

Factors Influencing Green Product Purchase Intention Among Millennial Investors in Real Estate and the Moderating Effect of Green Brand Knowledge: The Case of ABC Group of Companies

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Abstract

With today's increasing environmental threats, many people have started to pay attention to sustainable development to protect the environment and society. This study determined the effect of green brand positioning, attitude towards the green brand, and environmental concerns on green product purchase intention. In addition, this study evaluated green brand knowledge as a moderator on the association of green brand positioning, attitude towards the green brand, environmental concern, and green product purchase intention. The respondents were selected using the inquiry portal of ABC Group of Companies, a real estate developer in the Philippines. Based on the list, the age of the customers was filtered to meet the criteria of age 26-41, which is considered millennial and a potential buyer specifically in Cavite and Batangas province. The researcher employed a causal research design, purposive sampling, and a quantitative research methodology to quantify the research variables and determine the relationship between the independent variables. The research found that green brand positioning, attitude towards the green brand, and environmental concern positively and significantly affect green product purchase intention. At the same time, the study found that green brand knowledge does not significantly moderate the association of green brand positioning, attitudes towards green brand knowledge, environmental concern, and green product purchase intentions. With the above findings, a promotional marketing campaign is developed for ABC Company to strengthen its customers' green product purchase intention.

Keywords: green brand positioning; attitude towards green brand; environmental concern; green brand knowledge; green product purchase intention

1. Introduction

Despite the risks in the Philippine economy, the recent outbreak, and a few other obstacles, the Philippine real estate market is thriving. The consensus among economic specialists is that the Philippine real estate market will remain solid in the next few years. The supply and demand curves are in good shape due to a rise in investment demand in cities other than Metro Manila (Lilian Real Estate, 2020). In addition, an increase in millennial customers is projected. Millennials, or individuals born between 1981 and 1996, are often viewed as egocentric, entitled, and lazy. They are characterized as someone who frequently changes jobs and spend lavishly on travel and technology. The coronavirus has hastened a change in their purchasing patterns, driving them toward home ownership. According to a Forbes article, technology plays a vital role in the home-buying process for millennials, who utilize the internet and mobile devices extensively to investigate their options. In addition, it highlighted the preference of millennials for suburbs over cities. The convenience and comfort of condominiums make real estate an attractive investment for millennials. According to the Philippine Statistics

Authority, around 28 percent of our country's labor force comprises individuals aged 25 to 34. According to Colliers, the demand for integrated communities, consisting of condominiums, workplaces, shopping malls, and schools, suits millennials' mobility and convenience needs.

In contrast, climate change has moved to the top of the agendas of many real estate players. In recent times, investors have made net-zero promises, officials have improved reporting criteria, governments have implemented legislation targeted at lowering releases, employees have asked for action, and residents have asked for more ecological constructions. Simultaneously, the physical effects of climate change are becoming more apparent as communities are affected by storms, floods, fires, and extreme temperatures. Specifically, climate change is no longer a future risk. It has already become an immediate contemporary difficulty.

According to the Global Real Estate Sustainability Benchmark (2021), apocalyptic natural disasters and rising global temperatures necessitate rapid action on carbon emissions reduction and the incorporation of climate-friendly business practices. The harmful effects of climate change are felt globally in our economic and energy sectors, the quality of our environment, and the health and functioning of our ecosystems (Letcher, 2021). As a result, numerous industries and small and medium-sized businesses worldwide are contemplating how to respond to this global catastrophe. From the simple promotion of garbage recycling to developing new eco-friendly goods and services, numerous businesses strive to positively affect the environment. The real estate sector consumes over forty percent of the world's energy annually, and CO₂ emissions from buildings are projected to climb by fifty-six percent by 2030, making carbon reduction a particularly severe and substantial concern (GRESB, 2021).

Real estate companies are, therefore, in a crucial position in the context of the worldwide drive to reduce greenhouse gas (GHG) emissions, given the diversity of their operations, which range from land trade to building design and construction. According to Tan (2021), the Philippines will soon see an influx of green buildings, but it has a long way to go before its office sector is entirely decarbonized. This relates to eco-friendly renovations for decarbonizing the Philippine office market. Green buildings are not merely a novel notion; they are timely. Especially in modern times, pollution is damaging the environment.

Therefore, this is an excellent chance for Philippine real estate businesses to construct green buildings. Applying high-performance concrete by XYZ Construction, an ABC subsidiary, significantly minimizes cement consumption, lowering the carbon footprint. Building resilient homes and communities decrease risk, encourages preparedness, and enhances the ability to cope with environmental shocks. XYZ Construction uses 85 percent less cement compared to traditional construction methods. This significantly mitigates climate change because cement production contributes 8 percent of the global greenhouse gas (GHG) emissions.

