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The Effect of Green Purchases on University Students in Pakistan: An Empirical Study

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Article Details

Keywords: Environmental knowledge (EK); Green Purchase Intention (GPI); green purchase behavior (GPB), environmental concerns (EC)

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ABSTRACT

In the digital era, consumers possess extensive knowledge regarding product quality and benefits, enhancing their awareness of purchase behaviors and the associated social and environmental consequences. Environmentally conscious consumers have consistently favored environmental sustainability throughout time. Despite heightened environmental concerns, numerous factors hinder widespread green purchasing. This study investigates that drive individuals towards environmentally sustainable items. A total of 1,185 Pakistani university students provided their data, which was then analyzed via multiple regressions. The green buying behavior of surveyed students is primarily impacted by their green purchase intention, environmental concerns, perceived consumer effectiveness, and environmental knowledge that significantly influences GPB. The statistics indicate that young customers possess environmental awareness and are inclined to purchase sustainable products, irrespective of demographic factors. This study seeks to enhance young consumers' understanding of sustainable consumerism. Furthermore, it assists Pakistani officials and marketers in enhancing their strategy for promoting and benefiting from green products. Future research may employ many constructs and methodologies to address existing knowledge gaps.

INTRODUCTION

A number of challenges have been identified as well, such as overpopulation, expanding needs, output and the manufacturing industry, climate change, and the devastation of the environment. World Pollution rises as a result of manufacturing and production. Business activities cause deforestation, greenhouse gas emissions, water pollution, and the harm of wildlife. Due to these issues, businesses must be greener. The surge in environmental awareness shows firms and strategists are taking environmental challenges seriously (Ozili & Iorember, 2024). Sustainable development safeguards stakeholders and the environment. Business practices that encourage environmental sustainability are called sustainable development. Implementing sustainable development involves big economic reforms and a more integrated and comprehensive interdisciplinary strategy (Ching et al., 2022). Sustainability requires environmental and socioeconomic interconnectedness for economic growth and resource conservation for future generations (Hariram et al., 2023). Zhou et al. (2022) argue that a healthy environment is essential to a region's enabling environment, boosting business and economic growth.

Green economies have been around since the 1970s, but their popularity has grown since 2009. multinational organizations promoted economic policies in multinational corporations to reduce carbon investments and increase renewable energy portfolios (Berglund & Gericke, 2022). South Asian nations—Pakistan, India, Bangladesh and Srilanka have promoted green growth and carbon reduction, following North America and Europe. Businesses are investing more in environmental preservation as they worry about their actions and their effects. The circular economy is becoming more important. Environmental concern & green initiatives are driven by external factors i.e. stringent government regulations, the desire to enhance corporate reputation for competitive advantage, and the pressure to enhance manufacturing efficiency.

Environmental sustainability methods, which manage an organization's environmental and economic components to satisfy current and future needs, are growing (Vadakkepatt et al., 2021). Businesses also value consumer eco-conscious consumption and environmental sustainability (Chen et al., 2023). Complex consumer behavior research requires multiple views. Analysis of environmentally conscious customer behavior is difficult because it is difficult to define a really environmentally conscious consumer (Kim & Lee, 2023).

Pro-environmental behaviors, attitudes, and knowledge among environmentally concerned customers have grown in recent decades (Zeng et al., 2023). Growing environmental awareness is changing values and lifestyles. As consumers become more environmentally conscious, they will value sustainability. Most customers have known for years that their purchases affect ecological equilibrium (Rusyani et al., 2021). Growing environmental awareness has led customers to show greater willingness to use extra on environmentally friendly goods. Consumers increasingly check for recyclable materials and choose eco-friendly products.

Sustainable product development has become a major social and commercial potential for consumers and corporations (Kahupi et al., 2021). This sustainable business strategy lets companies reinvent production and marketing. Businesses can flourish by combining eco-friendly and safe procedures. Elshaer et al. (2023) explained that a green firm may minimize waste expenses, establish a safe and healthy workplace, and encourage sustainable and efficient operations. Some academics believe green products give companies an edge over non-green ones (Ozili & Iorember, 2024). Green practices and competitive technologies and products that are competitively priced and perform better than other options for environmental impacts. Prior studies described packaging size and aesthetics deter consumers from buying green items. Thus, product preferences are crucial to understanding consumers' green product purchases (Sun et al., 2022).

