

**GREEN PREMIUMS AND GREEN PENALTIES: EXPLORING CONSUMER
WILLINGNESS TO PAY FOR SUSTAINABLE PRODUCTS IN EMERGING
VERSUS DEVELOPED MARKETS**

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Abstract

Utilizing Green Products (GPs) is pivotal to enhancing the living environment and diminishing waste and resource consumption. When compared to general products, GPs frequently have high prices on account of their green attributes. As Environmental Concerns (ECs) increasingly influence purchasing decisions, consumers' Willingness To Pay (WTP) for sustainable products has become a growing area of interest in both emerging and developed markets. Nevertheless, there was insufficient comprehension of the WTP for such products in the emerging versus developed markets. Hence, exploring the consumers' WTP for sustainable products in the emerging and developed markets was the aim of the study. By utilizing a convenience sampling technique, the sample was taken from 400 consumers who previously purchased GPs in India and the United Kingdom. As per the findings, consumers' attitudes towards purchasing GPs had a positive as well as significant relationship with the WTP for a Price Premium (PP). Furthermore, most of the participants stated that a major barrier hindering the purchase of GPs was the inadequate availability of GPs in supermarkets and retail stores. According to the overall findings, consumers from emerging markets had a higher WTP for a premium price for sustainable products.

Keywords: *Green Product, Willingness to Pay, Green Premium, Consumers, and Green Marketing.*

1. INTRODUCTION

The practice of Green Marketing (GM) has gained significant attraction in today's marketplace. It refers to a strategy to leverage the environmental assistance of a service or product to increase sales [1, 2]. A complex field that has introduced new ideas and flexible ways to address emerging environmental needs is called GM [3]. The problem of environmental safety and awareness in consumer behaviour has been raised by the consciousness of the devastation of natural resources that results from the activities of humans, increasing the demand for GPs in the market all over the globe [4]. Consumers progressively change their consumption concept and augment the purchase of GPs [5]. A product whose design or attributes use recycled resources for minimizing its environmental impact during the entire life cycle is defined as a GP [6]. For various reasons, the majority of

the GPs are expensive compared to their non-green counterparts. A key challenge faced by marketers while targeting consumers with these GPs is green premium [7]. It is the price difference between conventional, often less sustainable, products and their eco-friendly alternatives [8]. In green purchase decision, the WTP a green premium plays a very important part [9]. The impact of GM on the consumers' WTP a premium price for sustainable products is exemplified in Figure 1.



Figure 1: Role of green marketing on the willingness of consumers to pay a premium price

The issues of GM and GPs have developed rapidly recently. The demand for producing GPs is becoming an increasingly significant and strategic issue to increase competitiveness [10]. There is a significant gap in the consumers' willingness to consistently choose and pay for those products, despite the dynamic growth of the GPs market. In several prevailing studies, the consumer's WTP a premium for GPs has been explored. Yet, there are comparatively limited studies that contrast the consumers' WTP a PP for GPs in the emerging and developed markets. Therefore, exploring the consumer's WTP for sustainable products in the emerging and developed markets is the study's main aim. The research's objectives are:

- To recognize the key determinants affecting the consumer's WTP a premium price for sustainable products.
- To compare the consumer's WTP for sustainable products in developing and developed markets.
- To assess the barriers that are observed as most pertinent in hindering the purchase of GPs for consumers.

The latter part of the study is organized as: In the next two sections, the literature review is given and the methodology and the data used in the study are described. The results and discussion of the study are provided in the subsequent section. Finally, the study is wrapped up by discussing the results, rendering limitations, and providing implications for future studies.

2. RELATED LITERATURE REVIEW

Sofia Gomes *et al.* [11] evaluated the determinants of the Generation Z youth's demand for GPs and their impact on the WTP for GPs. Through an online questionnaire, the study collected data from 1255 green consumers from Generation Z in Portugal. By utilizing the Partial Least Squares (PLS) methodology, the study hypothesis was tested. The study

identified that ECs, green perceived quality, and green future estimation positively influenced the WTP more for GPs by consumers of Generation Z. Additionally, green perceived benefits had a negative influence on the WTP for GPs. The study data were only gathered from Portugal. Therefore, the results were not generalized to other contexts. Moreover, the study only concentrated on green consumers from Generation Z.

Shuqin Wei *et al.* [12] analyzed the impact of consumer characteristics and customer participation on the WTP more for GPs. The data required for the study had been collected from 334 respondents through a questionnaire. Using statistical techniques, the data was analyzed. To analyze the relationship among the variables, the correlation analysis was employed. According to the study findings, customer participation improved consumers' WTP more, even when consumers exhibited lower sustainability-oriented motivation and capability. The study did not focus on the situational factors that had an impact on consumers' WTP for GPs. In addition, behavioural outcomes were only included in the study.