In addition to the potential to safeguard the environment, real estate firms profit from the technology of their green buildings. However, they must consider several variables to convince people to buy. The purchasing motive of consumers can be characterized as a particular intent or behavioral attitude (Tarabieh, 2017; Yii, Shein, & Poh Ming, 2020). New technologies support an approach to housing that is inexpensive, durable, energy-efficient, and environmentally friendly. This deficiency results in substandard living conditions and poses several concerns to families. With the proof of concept from the affordable housing market, XYZ Construction is now conducting Research & Development (R&D) for the application of high-performance concrete in building bridges and other infrastructure projects under the government's Build, Build Program, which should increase mobility and business transactions throughout the nation. Using high-performance concrete panels, XYZ Construction has already erected more than a thousand houses that are inexpensive, sustainable, and robust. These residences were constructed 2 to 5 months faster than typical construction methods. Due to its 100-year material lifespan, the high-performance concrete system generates less construction site waste and requires less building care throughout its life cycle. The high-performance concrete wall panels have a compressive strength of greater than 100 MPa (14,000 psi), preventing mold growth due to their extremely low permeability. It is also built to withstand typhoons and magnitude eight earthquakes. The high-performance concrete panels use less cement and can be reused and recycled after their useful life. These material home characteristics contribute to increased consumer pleasure. Despite the efforts of certain real estate enterprises to increase client purchases, the vast majority lack specific data on what influences buyers' purchasing intentions. ABC Company is among the real estate companies that promote and construct green homes. Moreover, Solar Company, another ABC subsidiary, illuminates the path to

sustainability in affordable housing. This group of companies consistently innovates, breaks down boundaries, and produces positive disruptions, all of which contribute significantly to nation-building. With prefabricated panels made in Europe and solar technology in every home, Filipinos may continue to look to the future. To encourage potential customers to purchase their products, the company focuses on how the brand's message and qualities are distinct from its competitors due to the employment of environmentally related attributes. They also try to explain environmentally friendly qualities to clients to aid in their decision-making. Nevertheless, despite the ABC Company's expenditures and efforts, there is insufficient evidence or research to demonstrate that it affects customers' purchase intentions and contributes to the company's profitability.

ABC Group of Companies is one of the top real estate development companies in the Philippines, pioneering the development of green building technology, including solar-powered homes and high-performance concrete technology. The Philippines, as one of Asia's tropical nations, has an abundance of solar energy. Solar energy is clean energy, emitting no greenhouse gases into the atmosphere, leaving you, your children, and future generations with clean air to breathe. On the other side, this study will assist ABC Company in determining what factors influence customer intent to purchase solar-powered homes.

Since its start, sustainability has been an integral part of the company's DNA. To realize the long-term objective of delivering environmental, social, and economic benefits to all stakeholders, the company's strategy will continue to incorporate sustainability initiatives. To aid with this, the study's findings will be presented via video to both the company and potential customers.

This study examined the influence of green brand positioning, attitude towards the green brand, and environmental concern on green product purchase intentions in the real estate industry, focusing specifically on the ABC Company. In addition, the study sought to determine if green brand knowledge moderates the relationship between green brand positioning, attitude towards green products, environmental concern, and green purchasing intentions.

Buyers are more concerned about purchasing green products on a global scale as green product knowledge increases. Due to the severity of environmental issues, there is a growing need and concern for environmentally friendly products. As defined by Shukri (2019), green products have a negligible or zero impact on the environment and consist of recycling systems, minimum packaging, and less harmful substances. These products are environmentally or ecologically friendly and do not affect the environment or live organisms.

According to Sajeewanie et al. (2019), green product is one of the best solutions which reflect minimizing or reducing detrimental environmental impacts on consumer lives. However, the increased degree of environmental worries does not essentially transfer into purchasing environmentally friendly green brands. While enormous efforts have been made to make green products more efficient and effective, their market share remains limited.

According to Siddique and Hossain (2018), buyers' awareness of green products has a significant effect on their purchase decisions. According to the survey, green products are a big factor in consumer purchase decisions. Producers need durable solutions that safeguard the product's content from overuse and physical damage and an exterior design that can tolerate false light and adverse climate conditions.

According to Baiquni et al. (2019), green brand positioning is one of the efforts made to separate the brand from competitors, such as green products that are ecologically friendly, contain natural ingredients, and are, of course, highly safe. Green brand positioning is a component of the brand identity of a product's value that is less destructive, environmentally friendly, and closely tied to the target market. Creating a green brand positioning by improving green marketing functions boosts the product's attractiveness in the target market.