Brand names, cost, perceptions of inadequate quality, and visual evidence of product ineffectiveness also influence green product consumer behavior, according to studies. Consumer behavior and decision-making were valued by the Pakistan. Consumer awareness of corporate social responsibility and related issues is growing, but impediments remain, such as a lack of understanding, restricted access to ethical decision-making information, and the potential need to pay a premium. Some companies lead this effort to help consumers make sustainable decisions. Revising the environmentally conscious consumption and industrial action plan to incorporate new elements may promote responsible consumption. Researchers say environmental awareness in Pakistan is young. Predicting when it will reach mature levels is difficult. Youth in Hungary are environmentally conscious, which is encouraging (Shahzad et al., 2022). Consumer environmental knowledge improves their support for sustainable methods. Consumers' eco-friendly shopping, energy saving, and selective waste pickup reflect this

understanding. Nazir et al. (2024) found that Pakistanis are less environmentally concerned than Western Europeans. The researcher believed that family participation motivates students to care about the environment.

This study examines Pakistani university students' green shopping habits. This study shows how young, educated consumers buy, emphasizing the necessity of recognizing them as current and future customers. The literature on Pakistani consumers' green purchases is lacking. This research reviews the current literature on green consumption and examines determinants green purchase behavior among Pakistani consumers to fulfill research gap. In particular, it considers PCE, EC, EK and green purchase intention to determine their effects on green purchasing behavior. Since there is limited research in the Pakistani scenario, particularly regarding young consumers, this research seeks to introduce new knowledge concerning how these factors influence their buying behavior. The current research questions of this study are as follows: What motivates green purchasing behavior (GPB) of young Pakistanis? What is young, educated Pakistani consumers' environmental knowledge (EK)? This research will aid policymakers and marketers in enhancing their green product promotion strategies by considering young consumers' perceptions and intentions. Environmental understanding and purchase intention strongly impact consumer buying. Companies focused on environmental safety should adopt a tailored advertising approach to raise awareness. This project will fill a research need. This scholarly study will inform future research and model development. To investigate green purchase behavior (GPB), this study uses EC, PCE, EK, and GPI. Regression analysis was utilized to evaluate various constructs' impact on GPB. This technique predicts a single outcome by combining multiple predictors. Readers can easily assess the independent-dependent relationship with this method.

A review of the literature was conducted to differentiate existing study from prior research in developing & industrialized nations. Secondly, a detailed description of materials and processes will be provided. The latter portion of the study will examine the data utilizing EFA, multiple regression testing. Final section was outlined the conclusions, recommendations, and limitations.

LITERATURE REVIEW

Consumers have increasingly recognized environmental and social concerns since the mid-

1990s, leading to shifts in their consumption behaviors (Bruhn et al., 2023). Businesses have responded by adopting sustainable practices to align with environmentally conscious consumers (Solekah et al., 2024). Green marketing emerged in the late 1980s as a contested concept but has since evolved into a key business strategy (Machová et al., 2022). Lahbar et al. (2025) describe green marketing as promoting eco-friendly or eco-efficient products.

Today, green marketing drives companies to adopt sustainable initiatives, yielding benefits such as higher profits, increased market share, and stronger consumer engagement (Al-Issa et al., 2022). Many studies have looked at elements influencing customers' green buying behavior, including EC, PCE, environmental concerns, and GPI for sustainable items (Al-Issa et al., 2022). Despite these insights, a persistent gap exists between consumers' environmental concerns and their actual purchasing decisions (Al-Issa et al., 2022). Many individuals express eco-friendly attitudes but fail to translate them into consistent buying habits, resulting in low adoption rates for sustainable products (Shams et al., 2025). This discrepancy highlights the need for further research into the psychological and behavioral barriers to green consumption.

ENVIRONMENTAL CONCERNS AND CONSUMERS' GREEN PURCHASE BEHAVIOR

Environmental concern (EC) denotes an individual's recognition of ecological challenges and their readiness to endorse measures that promote ecological health. It also embodies a person's sense of responsibility toward environmental problems and their perceived role in addressing them. EC is widely recognized as a crucial element in green marketing literature, particularly in understanding behaviors aligned with environmental sustainability. Previous research highlights that individual who is mindful of their ecological footprint and believes their actions can positively impact environment that likely engaging GPB**.** These individuals, often labeled as green consumers, demonstrate heightened sensitivity to environmental issues. Rusyani emphasized that consumers often express apprehension about how their consumption choices affect the environment. Despite this, the link between EC and GPB remains debated (Rusyani et al., 2021). While some research show a substantial, positive link, others have shown no meaningful or favorable correlation between EC and GPB. Overall, existing literature suggests that EC positively shapes attitudes toward eco-friendly products, which in turn influences

purchase intentions—indicating a potentially indirect relationship between EC and GPB (De Canio et al., 2021). Hence, it is proposed that:

H1: Environmental concern significantly influences consumers' GPB positively.