Ying Zhan *et al.* [13] investigated the consumers' WTP a premium for eco-label products. The data were collected from 398 participants in China using a questionnaire. Using descriptive statistics, the data was analyzed. The hypotheses were investigated using t-tests. As per the outcomes, when contrasted to the control group, the WTP a premium in the carbon label identification group was significantly higher for the natural laundry cleaner. The T-test outcomes specified that there was a substantial difference betwixt the 2 groups. Furthermore, the result exhibited that consumers were more willing for paying a premium for products when they were aware of carbon labeling, since they believed that those products' quality was high. The study did not consider the factors, including price and customers' trust, impacting the WTP a premium.

Aindrila Biswas and Mousumi Roy [14] explored the drivers for green purchase decisions and WTP for GPs. The primary data were collected from 150 consumers at large retail outlets in two different cities in India using structured questionnaires. To measure the consumer's WTP the premium for environmentally compatible products, multiple Regression Analysis (RA) was performed. According to the outcomes, the availability, price, performance, and quality of the product highly impacted the consumers' intention to pay for the green PP. Nevertheless, the sample size was very limited, which affected the accuracy of the result.

Tania Adialita *et al.* [15] studied the consumers' willingness to pay for GPs. A questionnaire sample of data had been acquired from 251 young consumers in West Java, Indonesia. Using descriptive statistics, the collected data were investigated. As per the findings of Structural Equation Modeling (SEM) analysis, there was a positive influence among behavioural beliefs and consumer attitudes towards eco-friendly products, normative beliefs and subjective norms of the consumers, and belief control and Perceived Behavioural Control (PBC). Moreover, subjective norms had no substantial impact on Purchase Intentions (PIs). Nevertheless, the study gathered data only from West Java, while the same result could not be applied to other geographical settings.

Richa Chaudhary and Samrat Bisai [16] investigated the factors that affected the green buying behaviour of millennials. By utilizing an online questionnaire survey, the data were gathered from 202 students from a higher education institute in India. SEM was utilized for testing the study's hypothesis. According to the study outcomes, the relation betwixt PI with green buying behaviour was moderated by the WTP a premium. Additionally, EC did not have a direct impact on green PI via its impact on subjective norm, attitude, as well as PBC. By utilizing a cross-sectional research design, the data were gathered, limiting the capability of drawing inferences on causality.

Santhosh Kumar. S [17] assessed the consumer's perception towards GM and the buying of environmentally sustainable products. The research obtained data from a hundred consumers based on questionnaires through visiting supermarkets and hypermarkets in Muscat. For the data analysis, the study utilized descriptive and inferential statistical approaches. According to the study findings, many consumers were willing to pay a premium for products that were environmentally conscious. Also, the study found that the factors impacting the consumer's decision to purchase an eco-friendly product were affordability, convenience, and brand recognition. Nevertheless, in the study, the cross-cultural variations in customer opinions and attitudes were not explored concerning GM strategies.

Mohd Danish Kirmani and Mohammed Naved Khan [18] aimed to analyze the past history of the consumers' WTP a premium for GPs. In the study, the relationship betwixt the antecedents and WTP was further analyzed. The data were obtained from 515 students enrolled in different educational institutes in India. Using SEM, the data were examined. According to the study outcomes, the attitude towards GPs had a positive and significant influence on WTP. Also, the study identified that the significant predictors of consumer attitudes towards GPs were Collectivism (CO) and EC. Yet, to generate data, the study adopted a cross-sectional design. Hence, subtle shifts in consumer preferences were not captured in the long run.

Dhanjit Pathak and Dipankar Malakar [19] unveiled the influence of ECs, green benefits, and green quality on the WTP for GPs. Using a convenience sampling methodology, the data sample was taken from 195 participants in Assam based on a structured questionnaire. To investigate the relation among the variables, multiple linear RA was utilized. The study indicated that the WTP was significantly influenced by ECs. Individuals who revealed higher EC exhibited a greater propensity to invest in GPs. Nevertheless, the study only concentrated on Assam. Hence, as different regions might possess different characteristics and features, the result did not apply to other regions.

Arpita Khare [20] investigated the effect of previous environmental attitudes, social influence, social and personal environmental norms, and green self-identity on the green purchasing behavior of consumers. Through self-administered questionnaires, the sample was gathered from 490 participants from six cities in India. To investigate the study data, RA was carried out. According to the results, the decision of consumers for purchasing GPs was impacted by green self-identity, social impact, environmentally friendly behavior, and past

green buying behavior. Nevertheless, the study only included the respondents from cities in which awareness about GPs was high.

