www.irbas.academyirmbr.com July 2023
International Review of Basic and Applied Sciences Vol. 11 Issue.3

Socially Responsible Consumption Examining Environmental Perception and Green Purchase Intentions at the Nexus of Price Sensitivity Moderation in Low-Income Contexts

Dr. NEELAM AKBAR
Lecturer Marketing: Centre for Management and Commerce, University of Swat.
Email: nlmmarwat@gmail.com

MUHAMMAD SUHAIL
Lecturer: Centre for Management and Commerce, University of Swat.
Email: sohail.uoswat@gmail.com

Dr. MUHAMMAD TARIQ YOUSAFZAI
(Corresponding Author)
Assistant Professor: Centre for Management and Commerce, University of Swat.
Email: muhammadtariq@uswat.edu.pk

Dr. SHABBIR AHMAD
Assistant Professor: University of Malakand.
Email: shabirhi@yahoo.com

Abstract

The global pandemic has reconstructed the phenomenon of generic consumption towards health-conscious consumerism; where the consumer has refashioned their perceptual mechanisms. Socially responsible consumption is composed of the ways consumers think, perceive, feel, and act in a more sustainable and socially desirable way. In the glimpse of the significance attached to sustainable consumption, the main aim of this study is to examine the connection between environmental perception (EP) and green purchase intentions (GPI) with the role of price sensitivity (PS) as a moderator. Structural equation modeling (SEM) investigated the structural bonding between EP and GPI via Amos. The findings indicate that the EP of consumers has a significant positive impact on GPI. Moreover, PS moderates the nexus between EP and GPI. This research is an extension of the theory of planned behavior that served as a guiding tool in understanding the perceptual processes in the human mind regarding the consumption of ecologically safe products. PS as moderator revealed the cognitive responses of consumers towards disparity in prices of sustainable products. First of all, it makes a contribution to the entire literature on environmental marketing and corporate sustainability problems by improving academics' understanding of the distinctive significance of consumers' views of the environment and green purchasing intents. Second, this research looks at the effect of price sensitivity as a moderator of consumer environmental perception and green purchasing intentions. The current study's policy impact is to raise policymakers' understanding of environmentally safe consumption so that they may establish price mechanisms that are compatible with consumers' views of sustainable consumption.

Keywords: *Consumer Social Responsibilities, Sustainable Marketing, Consumer Mental Health and Well-Being.*

Introduction

The human inner propensity to aspire for a sustainable future is governed by the progressive change in their ecological behavior and consumption patterns (Casalegno, Candelo, & Santoro, 2022). Zhao et al. (2020) pointed out that consumer behavior may influence 45-55 % of all power consumption; Consumption patterns are the symbolic trademarks of a specific society where consumers as geological agents have considerable opportunities to exhibit their socially responsible attitude about the acquisition of ecologically safe products (Fischer et al., 2021). As narrated by Lubowiecki-Vikuk, Dąbrowska, and Machnik (2021), In the process of purchase, consumers' active involvement in buying sustainably sound products reveals their psychological and social well-being. Green consumerism and sustainable consumption are the transitional Anthropocene phenomenon that is representative of consumers' ethical choices in the purchase process (Nozari, Szmelter-Jarosz, & Ghahremani-Nahr, 2021). A marketplace is a platform where consumers demonstrate their social values by selecting those products that are marked safe for the environment. Over the preceding several years buyers' and businesses' inclination for safeguarding the environment have increased the demand for environmentally friendly promotional campaigns (Trudel, 2019). The inventive diagnostic solutions to the global pandemic Covid-19 contributes in building resilience for the post pandemic world in the form of green consumerism and sustainable consumption(Zhao et al., 2020). Thus, in the forgoing discussion; it is assessed that consumers can contribute to minimize the negatives of environmental hazards with the purchase of green market offerings.

Sonetti, Brown, and Naboni (2019)The UN Agenda of 2030 emphasizes responsible production and consumption in the form of sustainable development goal (SDG12) out of 17 Goals. Taking note of the sustainable development goals; 3 and 12 cover two domains of preserving human species; health and consumption domain- that necessitate the implications to implement the sustainable development goals (Lubowiecki-Vikuk et al., 2021). Sachs et al. (2019) assert that seventeen sustainable goals revolve around subjective well-being (emotional, psychological, and social well-being). Construction industry in China shows an ample concerns to adopting green development behavior in the light of sustainable development goals (Li et al., 2022). However, in contempt of the rise in sustainable consumption; consumer behavior is not fully attuned to the spirit of green phenomenon in developing economies. The main challenge is to understand the consumers' perception of environmental stimuli that trigger them to adopt socially responsible consumption patterns (Valéria Marques, Ursi, Silva, & Katon, 2020). In the glimpse of the significance attached to green marketing, the aim of this study is to assess the connection between EP and GPI; with the role of PS as moderating variable. As articulated by Marwat, Ahmad, and Yousafzai (2022) Price sensitivity as moderator divulges the perceptual mechanism of consumers towards disparity in prices of ecologically safe products. First of all, it makes a contribution to the entire literature of environmental marketing and addresses company sustainability challenges by increasing awareness of the unique role of customers' perceptions at the nexus of the environment and green purchasing intents. Secondly, this study investigates the role of price sensitivity as a moderator between consumer environmental perception and green purchase intentions to deepen our understanding in a low-income country context.