The company's capacity to provide high-quality, eco-friendly products leads to the development of customer attitudes regarding brands and influences product purchasing. The company's matter for the environment extends beyond the design of its products to its employees' consumption of environmentally friendly products (Kardoyo 2020).

Environmental concern is represented in people's attitudes and their conduct towards the environment. It characterizes a person's environmental issues, compassion, and interests. It has also been described as an attitude towards facts and one's actions or others' behavior with environmental ramifications. (Lee 2014). Responding to the increased customer knowledge about environmental challenges, as claimed by Lee (2020), Situmorang (2021), Wu (2021), and Wang (2021), different enterprises have branded themselves as ecologically friendly by promoting their green product and services.

Customers having expertise or information about natural food or product are more likely to purchase it in the time to come. This results from consumers' favorable perception of the brand's delivery of environmental information (Chang & Wu, 2015). According to Suki (2016), green brand knowledge is precisely how a corporation gives information or knowledge regarding the uniqueness of its product through the brand's qualities. It refers to the corporation's guarantee to buyers and the environment.

According to Ali (2014), green product purchase intention is defined as the likelihood and desire of an environmentally conscious buyer to choose an environmentally friendly product over a conventional one, given that most manufacturing processes tend to outweigh environmental impacts.

1.1 Conceptual Framework

This research was anchored on Siyal (2021) study entitled "Factors Influencing Green Purchase Intention: Moderating Role of Green Brand Knowledge." The data was collected from 396 respondents who purchased green food no less than once each month in the supermarkets and hypermarkets of Pakistan's three largest urban areas. This study investigated the effect of green brand positioning (GBP), attitude towards green brand (ATGB), and environmental concern (EnvC) on green product purchase intention (GPPI). GPPI was considered the dependent variable, while GBP, ATGB, and EnvC were considered independent variables. In addition, as shown in Figure 1, green brand knowledge (GBK) was considered the moderating variable.

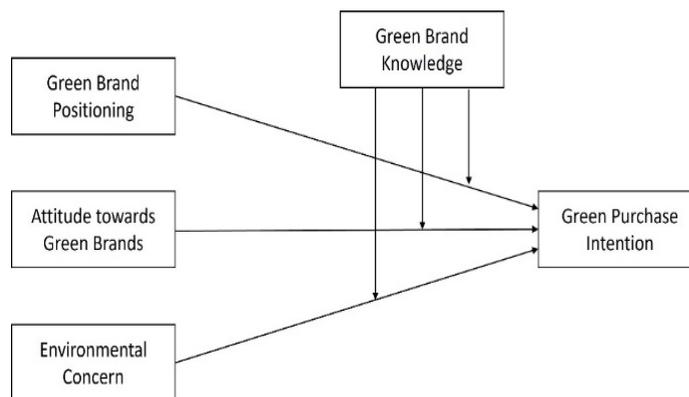


Fig. 1. Factors Influencing Green Product Purchase Intention: Moderating Role of Green Brand Knowledge

Siyal (2021) determined the influence of GBP, ATGB, and EnvC on GPPI. The questionnaire consists of twenty-three items assigned to six conceptual framework variables.

In this study, GBP is focused on the importance of eco-friendly goods or services, which is therefore centered on the ecologically friendly characteristics that buyers find helpful. ATGB is a word formed from consumers' rational evaluation of the green product. EnvC refers to an individual's interest in the environment and environmental issues.

Moreover, GBK, also known as a "trademark," is a name, term, sign, symbol, design, or a combination thereof, that is meant to identify the goods and services of one seller or group of sellers. Additionally, GPPI was defined as the customer's willingness, preference, and likelihood to choose environmentally friendly and sustainable products. Using simple linear regression analysis, the outcomes of the data were examined.

This study found that GBP, ATGB, and EnvC have a significant and beneficial effect on Pakistani buyers' GPPI. In addition, the results suggested that GBK will increase the association between ATGB, EnvC, and GPPI. In contrast, the results demonstrated that GBK did not influence the link between GBP and GPPI.

1.2 Operational Framework

While the study of Siyal (2021) was conducted in Pakistan, this study was conducted in the Philippines, specifically in the ABC Group of Companies, adopting the real estate sector. This study was guided by the operational framework stated in Figure 2, which presents the independent and dependent variables and their relationship with each other.