Kamonthip Maichum *et al.* [21] concentrated on the PI of consumers towards GPs in emerging countries. Using a questionnaire, the study sample was taken from 483 respondents in Thailand. For the analysis, the study used both descriptive and inferential statistical techniques. The SEM results showed that consumer attitude, PBC, and subjective norm had a significant and positive effect on the PI for GPs. Subsequently, environmental knowledge had no substantial impact on the PI for GPs. Generally, the study considered GPs rather than particular GPs; therefore, the results could vary for diverse products.

Chih-Cheng Chen *et al.* [22] inquired about the consumer's behavioral intention to purchase GPs in Belt and Road nations. Using questionnaires, the data were gathered from 227 customers who had bought GPs previously. The hypotheses of the study had been formulated. Also, using SEM analysis, the relationship was tested. As per the study findings, cognitive values, environmental consciousness, and government role had a significant and positive influence on environmental and product attitudes. In addition, objective knowledge had no substantial effect on environmental attitude. In the study, a cross-sectional design was adopted, limiting the capability of establishing causality in the relationship between the variables.

Abdullah Al Mamun *et al.* [23] focused on the WTP and purchase behavior of eco-friendly products. By utilizing a questionnaire, the quantitative data required for the study were taken from 380 lower-income family heads from thirty-eight coastline regions in Peninsular Malaysia. To examine the study, variance-based PLS-SEM was conducted. According to the outcomes, normative beliefs and PBC had a significant and positive influence on WTP for eco-friendly products. In addition, WTP for eco-friendly products and PBC had a significant and positive impact on behavioral control on payment behavior for eco-friendly products. Yet, the study did not consider all factors impacting the consumers' WTP and payment behavior.

Lucyna Witek and Wiesława Kuzniar [24] recognized the socio-demographic factors influencing the green purchasing behavior. From 650 Polish consumers, the sample was collected using a questionnaire-based online survey. Using descriptive statistics, the collected data were analyzed. As per the findings, female consumers showed highly positive attitudes towards purchasing GPs when contrasted with male consumers. Habits and low income were the major barriers to green purchases for young respondents. Moreover, the study showed that consumers having better personal circumstances exhibited a higher inclination towards purchasing GPs. Nevertheless, the study failed to fully recognize the main factors and analyze the relationship among factors.

Ida Farida Oesman *et al.* [25] emphasized the aspects that influenced the consumers' WTP more for GPs. By utilizing an online survey, the sample was taken from 225 consumers who purchased GPs from bulk shops in Bandung and Jakarta, Indonesia. To analyse the study, a statistical analysis was conducted. The testing of hypotheses was done by utilizing

covariance-centric SEM. As per the study, consumers' attitudes and green lifestyles had a substantial effect on the WTP more, with PI as a mediator. Samples were taken from only two areas of Indonesia, limiting the generalizability of the results to other geographical locations.

3. RESEARCH METHODOLOGY

3.1. Research Design

The selected methodology for the research was quantitative. Exploring the consumers' WTP for sustainable products in the emerging and developed markets was the key aim of the present research. Moreover, the barriers hindering the purchase of GPs for consumers were identified in the study. The research design presented the data substantially to assist the researchers in understanding a group's characteristics. To analyze the quantitative data, the study used statistical analysis. The questionnaire was structured to achieve the study's research objectives. In this research, the questionnaire was designed and sent with a brief introduction that clearly explained this research's main scope. In Figure 2, the conceptual model of the research design was given.



Figure 2: Conceptual framework

3.2. Target Population and Sample

The population was termed the group of all the units on which the findings of the research were to be applied. The consumers' WTP for sustainable products in emerging and developed markets was analyzed in the study. India and the United Kingdom were examples of emerging and developed markets, respectively. Thus, the population in this study included participants from India and the United Kingdom. The general population addressed in this research included consumers who previously purchased GPs. Participants were males and females of different age distributions, numbering up to 400. For the recruitment of the participants for the study, a convenience sampling approach was utilized. The population was settled since it was regarded as ideal for aiding the researcher in getting representative answers to the formulated research questions.

3.3. Data Collection

Primary data was the original data that the researcher directly gathered from the participants via surveys as well as interviews. A quantitative approach to collect information from a pool of respondents via a well-structured questionnaire was termed survey search. For supplementing primary data, secondary data was also gathered. This study gathered the primary data using a well-structured questionnaire and by getting it filled out by the respondents. A standardised questionnaire centered on the 5-point Likert scale that ranged from Strongly Disagree to Strongly Agree was constructed for the study. The questionnaire was distributed to 487 participants through email. After the final sample collection, the structured questionnaire was only properly completed by 400 out of 487 respondents, and others did not properly complete the structured questionnaire. The remaining 87 respondents were deemed as unfit, invalid, and inappropriate for the structured questionnaire; thus, they were eliminated from this research. In the research study, the closed-ended questionnaires were included. The participants were provided with 2 weeks of time and a subsequent follow-up for improving the response rate.