PCE AND CONSUMERS' GREEN PURCHASE BEHAVIOR

PCE was originally conceptualized by (Djajadiwangsa & Alversia, 2022) if a person's belief in their ability to assist environmental concerns and reduce ecological harm. Often regarded as an internal driver of self-regulated environmental behavior, PCE represents a core environmental belief that influences consumer actions (Kumar et al., 2022). Over time, it has become a central concept in understanding pro-environmental behavior. Studies show that PCE is essential in forming eco-friendly buying choices. PCE is also influenced by individual experiences and levels of environmental awareness, which can vary across consumers (Shams et al., 2025; Zameer & Yasmeen, 2022). Kim & Lee (2023) noted that individuals with high PCE tend to exhibit stronger environmental concern and are more likely to engage in eco-friendly behaviors. Prior studies have consistently demonstrated a positive association between PCE and various forms of pro-environmental behavior (Ahn & Kim, 2024). Hence, it is proposed that:

H2: PCE has a significant positive impact on GPB.

EK AND GPB

In the context of sustainability and environmental challenges, environmental knowledge (EK) refers to an individual's capacity to comprehend these issues. An individual's emotional intelligence (EK) can be defined as the amount of information that is stored in their head and has an impact on how they understand and evaluate the various product options that are available to them (Iqbal et al., 2023). Knowledge is a variable affecting the decision-making process across all phases of buying behavior; the term "knowledge" in consumer behavior refers to this variable. Knowledge, a fundamental idea, shapes the consumer's capacity to collect and arrange data, the degree of information employed in decision-making, and the means by which they evaluate the goods and services they plan to buy (Ebrahimi et al., 2021). Knowledge management was the inspiration behind the creation of this component. It has been found that there is a connection between environmental knowledge and environmental behavior and attitudes (Tamar et al., 2021). According to a number of studies (Ahn & Kim, 2024; Ebrahimi et al., 2021), Customers with a better knowledge of environmental concerns and the advantages

of environmentally friendly items usually report higher GPB. Consequently, EK has been acknowledged as a crucial factor for evaluating GPB among young Pakistani consumers. EK will also evaluate young consumers' environmental awareness and understanding of eco-friendly products. Therefore, proposed that:

H3: GPB is influenced environmental knowledge positively.

GPB AND GPI

A "green purchase intention" (GPI) is a term that refers to the inclination to acquire environmentally friendly products. In contrast, green purchase behavior (GPB) involves buying and using products that are ecologically friendly, sustainable, recyclable, or alleviate environmental problems (Salam et al., 2022) carried out a study regarding Pakistani customers to determine influence that a variety factors have on the intention to purchase environment friendly products. Pakistani populace green purchase intention (GPI) towards environmentally friendly items was considerably influenced by government programs that were targeted at boosting the adoption of environmentally friendly products (Akbar et al., 2021). Not only are consumers worried about the quality of the environment, but they are also concerned about the effects that their purchase decisions will have on the environment. It is more likely that individuals will exhibit green purchasing behavior (GPB) if they demonstrate a greater knowledge of the environment and a dedication to recycling. In addition, a number of research (Ebrahimi et al., 2021; Shams et al., 2025) have demonstrated that GPI has a considerable impact on GPB. GPI have a powerful and considerable influence on the purchasing behavior of young students attending universities (Hassan et al., 2025). Positive attitudes improve the intention to act more sustainably, which increases green purchase behavior.

Hence, proposed that:

H4: GPI significantly impact consumers' GPB positively.