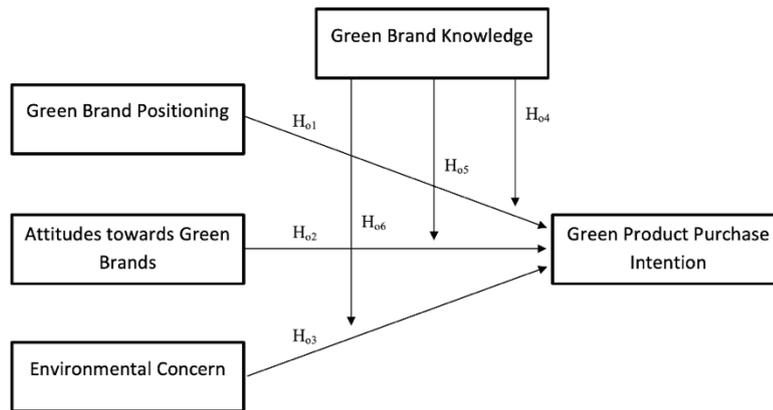


Fig. 2. Operational Framework

GBP focuses on the attributes of a brand being different from its competitors due to the use of environmentally related attributes. ATGB refers to the perception of the potential investor on favorableness or unfavorableness towards GPPI. On the other hand, EnvC refers to the potential investor's interests in the environment and environmental issues which affect their decision on GPPI. In addition, GBK refers to the information potential investors have about the company's green products. Lastly, GPPI refers to the plan of the respondents to buy an environmentally friendly product in the future.

In this study, GPPI is influenced by three factors: GBP, ATGB, and EnvC. In addition to these three variables is the moderating variable, GBK. Given the association between the three independent variables and the purchase intention, the moderating effect of GBK was also assessed. It followed the operating structure depicted in Figure 2.

1.3 Objectives

In general, this study investigated the factors influencing green product purchase intentions in ABC company; specifically, the study achieved the following objectives:

- To determine if green brand positioning has a significant effect on green product purchase intention.
- To determine if customers' attitude towards green brands has a significant effect on green product purchase intention.
- To determine if environmental concern has a significant effect on green product purchase intention.
- To determine if green brand knowledge has a significant moderating effect on the relationship between green brand positioning and green product purchase intention.
- To determine if green brand knowledge has a significant moderating effect on the relationship between attitude towards green brands and green product purchase intention.
- To determine if green brand knowledge has a significant moderating effect on the relationship between environmental concern and green product purchase intention.

1.4 Hypotheses

- H₀₁: Green brand positioning does not have a significant effect on green product purchase intention.
 H₀₂: Customers' attitude towards green brands does not have a significant effect on green product purchase intention.
 H₀₃: Environmental concern does not have a significant effect on green product purchase intention.
 H₀₄: Green brand knowledge does not have a significant moderating effect on the relationship between green brand positioning and green product purchase intention.
 H₀₅: Green brand knowledge does not have a significant moderating effect on the relationship of attitude towards green brands and green product purchase intention.
 H₀₆: Green brand knowledge does not have a significant moderating effect on the relationship between environmental concern and green product purchase intention.

2.0 Methodology

The researcher employed a causal research design and a quantitative method to quantify the research variables and determine the causal relationship between the independent variables - green brand positioning (GBP), attitude toward the green brand (ATGB), and environmental concern (EnvC) and the dependent variable - green product purchase intention (GPPI) via the moderator variable - green brand knowledge (GBK). Also, the researcher does descriptive analysis to determine the respondent's perception of the five variables and the demographic profile of the features of the sample population.

The minimum size sample was 89 respondents calculated using the G*Power 3.1.9.7 (effect size= 0.15; α error probability = 0.05; power $[1-\beta] = 0.95$; and number of predictors = 6) was required for the study. To collect data and choose respondents for the study, purposive quota sampling was used. The respondents were selected using the inquiry portal of ABC Company. Based on the list, the age of the customers was filtered to meet the criteria of 26-41, considered millennials potential buyers located in Cavite and Batangas province. A total of 100 customers met the criteria. However, only 89 responses were considered based on their intention to purchase. The profile of the respondents is presented in Appendix A.

A standardized questionnaire adopted from Yuliati's (2017) study determined the level of respondents' perception of green brand positioning, attitude towards green brand, environmental concern, green brand knowledge, and green purchase intention. The constructions were conventional, and only modest modifications were made to accommodate the real estate context.

The questionnaire (Appendix B) contained a total of 22 components. For all parts, a five-point Likert Scale with 1 for "Strongly Disagree," 2 for "Disagree," 3 for "Neutral," 4 for "Agree," and 5 for "Strongly Agree" was created. A higher score showed that customers' perceptions were more favorable. Table 1 displays the specifications of the instruments utilized.

Table 1. Questionnaire Specification

Part	Variable	Item No.
I	Green Brand Positioning	1 – 5
II	Attitude towards Green Brand	1 – 5
III	Environmental Concern	1 – 4
IV	Green Brand Knowledge	1 – 5
V	Green Product Purchase Intention	1 – 3

The instrument has five components. The first segment consisted of five issues concerning the green brand positioning. The second segment consisted of five questions regarding attitude towards green brands. The final part contained four environmental concern-related items. The fourth section contained five questions on green brand knowledge, while the last section comprised three questions regarding green purchasing intention.