The current study utilizes the Theory of planned behavior developed by Ajzen (1991) as a foundation that refers to rational predictors and proximal determination of consumer behavior. The heightened perceptual inclination toward a specific behavior indicates consumers' actual engagement in that particular course of action (Marwat et al., 2022). As enumerated by Schweiker et al. (2020) The process that explains people's worries about protecting the environment is referred to as environmental perception. Psychotherapeutic research demonstrates how one person's thought-feel brain mechanisms aid in perceiving stimuli from the environment and improving perception (Aruna & Thirumaran, 2017). Due to the paucity of resources, the majority of people in emerging Asian nations are submissive to nature (Prakash et al., 2019). According to Ali et al. (2021), growing low-income nations experience 44% of catastrophes with a 68% loss of life, whereas higher-income countries experience 56% of disasters with a 32% loss of life. The discrepancy between wealthy and poor countries are ascribed to inadequate catastrophe risk reduction skills and poor coping mechanisms. As a result, from a global standpoint, no formal initiatives have been done to

strengthen ecologically safe development practises in poor nations (Mottaleb, 2018). The current study employs environmental perception in predicting the consumers' GPI with PS as a moderator in the context of Pakistan. As assessed by Nevitt (2022) The effects of global warming have seriously impacted Pakistan in the shape of flooding; the dangers caused by rich nations in the guise of greenhouse gases are unequally dispersed; and Pakistan pays the price in the forms of life suffering and economic devastation. The policy consequence of this study is to increase authorities' awareness of environmentally conscious consumption so that they may design price mechanisms that are consistent with users' opinions regarding environmentally friendly habits.

Theoretical Background and Hypothesis Development

Green Purchase Intentions and Environmental Perception

Green buying intentions refer to customers' propensity to acquire ecologically friendly items (Yao, Guo, Wang, & Jiang, 2022). GPI is defined as the purchasing, utilising, and disposing items and services that are less harmful for the community as a whole, and it is articulated as consumers' internal desire to acquire ecologically safe items (Ahmad & Zhang, 2020). Furthermore, it is a series of steps that integrates consumers values, social principles, standards, and behavioural intents into a psychological structure of consumers' minds in order for them to formulate ideas and engage in sustainable purchasing practises (Coderoni & Perito, 2020). Furthermore, it is connected with purchasing and displaying preferences for biodegradable, recyclable products with firms who practise green marketing (Kamalanon, Chen, & Le, 2022). Thus, environmental consumption is closely tied to the businesses that imbed the green effects with their corporate planning and developmental activities (Kumar & Ghodeswar, 2015). Koengkan (2018) revealed that growth in economy, and trade liberalization has considerably increased green consumption. This requires that all the firms should lower their emissions in the process of production in order to maintain ecological balance (Sivapalan, von der Heidt, Scherrer, & Sorwar, 2021). Green consumption is forecasted to become a stimulating force in promoting sustainable economic growth(Yao et al., 2022).

Sustainability perception explains the link between consumers and its surroundings that heavily relies on intellectual and efficient mental connections arising from individual encounters and opinions (Choshaly, 2017). The notion of ecological perception has several connection with multiple realm of subjects ranging from sociology, anthropology, psychology, and social sciences (Valeria Marques, Ursi, Lima, & Katon, 2020). As a result, environmental perception is seen as a concept arising from environmental science, which depicts a complete structure to be embraced internationally by all disciplines and walks of life (Chacon, Lavoine, & Venditti, 2022). E-Perception, on the other hand, derives from the topo-philia basis of perception, which reflects an individual's strong affinity with ecologically safe consuming practises (Naidoo & Verma, 2019). Thus, E-Perception describes the consumers connection with the bio-spheric culture that open ways for absorbing the antidotes of environmental regulations (Chacon et al., 2022). Moreover, E-Perception integrates the psychological, effective, and socio-cultural dimensions that embark a sound base for developing a strong bond in explaining the sustainable practices (Mukaromah, Teja, & Anggraini, 2019).

Environmental perception depicts all the horizons that assists in developing favorable opinion about ecologically sound practices (N. Akbar, Rafiq, Takrim, Tauqeer, & Sajjad, 2023). In the context of preceding arguments N. Akbar, Takreem, and Akbar (2023)assessed that ecological perceptual processes refers to how consumers glares, perceives, and disseminate with their environment by indulging in ecologically safe practices in day to day routine. Therefore, perception varies from consumers to consumers that stems from an individual cognitive thought processes and the level of involvements in solving environmental issues (Zhang, Li, Cao, & Huang, 2018). nevertheless, consumer opinion of the environment may be changed by teaching them about the long-term dangers it poses (Umer Sial, 2019). In addition, contradictory judgments of knowledge could distort the entire environmental notions, causing stress and mental ease (N. Akbar, Ahmad, & Yousafzai, 2023; Yousafzai, Nawaz, Xin, Tsai, & Lee, 2020). In light of

the foregoing reasons, it is proposed to investigate the function of environmental perception in assessing and interpreting the central subject of biosphere preservation (Valeria Marques et al., 2020).