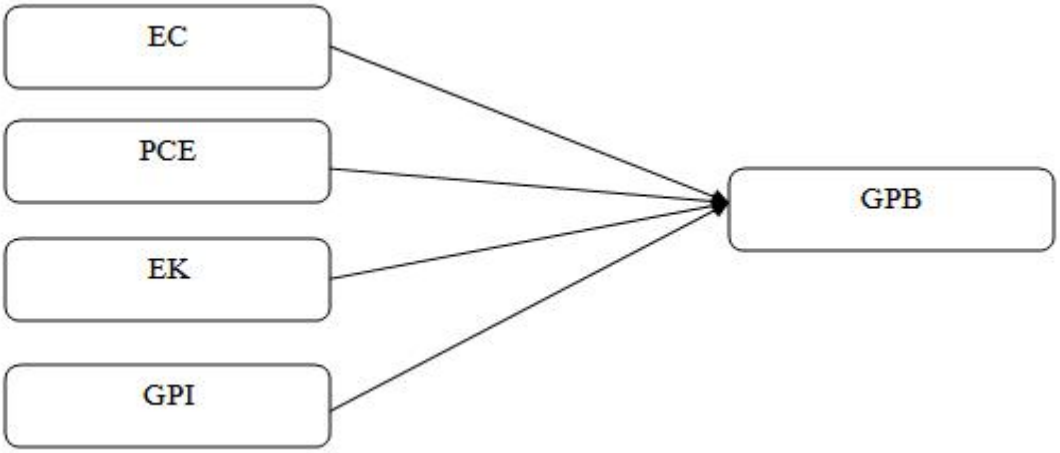

FIGURE 1 FRAMEWORK

METHODOLOGY

SAMPLE

The study literature contains number of different perspectives on sample size in factor analysis, each of which has been studied and elaborated upon. According to the findings of a number of research, factor analysis requires a sufficient total number of samples (Hair et al., 2014). College students from all throughout Pakistani participated in the survey, and four large cities were selected to guarantee that data collected was representative of the entire population geographically. For the purpose of the study, a method known as judgmental sampling was utilized to select respondents. Survey completed by 1255 students, and 1185 of those replies were used for the analysis that was ultimately conducted. There were some responses that were not considered because there were no values specified. Both sections of the questionnaire were comprised of sociodemographic information, such as age, gender, and qualification. The first component of the questionnaire. The second part of the report includes behavioral characteristics that were used to assess consumers purchase behavior with regard to environmentally friendly items. Table 1 shows respondent demographics. Within universities, 43% (n = 510) were pursuing master degrees, 32 % (n = 380) were pursuing bachelor's degrees, and 25 % (n = 295) were pursuing PhD. Among 795 replies, 67 % between 22 and 30, 21.5 % were between 31 and 40, 11.5 % were between 16 and 21, and 20 (0.02%) were above 40. The survey included 535 male respondents (45%) and 650 female respondents (55%). The individuals who participated in the survey were chosen on the basis of their responsibilities as

decision-makers in the purchase process and their exposure to purchasing environmentally friendly products, whether on a regular or infrequent basis.

TABLE1. DEMOGRAPHIC PROFILES

Demographic	No.	%
Qualification		
Bachelor	380	32
Master's	510	43
PhD	295	25
Age		
16 - 21	125	11.4
22 - 30	795	67
31 - 40	245	21.5
> 40	20	0.02
Gender		
Female	650	55
Male	535	45

DATA COLLECTION AND MEASUREMENT PROCEDURE

An online survey was conducted using a well-organized questionnaire; all those who took part had access to it via Google Forms. Both parts of questionnaire were meant for gathering data on the socio-demographic respondent traits. First part of the questionnaire was split into two sections. Likert scale range from 1 (strongly-disagree) to 5 (strongly-agree) utilized in research. The Likert scale questions were created from the ground up to assess latent variables like PCE, environmental concern, EK, GPI and green purchasing behavior. Likewise, existing research selected EC (four items), PCE (four items), EK (five items), GPI (three items), and GPB (four items) in current research (Ambreen & Sultana, 2024; Ebrahimi et al., 2021; Iqbal et al., 2023; Salam et al., 2022; Wijekoon & Sabri, 2021). According to the findings of an exhaustive literature review, the GPB was determined to be the dependent variable, whereas all of the other constructs were categorized as independent variables. It was requested of the respondents that they submit input regarding their behaviors and goals regarding purchase. In the subsequent evaluation of the data that had been generated, replies that were lacking values

were disregarded. Using SPSS, the survey data were analyzed.

DATA ANALYSIS

EFA was performed to establish number and kind of components that cause data fluctuation. To understand and examine variable patterns and linkages, factor analysis was used. Cronbach's alpha values for each construct and the instrument were used to assess construct reliability. Before component analysis. Kaiser–Meyer–Olkin (KMO) and Bartlett's tests of sphericity were used to check if the dataset was acceptable for factor analysis and contained enough data. The communalities were assessed to eliminate any influences on the findings.