Before data collection, the measurement instrument was pilot tested with 30 respondents from outside the target locale. The reliability of the measurement was tested using Cronbach's alpha. Cronbach's alpha reliability coefficient assesses the internal consistency of the scale's items. According to Adeniran (2019), Cronbach's Alpha values vary from 0.00 to 1.00, and a score of 0.7 or higher indicates that all variable index dimensions exhibit good internal consistency. Based on the pre-test results, all items recorded Cronbach's alpha values ranging from 0.922 to 0.971, indicating that all construct items were indicative of instrument reliability. However, one of the Environmental Concern items has a higher Cronbach Alpha rating, suggesting that the item should be removed. Table 2 displays the results of the pilot test's reliability test.

Table 2. Tabular Representation for Questionnaire's Reliability

	No of items	Cronbach Alpha
Green Brand Positioning	5	0.956
Attitude Towards Green Brand	5	0.930
Environmental Concern	4	0.958
Green Brand Knowledge	5	0.922
Green Product Purchase Intention	3	0.929

This research adhered to the ethical guidelines established by De La Salle Lipa. The questionnaire instructed respondents that their participation was entirely voluntary and that they might discontinue answering the questionnaire at any time. It also guaranteed respondents confidentiality and that their replies would be analyzed on an aggregate basis rather than individually. In addition, the researcher sought to review and approve this study by completing Ethics Clearance Form (Appendix C). The online survey was performed using the Office of Research and Publication's Ethical Guidelines for Online Survey Design.

Data collection was administered from April 2 to April 20, 2022. A consent letter asking for permission to use the list of target customers from the IHGC portal has been sent to the chief operating officer (COO) of ABC Company. With the information provided, the researcher requested permission from the random individual to use their details as part of the research study. Mean was used to summarize the respondents' perceptions of the five variables with the verbal interpretation of the very low (1.00-1.79), low (1.80-2.59), medium (2.60-3.39), high (3.40-4.19) and very high (4.20-5.00) presented in Appendix D.

To examine the direct effect of the independent variable on the dependent variable, linear regression analysis was employed on the generated data. A simple linear regression analysis was used to determine whether GBP, ATGB, and EnvC significantly affect GPPI. In addition, regression analysis was utilized to investigate the simple moderation effect of GBK on the association between GBP, ATGB, EnvC, and GPPI.

3.0 Results and Discussion

3.1 Descriptive Statistics

Table 3 shows the mean and standard deviation for each of the study's important variables, including green brand positioning (GBP), attitude towards green brand (ATGB), environmental concern (EnvC), green brand knowledge (GBK), and green product purchase intention (GPPI).

The mean score of 4.410 ($SD = 0.570$) for overall GBP indicates that millennial investors concur that quality and price are important when purchasing green products, that they learn about green branding through advertising, that green products meet their personal needs, that green products are always affordable, and that they prefer to purchase environmentally green products.

Respondents also have a relatively very high ATGB ($M = 4.520$, $SD = 0.509$). The company's capacity to provide high-quality eco-friendly items leads to the development of client attitudes toward green brands and to the improvement of product buying preferences. The company's concern for the environment extends beyond the design of its products to its employees' consumption of environmentally friendly products (Karodoyo et al., 2020).

The results also revealed that respondents are very high on EnvC ($M = 4.748$, $SD = 0.535$). EnvC can manifest in various ways, from definite attitudes to acts such as reusing and consuming ecologically friendly products.

In addition, it is noteworthy that GBK is also very high ($M = 4.560$, $SD = 0.542$). This indicates that respondents believe they are performing satisfactorily in their positions. GBK provides information that modifies customer behavior to make them more knowledgeable about an ecologically friendly product (Aulina and Yuliati, 2017).

The data also revealed that the GPPI is very high ($M = 4.657$, $SD = 0.553$). According to Puspitari et al. (2018), GPPI is defined as the likelihood and desire of an environmentally conscious consumer to choose an environmentally friendly product over a conventional product, given that most production processes tend to outweigh environmental impacts. Note that the standard deviation reflects the response's proximity to the mean. A low standard deviation implies that data points tend to cluster close to the data set's mean. In contrast, a significant standard deviation suggests that data points span a wide range of values.