3.4. Consent to participate

Participation was anonymous and voluntary, and participants were informed regarding the study's purpose, and informed consent was obtained from them. The author attested that participants were conscious of the potential risks, purpose, and benefits of the study. Also, the author highlighted the voluntary nature of participation, confidentiality measures, and the right of the participants to withdraw at any time.

3.5. Data analysis

By utilizing quantitative techniques, the present study conducted data analysis. Using statistical techniques, including descriptive statistics and inferential statistics, the quantitative data gathered from the questionnaire survey were analyzed. Statistics analyzed variables to assist the researcher in making sense of statistical data drawn from a sample. An ordinal scale was the scale used to measure the constructs of variables. Ordinal scales utilized attribute labels like Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. To examine the demographic data and the Likert-type data, descriptive statistics were utilized. Mean, percentage, Standard Deviation (SD), and frequency were the descriptive statistics. To study the correlation among the variables, inferential statistics, including RA and correlation analysis, were performed. Lastly, to test the study hypothesis, SEM was utilized.

3.6. Validity and Reliability

Numerous tests were performed to show the research instrument's construct validity, content validity, and reliability. To analyze the collected data's internal consistency and reliability, the Cronbach's Alpha (CA) coefficient was used.

3.7. Measurement of Variables

The present study took EC, CO, PBC, Price Sensitivity (PS), Green Product Quality (GPQ), and Attitude Towards Purchasing GPs (ATGP) as independent variables and WTP a PP (WTP) as a dependent variable.

3.8. Demographic characteristics of selected respondents

Age, education, marital status, gender, and income were the participants' demographic characteristics. Table 1 showed the selected respondents' demographic profile.

Table 1: Demographic profile

Demographic Information	Frequency (N)	Percentage (%)
Age		
18 to 35 years	187	46.75
35 to 50 years	120	30.00
Above 50 years	093	23.25
Gender		
Male	171	42.75
Female	229	57.25
Marital Status		
Married	249	62.25
Unmarried	151	37.75
Education		
Undergraduate	217	54.25
Post Graduate	128	32.00
Others	055	13.75
Annual Income Level		
Low	093	23.25
Medium	245	61.25
High	062	15.50

Age: In Table 1, the respondents' age group was shown. Many respondents were between the age groups of 18 to 35 years (i.e., 46.75%), followed by the age group 35 to 50 years (30%) and above 50 years (23.25%).

Gender: Table 1 exhibited the respondents' gender. Many respondents were female. 42.75% and 57.25% respondents were male and female, respectively.

Marital status: The respondents' marital status was provided in Table 1. 249 out of 400 respondents were married. The remaining 151 respondents were unmarried.

Education level: In Table 1, the respondents' educational qualification was given. 54.25%, 32%, and 13.75% respondents were undergraduates, post-graduates, and other categories, respectively.

Annual income level: Table 1 displayed the respondents' income range. Many respondents had a medium level of annual income (61.25%). 23.25% and 15.50% respondents had lower and higher levels of annual income, correspondingly. Hence, the graphical views of the respondents' demographic characteristics were exemplified in Figure 3.

