor analysis, and Cronbach's alpha. The Cronbach's alpha coefficient approach is used for assessing the scale's reliability. When this coefficient is between 0.6 and 0.8, the scale has adequate dependability.

According to Hair et al. (2014), factor analysis techniques are used to assess the validity of the scale, allowing the research model and research hypothesis to be adjusted. When the factor loading coefficient is nearly equal to or greater than 0.5, the scale is acceptable. Additionally, the KMO (Kaiser-Meyer-Olkin) coefficient used to assess the suitability of factor analysis must fall within the interval [0.5 - 1], and the Bartlett test is statistically significant (Sig. < 0.05). Multivariate regression analysis have been used to examine the study hypotheses. This is a statistical approach for investigating the connection between one variable (referred to as the dependent or explanatory variable) and one or more additional variables (called the independent variable or the explanatory variable). The purpose of regression analysis is to predict the value of the dependent variable depending on the values of the independent variables and to test hypotheses.

### Research Findings and Discussion

According to the survey results, 162 males accounted for 51.8% of the 313 valid samples, while 151 females accounted for 48.2%. In 313 samples, the age group with the highest proportion was 17-25 years old, with 220 people accounting for 70.3%, 26-30 years old had 91 people accounting for 29.1%, and over 30 years old had 2 people accounting for 0.6%. In terms of average monthly income, 75 people answered that their family has an income of less than 3 million VND/month, accounting for 24%, 107 people answered that their family has an income of 3 - 5 million VND/month, accounting for 34.2%, 62 people answered that their family has an income of 5 - 7 million VND/month, accounting for 19.8%, and 69 people answered that their family has an income of more than 15 million VND/month. Regarding family status, there were 203 single respondents (accounting for 64.9%), 94 respondents in a relationship (accounting for 30%), and 16 respondents who are married for the first time (accounting for 5.1%).

### Correlation Analysis Result

**Table 2. Correlation test**

Variables	1	2	3	4	5	6
1.EC	1					
2.ATT	0.680**	1				
3.SN	0.359**	0.422**	1			
4.PBC	0.465**	0.498**	0.410**	1		
5.PI	0.572**	0.650**	0.501**	0.563**	1	
6.PB	0.370**	0.448**	0.469**	0.444**	0.619**	1

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed)

Because it is based on the covariance method, Pearson correlation is often regarded as the most effective technique for assessing the connection among variables of interest. It describes both the magnitude and direction of the link. In addition, assessing the Pearson correlation coefficient enables us in recognizing the presence of the multicollinearity issue when the independent variables are strongly connected with one another. Table 2 uses Pearson correlation and regression to analyze the relationship from H1 to H5. As a result:

Hypothesis 1 (H1) was confirmed; a substantial correlation of  $r = 0.370$  suggested positive association between 'environmental concern' and 'green purchasing behavior.' This relationship was also supported in Dagher et al. (2015)'s study about the effect of environmental concern and attitude on GPB (2015).

Hypothesis 2 (H2) with a correlation of  $r = 0.448$  suggest a significant positive relationship between 'attitude' and 'green purchasing behavior.' Dagher et al. (2015) also supported this relationship in their study.

Hypothesis 3 (H3) was also supported with a significant correlation of  $r = 0.469$  demonstrates a positive association between the 'subjective norms' and 'green purchasing behavior'. Chaudhary and Bisai (2021) also suggest this correlation in their study.

Hypothesis 4 (H4) has a correlation of 0.444 which shows a significant positive relationship between 'perceived behavior control' and 'green purchasing behavior.' According to Chaudhary and Bisai (2021), perceived behavior control was the third indicator of GPB.

Hypothesis 5 (H5) that has a significant positive correlation of  $r = 0.619$  was also supported. Chaudhary and Bisai (2021) maintain the same association, citing purchase intention' as the second most important predictor of green shopping behavior among millennials in India.

### Explanatory Factor Analysis Result

According to Table 3, the KMO index of the five independent variables equals  $0.764 > 0.5$  and the Bartlett's test result is 2943.825 with significance level  $\text{sig} = 0.000 < 0.005$ .

**Table 3. KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.764
Bartlett's Test of Sphericity	Approx. Chi-Square	2943.825
	df	210
	Sig.	.000

Table 4 shows that, there are 5 extracted factors corresponding to 5 independent factors of this study that has their Eigenvalues greater than 1, and their Cumulative Extraction Sums of Squared Loadings equals  $56.881\% > 50\%$ , that have fulfilled the reliability test principles and can imply that these 5 factors explain  $56.881\%$  of the variation in the data.