Table 3. Descriptive Statistics of the Variables

Variables	Mean	Standard Deviation	Interpretation on the Level of Agreement
Green Brand Positioning (GBP)	4.410	0.570	Very High
Attitude Toward Green Brand (ATGB)	4.520	0.510	Very High
Environmental Concern (EnvC)	4.750	0.535	Very High
Green Brand Knowledge (GBK)	4.560	0.542	Very High
Green Product Purchase Intention (GPPI)	4.657	0.553	Very High

3.2 Effect of Green Brand Positioning on Green Product Purchase Intention

The table shows the simple linear regression showing GBP as a predictor variable of GPPI. The modified R^2 was found to be 0.400. This indicates that the GBP can support roughly 40% of the propensity to purchase green products. Results proved that GBP significantly affects GPPI ($p\text{-value}=0.000$). While the β indicates that when the level of GBP increases by 1 unit change, this will increase GPPI by a percentage change of 0.633. With this, it can be concluded that when the level of GBP increases, the millennial's GPPI will also increase.

Table 4. Effect of Green Brand Positioning on Green Product Purchase Intention

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Interpretation
		B	Std. Error	Beta			
1	(Constant)	1.945	.338		5.755	.000	
	Green Brand Positioning	.615	.076	.633	8.089	.000	Significant
R ² = .400		F-value = 65.425		p-value = .000			

a. Dependent Variable: Green Product Purchase Intention

The current finding is consistent with the results of Huang et al. (2014), stating that GBP, through active communication campaigns related to green attributes, could induce a more positive perception of green brands amongst consumers. Earlier scholars have asserted that GBP significantly affects GPPI (as cited in Suki 2016).

According to Aulina and Yuliati (2017), GBP contributes to the intention to acquire green products. A good GBP indicates that buyers are knowledgeable and conscientious about developing environmentally friendly products.

Thus, sellers need to contend with GBP for their products. For customers to buy green products, green marketers should highlight product quality, price, advertising, and the product's environmental friendliness. Additionally, green products should meet the individual demands and needs of the customer.

3.3 Effect of Attitude Towards Green Brands on Green Product Purchase Intention

Table 5 shows the simple linear regression showing ATGB as a predictor variable of GPPI. The modified R² was found to be 0.277. This indicates that the ATGB can support roughly 28% of the propensity to purchase green products. Results proved that ATGB has a significant effect on GPPI ($p\text{-value}=0.000$). While the β indicates that when the level of attitude towards green brands increases by 1 unit change, this will increase green product purchase intention by a percentage change of 0.572. With this, as the level of ATGB increases, the millennials' GPPI will also increase.

Table 5. Effect of Attitude Towards Green Brands on Green Product Purchase Intention

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Interpretation
		B	Std. Error	Beta			
1	(Constant)	2.069	.425		4.866	.000	
	Attitude Towards Green Brands	.572	.094	.526	6.121	.000	Significant
R ² = .277		F-value = 37.472		p-value = .000			

a. Dependent Variable: Green Purchase Intention

The result of the current study is consistent with the study of Siyal et al. (2021), stating that a consumer's ATGP has a significant impact on their GPPI. In addition, consumers with positive views about green products are more likely to acquire a stronger tendency to purchase green products by referring to their green brands.

3.4 Effect of Environmental Concern on Green Product Purchase Intention

Table 6 shows the simple linear regression showing EnvC as a predictor variable of GPPI. The modified R²

was found to be 0.424. This indicates that EnvC can support roughly 42% of the propensity to purchase green products. Results proved that ATGB has a significant effect on GPPI (p -value=0.000). While the β indicates that when the level of ATGB increases by 1 unit change, this will increase GPPI by a percentage change of 0.674. With this, as the level of EnvC increases, the millennials' GPPI will also increase.

Table 6: Effect of Environmental Concern on Green Product Purchase Intention

Model		Unstandardized Coefficients		Standardized	T	Sig.	Interpretation
		B	Std. Error	Coefficients			
1	(Constant)	1.457	.379		3.844	.000	
	Environmental Concern	.674	.079	.651	8.495	.000	Significant
R ² = .424		F-value = 72.163		p-value = .000			

a. Dependent Variable: Green Purchase Intention

The above findings demonstrate that greater EnvC is associated with increasing GPPI. This was reinforced by Liao et al. (2020)'s finding that more environmental worries among customers enhance the development of their intention to acquire green products.

3.5 Moderating Effect of Green Brand Knowledge in the Relationship between Green Brand Positioning and Green Product Purchase Intention

The moderation analysis is presented in Table 7. The main effect of GBP and GBK on GPPI is significant ($p < .05$). However, the interaction term (GBP x GBK) is not significant ($p > .05$). The "R Square Change" shows the rise in variation justified by the adding of the interaction term (i.e., the change in R^2). The change in R^2 is described as 0.0096 or 96%, which is a proportion that did not significantly add new variance and is statistically not significant ($p > .05$). The researcher concludes that GBK does not significantly moderate the association of GBP and GPPI. It means that the GBP affects GPPI, but it does not differ significantly with changes in GBK.