A prerequisite for parametric statistical tests is determining whether the residuals are normally distributed. Kolmogorov–Smirnov was used to test residual normality. Testing for autocorrelation and multicollinearity is also crucial. Durbin–Watson & correlation coefficient tests performed and analyzed for this purpose. Using multiple regression and ANOVA, the dataset was thoroughly examined. The study's aims and hypotheses were assessed using multiple regression analysis. Multiple regression analysis efficiently analyzes how variables affect a single dependent variable. A study examines the associations between four independent variables—EK, EC, PCE, and GPI—and one dependent variable, GPB. The association between each predicted predictor and the outcome is clear and accurate with this strategy.

RESULTS

ANALYSIS OF RELIABILITY

Prior to the study of results & hypotheses, reliability was examined and carried out. Cronbach's alpha for the entire construct is 0.942, which is considered to be adequate for an exploratory study (Hair et al., 2014). The data are presented in Table 2, which details the findings. The questionnaire has a very high level of reliability among its respondents. Rather than doing a single reliability test on the complete instrument, there are some researchers that argue for the independent examination of the strengths and weaknesses of particular components. Cronbach's alpha values ranged from 0.784 to 0.893, according to the results of reliability tests that were carried out on each factor. These results are presented in Table 3. Cronbach's alpha between 0 and 1 with r = 0.7 or higher is reliable. This show the factors are reliable.

TABLE 2: RELIABILITY TEST

Cronbach's Alpha	(Standardized Cronbach's Alpha)	Items
0.942	0.943	25

TABLE 3: CRONBACH'S ALPHA

Construct	Items	Cronbach's Alpha
EC	4	0.873
PCE	4	0.784
EK	5	0.857
GPI	3	0.871
GPB	4	0.865

EXPLORATORY FACTOR ANALYSIS

Before factor analysis, the Kaiser–Meyer–Olkin (KMO) test and Bartlett's test of sphericity were employed to evaluate the dataset and samples (Table 4). The dataset is suitable for factor analysis (Hair et al., 2014) due to its high KMO score (above 0.6) and substantial Bartlett's test of sphericity ($p < 0.05$). The KMO score of 0.919 in our investigation suggests the results are applicable. Bartlett's sphericity test of the correlation matrix yielded a p-value below 0.05. This finding suggests the variables are connected and warrant further study because the dataset is

TABLE 4. KMO TEST & BARTLETT'S TEST

Kaiser Meyer Olkin Measure	**Sampling-Adequacy**	0.919
Bartlett's Test of Sphericity	Approx. Chi-square	3823.380
	Df	300
	Sig.	0.000

The dataset was subjected to factor analysis after the evaluation of sample adequacy and significance. The purpose of this analysis was to determine the factors that statistically explain for the covariance and variation among the components. One of the goals of factor analysis is to discover hidden variables that are responsible for the co-variation that exists between observed variables. Factor analysis is a technique that is used to reduce the amount of data that is available. This technique involves the reduction of observable or measurable variables into a small number of latent variables that have a similar variance (Hair et al., 2014). From the many different factor analysis extraction methods that are available, this study chose to use principal

component analysis (PCA) as the approach for extracting the factors that provide the most comprehensive explanation for the variables investigated.

Considering that factors with low communalities have the potential to dramatically influence results (Dalati & Marx Gómez, 2018), it is crucial to conduct an analysis of communalities. The presence of items that display poor communality should be eliminated from the analysis because their presence does not contribute to the purpose of component analysis, which is to elucidate variance through common factors. Each object must have some degree of shared variation with other products in order to be considered unique. There are scholars who believe that a communality threshold of 0.2 is appropriate (Hair et al., 2020), while there are others who argue for a minimum of 0.40 (Khan, 2023). It is important to note that when communality falls below 0.40, there is a greater likelihood of outcomes that are inconsistent with one another (Testa & Simonson, 2017). Based on the communalities of all of the items that were investigated, which are included in Table 5, each item had a value that was greater than 0.40; accordingly, none of the items were omitted from the analysis. An examination of the components found that there were five significant factors that were responsible for 68.12% of the variance. These factors come with eigenvalues that are greater than 1. The rotated solution, which consisted of five extracted components, was obtained through the utilization of the varimax rotation approach.