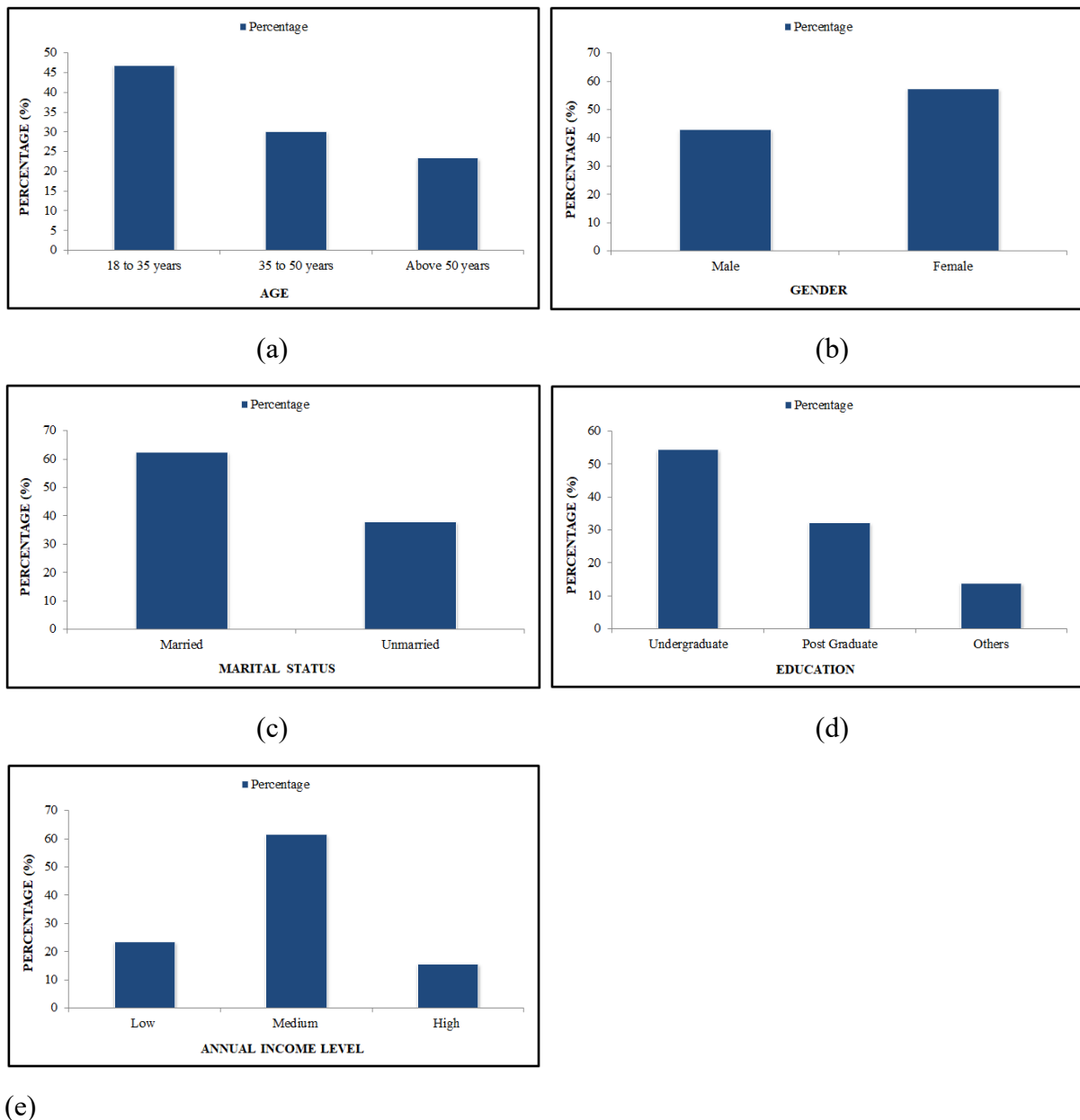


Figure 3: Demographic profile of respondents: (a) Age, (b) Gender, (c) Marital status, (d) Education, and (e) Annual income level

4. RESULTS AND DISCUSSION

This study explored the factors that impacted the consumers' WTP a premium price for GPs. Further, it explored the consumer's WTP for sustainable products in developing and developed markets. Moreover, the barriers hindering the purchasing behavior of consumers were identified [26].

4.1. Factors influencing the consumer's willingness to pay a premium price for sustainable products

Since the demand for eco-friendly goods rose, factors influencing a consumer's WTP a premium price for sustainable products were pivotal for companies and marketers to interpret. Table 2 offered a confirmatory factor analysis of several constructs of the factors impacting the consumers' WTP a premium price for GPs.

Table 2: Confirmatory factor analysis

Variables	Items	Mean	SD	Item loadings	CA	CR
PBC	PBC1: Perceived Availability of Resources	4.61	0.878	0.807	0.941	0.969
	PBC 2: Perceived Control Over Purchase Process	4.62	0.892	0.793		
CO	CO1: Subjective norms	4.53	0.869	0.852	0.925	0.956
	CO2: Perceived price	4.46	0.943	0.857		
EC	EC1: Perceived value	4.58	0.902	0.822	0.933	0.964
	EC2: Social and cultural influences	4.57	0.872	0.831		
PS	PS1: Availability of GP	4.28	0.838	0.878	0.919	0.949
	PS2: Environmental knowledge	4.39	0.853	0.866		
GPQ	GPQ1: Durability and longevity	4.71	0.918	0.778	0.959	0.977
	GPQ2: Energy efficiency and waste reduction	4.68	0.902	0.789		
ATGP	ATGP1: GP knowledge	4.79	0.948	0.763	0.968	0.982
	ATGP2: Trust in GPs	4.74	0.932	0.775		
WTP a PP	WTP1: Intention to purchase	4.87	0.956	0.745	0.976	0.994
	WTP2: Social responsibility perceptions	4.93	0.965	0.732		

CA was utilized for computing the reliability of the variables utilized in the data analysis process. All the variables in the study showed stronger reliability, with the CA values higher than 0.7. The internal consistency was measured using CA. Also, in the study, the loading of items was found for each construct. All the constructs had a loading value of above 0.7. WTP a PP achieved the maximum CA coefficient (0.976) with Composite Reliability (CR) of 0.994. ATGP acquired the second-highest CA coefficient (0.968) with CR of 0.982, followed by GPQ (CA=0.959 and CR=0.977), EC (CA=0.941 and CR=0.969), PBC (CA=0.933 and CR=0.964), CO (CA=0.925 and CR=0.956), and PS (CA=0.919 and CR=0.949). According to the outcomes, the quality of the GP and the attitude towards purchasing it highly influenced the WTP a premium for it. In addition, higher PBC resulted in a stronger intention to purchase GPs. Consumers with high PBC were more likely to overcome challenges and barriers related to green purchasing.