Table 5 shows that all qualifying items are allocated to five unique columns, with no items assigned to the same factor, showing that no item has a mutual link with multiple factors. In addition, the loading factors of the items were all more than 0.5, suggesting that no variables would need to be modified or eliminated from the measurement scale, therefore, the EFA is applicable for independent variables.

### Regression Analysis Result

The hypothesis results are shown in the following Table 7. The findings of the scale reliability study by Cronbach's alpha coefficient and the scale validity by factor analysis provided in Table 6 also reveal that the scales have good reliability and validity.

**Table 4. Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.229	22.706	22.706	5.229	22.706	22.706	3.151	14.898	14.898
2	2.648	11.499	34.205	2.648	11.499	34.205	2.653	12.543	27.441
3	2.036	8.841	43.046	2.036	8.841	43.046	2.425	11.465	38.906
4	1.874	8.138	51.184	1.874	8.138	51.184	2.284	10.798	49.704
5	1.312	5.697	56.881	1.312	5.697	56.881	1.518	7.177	56.881
6	.895	3.888	60.769						
7	.858	3.725	64.494						
8	.808	3.508	68.002						
9	.769	3.339	71.341						
10	.710	3.083	74.424						
11	.669	2.905	77.329						
12	.593	2.575	79.904						
13	.570	2.475	82.379						
14	.511	2.220	84.599						
15	.485	2.106	86.705						
16	.466	2.023	88.728						
17	.443	1.880	90.608						
18	.418	1.815	92.423						
19	.406	1.763	94.186						
20	.361	1.567	95.753						
21	.348	1.511	97.264						
22	.335	1.455	98.719						
23	.295	1.281	100.000						

**Table 5. Rotated Component Matrix<sup>a</sup>**

	Component				
	1	2	3	4	5
SN1	0.843				
SN4	0.819				
SN2	0.802				
SN3	0.758				
EC4		0.892			
EC2		0.886			
EC3		0.815			
EC1		0.781			
ATT2			0.876		
ATT3			0.778		
ATT1			0.723		
PI4				0.843	
PI2				0.810	
PI5				0.795	
PI1				0.783	
PI3				0.754	
PBC4					0.813
PBC1					0.803
PBC3					0.756
PBC2					0.661

Source: Authors

**Table 6. Cronbach's alpha and Factor loadings**

Variable	Item	Cronbach's alpha	Factor loadings
Environmental concern (EC)	EC1	0.726	0.781
	EC2		0.886
	EC3		0.815
	EC4		0.892
Attitude (ATT)	ATT1	0.741	0.723
	ATT2		0.876
	ATT3		0.778
Subjective norms (SN)	SN1	0.752	0.843
	SN2		0.802
	SN3		0.758
	SN4		0.819
Perceived behavioral control (PBC)	PBC1	0.711	0.803
	PBC2		0.661
	PBC3		0.756
	PBC4		0.813
Purchase intention (PI)	PI1	0.772	0.783
	PI2		0.810
	PI3		0.754
	PI4		0.843
	PI5		0.795
Purchase behavior (PB)	PB1	0.733	0.842
	PB2		0.806
	PB3		0.813

Source: Authors

**Table 7. Multivariable regression results**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics
	B	Std. Error	Beta			VIF
(Constant)	-0.996	0.422		-2.362	0.019	
EC	0.192	0.043	0.246	4.733	0.000	1.204
ATT	0.264	0.062	0.224	4.127	0.000	1.347
SN	0.116	0.046	0.143	2.572	0.013	1.297
PBC	0.198	0.062	0.164	3.209	0.002	1.194
PI	0.214	0.063	0.177	3.416	0.001	1.191

Source: Authors

The regression model has the coefficient of determination adjusted R square is 0.447, which suggests that the model explains 44.7% of the variation in green purchasing behavior of people in Ho Chi Minh city which were explained by independent variables such as environmental concerns, attitudes, subjective norms, perceived behavioral control, and purchase intention. Each variable's level of effect declines in the following order: environmental concerns ( $b = 0.246$ ), attitudes ( $b = 0.224$ ), purchase intention ( $b = 0.177$ ), perceived behavioral control ( $b=0.164$ ), and subjective norms ( $b = 0.143$ ).