TABLE 5 COMMUNALITIES VALUES

Items	Initial	Extraction	Items	Initial	Extraction
EC-1	1.000	0.694	EK-3	1.000	0.711
EC-2	1.000	0.748	EK-4	1.000	0.669
EC-3	1.000	0.732	EK-5	1.000	0.641
EC-4	1.000	0.764	GP-I1	1.000	0.738
PCE-1	1.000	0.608	GP-I2	1.000	0.704
PCE-2	1.000	0.593	GP-I3	1.000	0.724
PCE-3	1.000	0.520	GPB-1	1.000	0.636
PCE-4	1.000	0.493	GPB-2	1.000	0.636
EK-1	1.000	0.628	GPB-3	1.000	0.736
EK-2	1.000	0.690	GPB-4	1.000	0.746

EXTRACTION METHOD: PMA

Additionally, correlation analysis examined the linear link between the two constructs. Variable relationships were examined using the Pearson correlation matrix. Multicollinearity occurs when the correlation coefficient between two variables exceeds 0.9 (Gokmen, Dagalp, & Kilickaplan, 2022). Our investigation found no multicollinearity in the dataset, with Pearson's correlation coefficients ranging from 0.405 to 0.631. Table 6 shows all variables' Pearson's correlation coefficients with the dependent variable. A Durbin–Watson test confirmed that the variables were not auto-correlated. From 0 to 4, the Durbin–Watson statistic should be near 2, indicating no sample autocorrelation (Kumar, 2023). Our sample had no autocorrelation because the Durbin–Watson statistic was 2.1, close to 2.

TABLE 6. PEARSON'S CORRELATION MATRIX

	1	2	3	4	5
GPI	1				
PCE	0.631**	1			
EK	0.482**	0.475**	1		
EC	0.454**	0.515**	0.430**	1	
GPB	0.539**	0.526**	0.577**	0.622**	1

Prior to multiple regression analysis, residual normality must be determined. Normality tests confirm the dataset's normal distribution. Parametric statistical tests require normality analysis. Kolmogorov–Smirnov test was utilized to determine residual normality. A p-value of 0.20 at a significance threshold of 0.05 suggests a normal residual distribution (Demir, 2022).

MULTIPLE REGRESSION ANALYSIS

Table 7 shows the hypotheses and dependent variable-independent variable association tested using multiple regression analysis. This strategy is excellent for research with multiple independent factors impacting one dependent variable. The regression model works. Good model explains 60% of variation (R square = 0.601).

TABLE 7: MODEL

R	R Square	Adjusted R Square	Std. Err
0.776	0.601	0.591	0.506

ANOVA results indicated model's significance (Table 8). Moreover, multiple regression analysis results indicated model fitness, with significant F-value (F = 57.837) at the 5% significance level.

TABLE 8: ANOVA (DEPENDENT VARIABLE GPB)

Model	Sum of Squares	df	Mean Square	F	Sig.[a]
1 Regression	88.780	6	14.797	57.837	0.000
Residua	58.841	230	0.256		
Total	147.621	236			

Predictors: (constant), EC, PCE, EK, GPI.

A tolerance value over 2 and VIF of 10 or higher suggest statistical analysis multicollinearity (Tsagris & Pandis, 2021). The tolerance and VIF values in Table 9 show no multicollinearity difficulties in the statistical analysis.

TABLE 9: COEFFICIENTS (DEPENDENT VARIABLE: GPB).

	β	Error	β	T-value	p	Tolerance	VIF
1 Constant	.222	0.242		.917	0.36		
EC	.108	0.058	0.107	1.857	0.065	0.525	1.904
PCE	.047	0.071	0.039	0.656	0.513	0.48	2.085
EK	.288	0.058	0.254	5.002	0	0.674	1.483
GPI	.297	0.06	0.273	4.973	0	0.574	1.743

Predictors: PCE, EK, EC, and GPI.

Hypotheses were examined through multiple regression analysis in Table 9. However, no significant association among GPB and EC ($p > 0.05$, $\beta = 0.107$). Also, no significant association was found between PCE and GPB. Hence, H1 & H2 are unsupported. The relationship between green buying behavior and environmental knowledge is positive (EK, $p < 0.05$; $\beta = 0.254$), as is the connection with GPI ($\beta = 0.273$; $p < 0.05$). H3 & H4 are supported.