4.2. Analysis of descriptive statistics of variables

For the variables, including PBC, CO, EC, PS, GPQ, ATGP, and WTP a PP, a descriptive statistical analysis of mean, SD, and frequency was estimated. Furthermore, Table 3 displayed the total number of constructs of each variable.

Table 3: Descriptive statistics of variables

Variables	Mean	SD	p-value	Number of Constructs	Frequency (N)
PBC	4.495	0.906	0.000	2	400
CO	4.615	0.885	0.001	2	400
EC	4.575	0.887	0.008	2	400
PS	4.335	0.845	0.010	2	400
GPQ	4.695	0.910	0.001	2	400
ATGP	4.765	0.940	0.001	2	400
WTP a PP	4.900	0.961	0.000	2	400

Table 3 exhibited the variables' descriptive statistics. The proposed variables included a dependent and 6 independent variables. By analyzing all the variables, WTP achieved the highest mean value and SD of 4.9 and 0.961, respectively. The mean and SD of PBC, CO, EC, PS, GPQ, and ATGP were 4.495, 4.615, 4.575, 4.335, 4.695, and 4.765, and 0.906, 0.885, 0.887, 0.845, 0.910, and 0.940, respectively. According to the outcomes, all the variables were statistically significant. Figure 4 depicted the graphical representation of the statistical analysis.

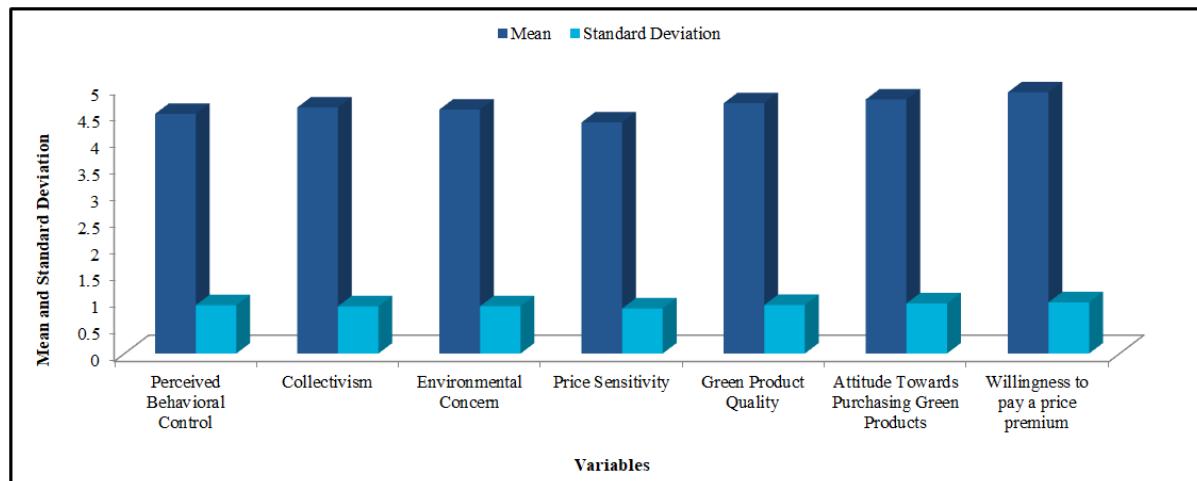


Figure 4: Graphical illustration of descriptive statistical analysis of variables

4.3. Correlation Analysis

Correlation analysis was performed to analyze the correlation betwixt variables, especially concentrating on the associations among PBC, CO, EC, PS, GPQ, ATGP, along with WTP a PP. In Table 4, the intercorrelations among the aforementioned variables were given.

Table 4: Results of the correlation between the variables

	EC	CO	PBC	PS	GPQ	ATGP	WTP
EC	1						
CO	0.687*	1					
PBC	0.768*	0.742**	1				
PS	0.791**	0.779***	0.742**	1			
GPQ	0.754**	0.851**	0.737***	0.764*	1		
ATGP	0.778**	0.751**	0.819***	0.778**	0.842*	1	
WTP	0.817**	0.842*	0.837***	0.819***	0.829*	0.863*	1

* Significant at 0.05 level, ** Significant at 0.01 level, and *** Significant at 0.001 level.