Table 7. Moderating Effect of Green Brand Knowledge in the Relationship between Green Brand Positioning and Green Product Purchase Intention

	Unstandardized Coefficients		t-value	p-value	Interpretation
	B	Std. Error			
(Constant)	4.671	.038	122.710	0.000	
Green Brand Positioning	.243	.088	2.759	.007	Significant
Green Brand Knowledge	.466	.106	4.385	.000	Significant
GBP x GBK	-.072	.049	-1.470	.145	Not Significant
R ² = 0.572	R ² change = 0.0096		F-value = 42.721		

a. Dependent Variable: Green Purchase Intention

These results are even with the study of Suki (2016) which states that since the estimation of the interaction term resulted in a non-significant value, the influence of GBP and GPPI does not vary significantly across GBK levels.

3.6 Moderating Effect of Green Brand Knowledge in the Relationship of Attitude toward Green Product Purchase Intention

The moderation analysis is presented in Table 8. The main effect of ATGP is not significant ($p > .435$), and GBK on GPPI is significant ($p < .05$). However, the interaction term (ATGBS x GBK) is not significant ($p > .05$). The “R Square Change” shows the rise in variation justified by the adding of the interaction term (i.e., the change in R^2). The change in R^2 is described as 0.0102 or 10%, which is a proportion that did not significantly add new variance and is statistically not significant ($p > .05$). The researcher concluded that GBK does not significantly moderate the association of ATGP and GPPI. It means that the GBK affects GPPI, but it does not differ significantly from changes in GBK.

Table 8. Moderating Effect of Green Brand Knowledge in the Relationship between Attitude toward Green Product and Green Product Purchase Intention

	Unstandardized Coefficients		t-value	p-value	Interpretation
	B	Std. Error			
(Constant)	4.680	.042	111.730	0.000	
Attitude towards Green Brand	.083	.105	.783	.435	Not Significant
Green Brand Knowledge	.574	.128	4.474	.000	Significant
ATGB x GBK	-.127	.088	-1.442	.153	Not Significant
$R^2 = 0.530$		$R^2 \text{ change} = 0.0102$		$F\text{-value} = 36.114$	

a. Dependent Variable: Green Purchase Intention

This study contradicts Siyal (2021) study, which states that when the customers know about the products and services, the relationship between their attitude and intention will become stronger. Notably, consistent provision of information about the green brands ultimately becomes a piece of knowledge for the consumer regarding the environment moderates’ attitudes and green behaviors. Accordingly, the study also found that the relationship between environmental concerns and GPPI is moderated by GBK.

3.7 Moderating Effect of Green Brand Knowledge in the Relationship between Environmental Concern and Green Product Purchase Intention

The moderation analysis is presented in Table 9. The main effect of EnvC and GBK on GPPI is significant ($p < .05$). However, the interaction term (ATGB x GBK) is not significant ($p > .05$). The “R Square Change” reveals the rise in variation supported by the calculation of the interaction term (i.e., the change in R^2). The change in R^2 is described as 0.0010 or 10%, which is a proportion ($p > .05$). The researcher concludes that GBK does not significantly moderate the relationship between EnvC and GPPI. It means that the EnvC affects GPPI, but it does not differ significantly with changes in GBK.

Table 9. Moderating Effect of Green Brand Knowledge in the Relationship between Environmental Concern and Green Product Purchase Intention

	Unstandardized Coefficients		t-value	p-value	Interpretation
	B	Std. Error			
(Constant)	4.661	.038	121.637	0.000	
Environmental Concern	.270	.114	2.373	.020	Significant
Green Brand Knowledge	.513	.104	4.948	.000	Significant
EC x GBK	-.021	.044	-.467	.642	Not Significant
$R^2 = 0.561$		$R^2 \text{ change} = 0.0010$		$F\text{-value} = 40.803$	

a. Dependent Variable: Green Purchase Intention

This is in contrast with the result of the study of Siyal (2021), which says that customers' knowledge moderates the relationship between EnvC and GPPI. More buyers today are more particular with houses' aesthetics, space, and location. Sometimes, they are not concerned about whether the environment is polluted if it is near their workplace, school, or hospital.

3.8 Conclusion

The summary of hypothesis testing for this research is presented in Table 10. Based on the outcomes of the above study, the following conclusions can be drawn.