All independent factors exhibit positive regression coefficients and a statistically significant effect on the dependent variable "Green purchase intention" ( $\text{sig} < 0.05$ ). As a result, all of the provided hypotheses are supported.

This study builds on past research and offers empirical evidence for such works, and our results add to the body of knowledge on green purchasing behavior and the TPB framework. The regression analysis findings demonstrate that the impact of independent components on the green purchasing behavior variable, all five variables have a statistically major effect on green consumption behavior. Therein, environmental concern ( $b = 0.246$ ) has the greatest influence on green purchasing behavior. The greater the consumers awareness of their environment state, the better the behavioral performance. In particular, Newton et al. (2015) indicated that consumers needed knowledge to assist the environmental assessment of available purchasing options before they could turn their concern for the environment to buying behavior. Therefore, this results also shows the significance of including information gathering processes into equations meant to demonstrate purchasing behaviors.

Attitudes ( $b = 0.224$ ) is the second factor influencing green purchasing behavior. Emotions of usefulness, excitement, and pleasure affect green purchasing behavior positively. Different attitudes and opinions held by consumers impact their purchasing choices. People's behavior toward a product is dependent upon this mindset. This acts as an important part in developing a company's reputation. In order to have effective marketing efforts, businesses must strive to comprehend the customer's mindset.

Research results also show that purchase intention ( $b = 0.177$ ) has a significant positive correlation with green purchasing behavior. Consumers will contemplate purchasing more if they can see the positive environmental contribution of the product and manufacturing process that are safe and healthy for themselves and the community. In other words, higher purchase intention will increase green purchasing behavior. The findings presented above are consistent with previous research of Yadav and Pathak (2017), Chaudhary and Bisai (2021).

With  $b = 0.167$ , subjective norms suggest that the definition of social influence is an individual's impression of societal forces to do or not execute the act. The advice, encouragement, encouraging, and desires of relatives and influential individuals have a beneficial influence on each individual consumer's ecologically friendly green consuming behavior in Ho Chi Minh city.

Perceived behavioral control ( $b = 0.164$ ) is the least factor influencing green purchasing behavior in Ho Chi Minh City. Consumer behavior is linked to perceived behavioral control and it was described as an individual's sense of how easy or difficult it is to perform a behavior that reflects the degree of control. The behavioral control component indicates the degree of control over the performance of the activity, ranging from easy, without any obstacles, under your control, and with sufficient resources (money, time, expertise, etc.). In the context of environmentally friendly consumption, behavioral control reflects consumers' views of the availability of essential resources, impediments, and ease of implementation of environmentally friendly green consumption.

The outcomes of this research suggest a major concern for selecting successful communication methods, which should integrate various communication tools, including social media, viral marketing, and word of mouth, etc. This research provides information that

will aid individuals and organizations that encourage green initiatives and behaviors such as public policymakers and businesses. Importantly, these findings do not diminish the necessity for further environmental government laws and regulations. Public policymakers should also encourage green behavior among consumers by providing incentives and useful information, as well as assisting green product manufacturers in providing more green choices. Public awareness about the issue should be enhanced. In order to do so, launching campaigns, action months, special days (such as Earth Hour), and encouraging people to use eco-friendly goods, preserve and protect resources, and reuse packaging are some of the ways that would help to achieve green consumerism in the country.

Businesses should consider widening the green options and enhancing the accessibility of green goods in this manner by investing in R&D and developing new distribution channels. This can help to reduce the trouble of obtaining green goods. Campaigns and commercials highlighting the poor state of the environment and the contributions of people to improving environmental quality may assist in raising environmental knowledge and concern, that might encourage green consumption among these consumers. In long-term, this may be beneficial by altering consumers' attitudes, intents, and behaviors toward green products by promoting green purchases a socially acceptable norm and habit.

### Conclusion

In conclusion, from this case study of young people in the largest city of Vietnam and the issue of green consumerism, it is affirmed that, among the five relevant independent factors, environmental concern is the most important one that can help to predict green purchasing behavior from young Vietnamese people. On the other hand, perceived behavioral control is found to be the least influencing factor shaping young people's behavior in this context. As a result, via the case of Vietnam, raising public awareness about this sustainable development issue should be further enhanced and invested due to the fact that it has shown its effectiveness in promoting and shaping people's green behavior.

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