To quantify the linear relation betwixt 2 variables, correlation was used. If two variables had a high correlation coefficient, then it was considered as a strong correlation, and if two variables had a low correlation coefficient, then it was considered as a weak correlation. While performing the correlation analysis, it was revealed that all the variables had a substantial correlation with each other, rendering elementary assistance for the study's propositions. While comparing the correlation results between the variables taken into account for the study, it was shown that all the variables were highly and significantly related to WTP a PP.

4.4. Hypothesis Formation

Based on the study's objective, the subsequent hypotheses were formulated.

- **H1:** PBC had a positive as well as significant relationship with WTP a PP.
- **H2:** CO had a positive as well as significant relationship with WTP a PP.
- **H3:** EC had a positive as well as significant relationship with WTP a PP.
- **H4:** PS had a positive as well as significant relationship with WTP a PP.
- **H5:** GPQ had a positive as well as significant relationship with WTP a PP.
- **H6:** ATGP had a positive as well as significant relationship with WTP a PP.

Table 5: Testing of the hypothesis

Variance source	Total squares	df	Avg. squares	R	R ²	t-value	β coefficient	p-value	Result
H1									
Regression	62.89	17	19.52	.497	.257	2.864	0.779	.008	Positive and significant
Residual	73.28	383	6.85						
H2									
Regression	63.37	17	18.41	.473	.233	4.053	0.756	.031	Positive and significant
Residual	69.68	383	5.66						
H3									
Regression	75.29	17	12.44	.489	.267	3.675	0.771	.002	Positive and significant
Residual	70.16	383	5.36						
H4									
Regression	53.28	17	16.57	.504	.238	3.454	0.729	.016	Positive and significant
Residual	49.83	383	6.47						
H5									
Regression	62.64	17	13.57	.512	.255	4.346	0.784	.000	Positive and significant
Residual	53.64	383	6.34						
H6									
Regression	88.86	17	14.67	.519	.262	3.589	0.793	.001	Positive

Residual	74.81	383	5.36						and significant
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The findings of the generated hypotheses were exemplified in Table 5. The hypotheses were tested by using SEM analysis. Regression, residual, total squares, degrees of freedom (df), average squares, R, R^2 , t-value, β -coefficient, and p-value were determined for each hypothesis. The variable that attained a t-value of 2 or above was considered as a positive and significant relationship. If the path coefficient didn't achieve the threshold of t-value, then it was called a negative and insignificant relationship. R, which measured the direction and strength of a relation betwixt 2 variables, was a statistical value. R^2 was the square of the measure of correlation. Also, it indicated the ratio of the variance in the variable that was used for the study. All the hypotheses were accepted as the significance value of all the hypotheses was smaller than 0.05. When comparing the results of the hypotheses, the maximum mean and SD were attained by H6 with a t-value and β -coefficient of 3.589 and 0.793, respectively. Figure 5 exemplified a diagrammatic representation of the measurement model of the developed hypothesis.

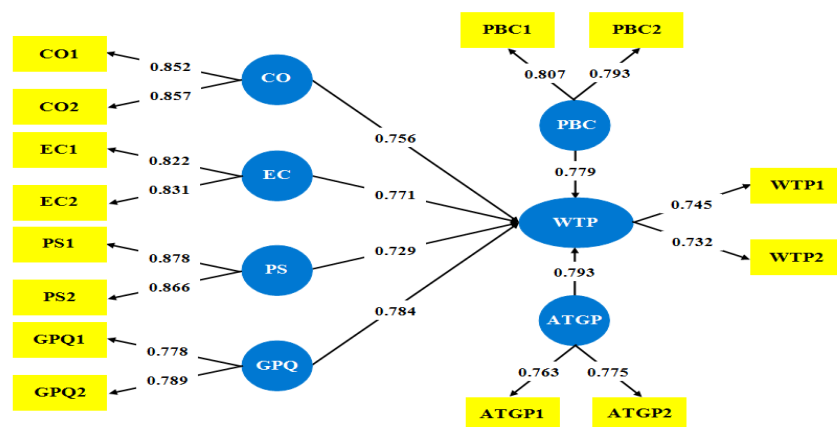


Figure 5: Measurement model of SEM analysis

4.5. Comparison of consumers' WTP for sustainable products in emerging and developed markets

In general, consumers in developed markets were more likely to purchase sustainable products; however, emerging market consumers were showing a stronger WTP a premium when they perceived a clear benefit and had the means to do so. Therefore, the outcomes of multiple linear RA in determining the consumers' WTP a premium price among emerging and developed markets were shown in Table 6.