DISCUSSION

This study examines latent components and GPB in university students. A study found the most significant predictors of GPB and the least influential variables among young consumers in Pakistan. Regression analysis indicated that EC did not affect purchase behavior, disproving

H1. These findings support several research in developed and developing nations (Rusyani et al., 2021). Contrary to research, EC is not reliable consumer GPB evaluation predictor (Farrukh et al., 2022). Albayrak et al. (2013) found that environmental concern (EC) does not predict GPB but affects customers' environmental sentiments. The data show that environmental concerns do not affect consumer purchasing behavior. Environmental protection is a top priority for university students. However, their green product purchases do not reflect their environmental worries. Likewise H2: PCE had no substantial effect on customers' green product purchases, according to the second study, H2 our next hypothesis, is unsupported. Furthermore, Solaiman & Rana (2023) support our findings. Millennials' idea that they can improve the environment does not match their green goods purchases. PCE moderates environmental behavior-attitude relationships (Ahn & Kim, 2024). The present study shows that younger generations' confidence in their environmental efforts does not affect their shopping habits. More, our study found that EK significantly affects GPB, showing that environmental awareness directly affects consumer purchasing behavior. Thus, H3 is well-supported. About 65% of respondents reported environmental awareness and changed their purchases. Our findings match (Djajadiwangsa & Alversia, 2022) say EK reflects consumer habits because environmentally aware consumers behave more sustainably. Various studies show that EK has little influence on GPB (Shams et al., 2025) found that environmental knowledge affects young millennials' GPB. This study found that young, educated, environmentally aware consumers are more likely to buy green items. Environmental education benefits youth, supporting the necessity for eco-education initiatives to improve understanding. Furthermore, our study also finds that GPI predict GPB, indicating that purchasing intention positively impacts GPB. Hence, Hypothesis-H4 is supported. Kumar et al. (2022) found that GPI is a strong predictor of GPB. Consumers' green product intentions matter more than their attitudes. Consumer purchases indicate their aspirations to behave a certain way. Numerous international investigations have proven the direct link between GPI and GPB (Irfan et al., 2020).

IMPLICATIONS

With the help of this study, green marketing strategies may be developed. Research indicated that college students are more inclined; also make an adjustment to their way of life when they

are provided with useful information on environmentally responsible businesses and products. Having the realization that EK predicts GPB allows for the development of marketing strategy. Therefore, it is of the utmost importance to develop communication messages that are capable of skillfully describing the environmental background and immediately conveying the advantages that their products offer in terms of addressing these problems. In the event that university students are provided with information regarding environmentally friendly alternatives to conventional products, they may adopt environmentally conscious purchasing practices.

Furthermore, practical implications of study ecologically sustainable businesses should focus on attracting younger customers, enhancing product knowledge, and making products more easily accessible. It was shown that the willingness to pay was the most accurate predictor of environmentally conscious purchase among young students. Consumers are willing to pay a higher price for environmentally friendly products and are willing to support businesses that are sustainable. Product pricing should be a primary priority for marketers and policymakers to persuade younger consumers to make environmentally conscious purchases. Enterprises and businesses need to investigate the pricing and availability of environmentally friendly products in order to guarantee that their consumers can afford them and have access to them. This behavior is determined by environmental awareness as well as the goal to make environmentally conscious purchases. In order for consumers to be able to purchase more products, businesses need to increase their accessibility and distribution networks. Hence, environmental consciousness has a significant impact on environmentally conscious purchasing decisions, marketing and promotion strategies need to incorporate environmental issues and product advantages.

CONCLUSION

The study's conclusions can help Pakistani Universities to establish a green marketing strategy. This study may encourage environmentally conscious marketing and advertising to raise customer awareness. They can help politicians create GP-improving marketing campaigns. Concerns about environmental degradation will drive people to buy greener items through such schemes. Green brand positioning in GPB can boost consumer interest in green products. Governments could provide practical documentaries and offer instructions to reduce

environmental impacts to raise consumer awareness. This study intends to help researchers and academics study Pakistani consumers' GPB. Since this study only examined young consumers, more research is needed on the GPB in the elderly. This paper provides a theoretical model for future investigation using multiple methods. We shall compare other Asian Countries based on our findings. Furthermore, future studies can analyze the role of big data analytics in circular economy practices such as green purchasing to check how it aid in enhancing firm performance (Rafi & Sulman, 2025).

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