Table 10. Summary of Hypothesis Testing

Hypothesis	Result
H ₀₁ Green brand positioning has no significant effect on green product purchase intention	Rejected
H ₀₂ Customers' attitude toward green brands has no significant effect on green product purchase intention.	Rejected
H ₀₃ Environmental concern has no significant effect on green product purchase intention.	Rejected
H ₀₄ Green brand knowledge has no significant moderating effect on the relationship between green brand positioning and green product purchase intention.	Failed to be Rejected
H ₀₅ Green brand knowledge has no significant moderating effect on the relationship of attitude towards green brands and green product purchase intention.	Failed to be Rejected
H ₀₆ Green brand knowledge has no significant moderating effect on the relationship between environmental concern and green product purchase intention.	Failed to be Rejected

The research demonstrated that green brand positioning (GBP) had a favorable and significant effect on the green product purchase intention (GPPI). This supports the claim that successful brand positioning leads to a significant purchase intent among customers. Thus, H₀₁ claiming that GBP has no significant effect on GPPI was rejected.

The study also indicated that customers' attitude towards green brands (ATGB) significantly affects their GPPI. This indicates that the customers' choice and complete assessment of the brand, which encompasses their likes and dislikes, correlate with their attitude toward the brand. Thus, the hypothesis that the ATGB has no significant effect on GPPI was rejected.

In addition, the research revealed that environmental concern (EnvC) dramatically affects the propensity to purchase green products. This demonstrates that EnvC has a direct effect on recycling. In addition, a correlation was found between EnvC and the intent to buy green products. Thus, the hypothesis that EnvC does not significantly affect GPPI was rejected.

Lastly, the research showed that green brand knowledge (GBK) does not significantly moderate the relationship between GBP and GPPI; ATGB and GPPI; and EnvC and GPPI. Thus, H₀₄, H₀₅, and H₀₆ failed to be rejected.

In conclusion, GBP, ATGB, and EnvC have a significant effect on the GPPI. Furthermore, GBK does not moderate the association between GBP and GPPI, nor does it moderate the relationship between EnvC and GPPI. This indicates that GBP and EnvC influence GPPI but does not significantly affect GBK.

3.9 Recommendations

The findings of this research revealed that GBP positively and significantly affects GPPI. With this, the company must strengthen its marketing strategy to focus on promotion and the positive return when purchasing houses under ABC Company. Sales employees must reiterate to customers that buying a green home is a good investment that will result in a win-win situation in the future.

In addition, this research revealed that ATGB positively and significantly affects GPPI. It is recommended for ABC Company to create a Facebook or online page where all members are the customers who have already purchased green properties wherein they can upload or post their on-hand experiences living in a greenhouse. With that, customers can check reviews on the Facebook page where customers can speak for their experience other than the sales agents. This is one of the best ways to make the product reliable.

Also, this research revealed that EnvC positively and significantly affects GPPI. With this, ABC Company should widen its corporate social responsibility. This is one way to let the customers know that the company is dedicated to improving the natural environment.

The study recommended a project action plan (Appendix E) Promotional Marketing Campaign for ABC Company. ABC Company has been a player in real estate for about four decades. Over time, it has been proven to be one of the fastest rising stars as it is the first protected real estate developer in the Philippines. Year on year, ABC Company sees continued success due to its vision, unique proposition, and passion by its people to truly make sustainable communities a reality. As ABC Company continues to grow, there is a need to ensure that the brand positioning is distinct, its vision is communicated, and its mission and values are understood by employees and partners so that it can be acted upon. Through the project knowledge seminar, brokers and agents will be more informed about the company's brand positioning, the only energy-efficient, safe, and long-lasting home within a community that enables you to build your future with your loved ones. It will also cover different topics from the solar solution, high-performance concrete panels, project updates, and how to create an extensive advertisement using the latest social media platforms such as Facebook, Instagram, and Youtube channels which are the newest avenue in the advertising world. After the product knowledge seminar, it will expect a higher volume of sales, more knowledgeable agents and brokers, an increase in leads, and convert them into sales.

Additionally, new factors and their scopes can be investigated. For example, the study saw the green brand positioning as a unidimensional concept, which may bound the generalizability from several viewpoints, given that it includes useful, open, and green positioning dimensions. Therefore, it is advised that upcoming research address the multidimensional concept of green brand positioning, which will expand our knowledge of how positioning from many viewpoints can influence green purchasing intentions. In addition, the relationship between green brand positioning and environmental concern was not regulated by green brand knowledge; consequently, the future study may wish to examine other mediating or moderating variables. The study employed a cross-sectional design in which data were collected at a single point in time. There are several additional research designs in which data could be gathered multiple times, such as longitudinal, to determine if respondents' responses change over time.

3.10 Limitations of Research

Like any other research, there are limitations to this study. The data was collected through an online survey. Although it achieved the minimum sample size, the number of participants was limited, which may not be generalizable to the population. Another limitation encountered was the limited time to conduct the survey. Thus, although it is not applicable during this pandemic, future researchers may use the traditional pen and paper for data collection.

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