Table 6: Consumers' WTP in emerging and developed markets

	Emerging market (India)				Developed market (United Kingdom)			
	Beta (B)	Standard Error (SE)	t-value	p-value (0.05)	B	SE	t-value	p-value (0.05)

Constant	.598	.099	8.95		.598	.099	8.95	
PBC	0.328	0.068	6.49	0.002	0.299	0.061	1.97	0.002
CO	0.286	0.054	4.82	0.001	0.262	0.057	1.98	0.065
EC	0.301	0.062	5.28	0.016	0.287	0.050	2.87	0.002
PS	0.263	0.043	4.75	0.008	0.253	0.043	4.35	0.133
GPQ	0.335	0.075	7.62	0.002	0.301	0.068	1.64	0.016
ATGP	0.351	0.083	7.83	0.001	0.317	0.071	0.75	0.001
WTP ^a PP	0.364	0.097	8.91	<0.000	0.328	0.082	1.07	0.017

In the emerging markets, all the variables were statistically significant and attained a t-value above 2. The t value ranged between 4.75 and 8.91. Therefore, when compared to the developed market, the emerging market showed higher levels of PBC, CO, EC, PS, GPQ, ATGP, and a greater WTP a premium for GPs in certain situations. The WTP a PP attained a t-value less than 2 in developed markets. For WTP in emerging and developed markets, the B and SE values were 0.364 and 0.097, and 0.328 and 0.082, respectively. According to the findings, the consumers from emerging markets had relatively higher WTP than developed markets.

4.6. Barriers to the purchase of green products for consumers

Table 7 illustrated the barriers to purchasing GPs estimated based on the Likert scale model that ranged from strongly disagree to strongly agree.

Table 7: Barriers to purchasing green products

Barriers	Percentage of Participants (%)				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Lack of availability of GPs in supermarkets and retail stores	45.75%	32.25%	07.25%	06.50%	08.25%
Lack of time to shop	24.50%	20.25%	19.50%	21.00%	14.75%
Lack of desire to shop	30.25%	27.25%	18.25%	17.00%	07.25%
Competing brands often go on sale	29.50%	25.25%	13.75%	17.25%	14.25%
To stand among traditional products	32.75%	19.00%	13.25%	14.75%	20.25%
Lack of proper in-store communication	41.25%	36.00%	12.00%	07.00%	03.75%

Lack of proper mass media communication	38.25%	30.25%	06.50%	07.75%	17.25%
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It was shown from the table that many respondents (i.e., 78%) stated that there was an inadequate availability of GPs in supermarkets. Additionally, the result showed that another barrier was a lack of proper mass media (68.50%) and in-store communication (77.25%) because communication failures left consumers unaware of the existence of GPs and the positive consequences on the environment that were derived from purchasing these goods. Figure 6 exhibited the graphical illustration of the barriers for consumers to purchasing GPs.

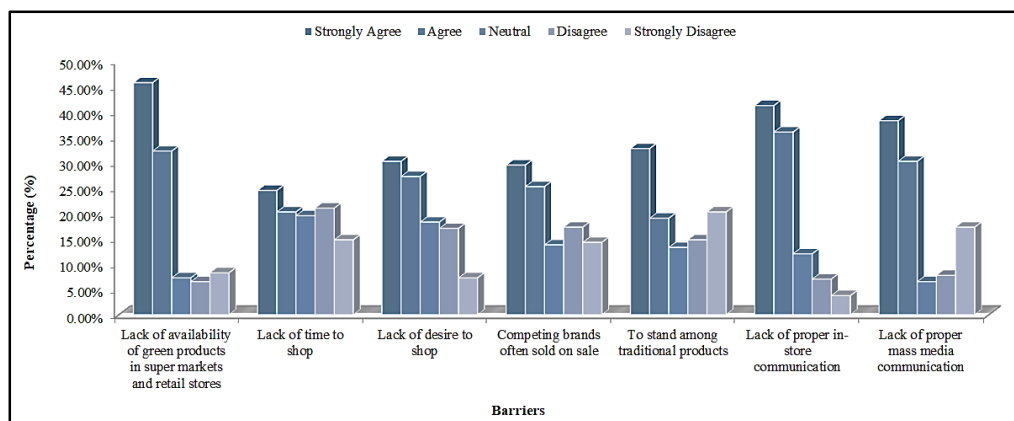


Figure 6: Graphical illustration of barriers to purchasing green products

5. CONCLUSION

In the presented study, the consumers' WTP for sustainable products in the emerging and developed markets was explored. The barriers that hindered the purchase of GPs for consumers were further identified in the study. The study identified that the WTP for sustainable products was considerably influenced by the ATGP and the GPQ. According to the correlation analysis, all the variables were highly correlated. The overall result displayed that the consumers in the emerging market were more willing to pay a premium price for sustainable products. Interpreting the factors that influenced the WTP for GPs could permit firms to tailor their GM strategies, effectively price their products, and develop sustainable business models. Nevertheless, the study did not investigate the determinants that deeply impacted the consumers' WTP for GPs. In addition, a few factors impacting the WTP for GPs were only included in the study. The study will use a longitudinal approach as part of the research method in the future to perceive the reactions of consumers who aim to purchase more sustainable products.

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