Ting, Hsieh, Chang, and Chen (2019) identified positive relationship between perceived stimulations for green efforts, perceived incentives, and customer's behavioral intentions towards sustainable green restaurants in the service sector. In addition, Rahman, Barua, Hoque, and Zahir (2017) investigated the relationship between consumers perceptual values about the ecologically safe environment and how they are modified by organizational promotional campaigns. The findings suggested that corporate promotional structure play key part in changing the consumers preferences towards green consumption. Moreover, Erba and Tamak (2017) revealed that consumer perception of firms green marketing strategies helps in shaping their purchase intentions that further assists in creating a desirable picture in their minds. Furthermore, Ullman and Bentler (2012) discussed ecological perception as consumer's norms that defines their compatibilities in contributing towards serene environmental campaigns. Additionally, Abdulla, Wrya, and Durmaz (2020) identified that corporate favorable brand image relies on how its customer base prefers sustainable green consumptions in their buying patterns that leads to their actual green purchase behavior. in view of preceding arguments, it is articulated that embedding sustainability notion within the firms planning and development activities serve as s competitive advantage that can uplift the market share in the long run. Moreover, green marketing has considerable influence on the consumers attitudinal tendencies towards responsible consumptions(Nawaz, Yousafzai, Shah, Xin, & Ahmad, 2021); (Duan & Li, 2022; Zeb, Akbar, & Ahmad, 2016). Both general perception and ecological awareness indicate the individual's ability to notice the qualities and components in their surroundings. Similarly, consumers form loyal affiliations with companies that display socially responsible behaviour (Shah, Yousafzai, & Akbar, 2023; Szabo & Webster, 2020). As a result, as reported by Valeria Marques et al. (2020) teaching consumers demonstrated a significant association between environmental perception and awareness, revealing a heightened degree of human involvement with the environment. Related perception investigations result in the establishment of the first hypothesis of the study.

H1: Environmental perception has a significant positive impact on green purchase intentions

Price Sensitivity

Price sensitivity was identified as a key driver of customers' pro-environmental behaviour towards ecologically sound items (Ajzen, 1991). Ehigiamusoe and Dogan (2022) investigated the renewable energy consumption (green consumption) and its interaction effect in low-income countries; the findings revealed positive and significant interaction effect of renewable energy consumption on purchase behavior. According to Ogiemwonyi (2022) green goods are more expensive since the expense connected with the purchase of green raw materials to the final certification process is reliant on long-term compliance with laws. Customers who understand the long-term implications of the environment are willing and excited to pay extra for environmentally safe items (N. Akbar, Yousafzai, & Akbar, 2023; Bhutto et al., 2020). Similarly, the equity theory has a significant relationship with price sensitivity, which is the key determinant used for assessing the price fluctuations in manufacturing plants from a consumer and production standpoint (Oliver & DeSarbo, 1988). Consumer approval of pricing adjustments is based on a comparison of the company's outcome-to-input ratio. As described by Bolton and Lemon (1999), equity theory examines the customer's choice and its congruence with the cost and benefit analysis of the product: it integrates the monetary and non-monetary cost associated with specific goods and services. In light of preceding debate, it is assessed that consumer consciously perceive prices as a mark of identity that silently expresses the worth of a product (N. Akbar, Ahmad, & Yousafzai, 2022; N. Akbar, Mordhah, & Rafiq, 2021).

Price is marked as acts as a payment and informative cue; cost cues allude to funds spent on purchases, whilst informational signals show the quality and status earned by possessing certain goods (Völckner, 2008). As reported by Danko and Nifatova (2022) green brands are much valued than conventional brands

in terms of premium prices payments. Likewise, J. Wang, Pham, and Dang (2020) identified that price sensitivity has significant interaction effect on the connection between environmental consciousness and organic food purchase intentions. Similarly, H. Wang, Ma, and Bai (2019) identified significant link between green trust and green purchase intention in case of high perceived price. N. Akbar and Ahmad (2022) describes the price sensitivity as the limit to which customers takes exponential increase in prices as environmental gains. Moreover, price variations is the prime factor that helps in evaluation among available alternatives (Hsu, Chang, & Yansritakul, 2017). In Canadian context, consumers showed preference towards environmental concerns but they were less motivated towards paying price premiums for sustainable packaging (Walker, McGuinty, Charlebois, & Music, 2021). Lavuri (2022) investigated the impact of green skepticism, altruistic, and egoistic values on green purchase intentions with mediating role of environmental perception emotion and moderating role of price sensitivity in the context of attitude behavioral approach. The findings of preceding study revealed positive moderation of PS between attitude and GPI. In light of prior studies following hypothesis is generated:

H2: PS moderates the relationship between EP and GPI

Methodology

The current study is quantitative in nature that has employed a survey instrument in assessing the respondents' opinions. Four questions related to environmental perceptions were taken by the study conducted by (Akgün, Zerenler, & Şahin, 2013). Five items covering GPI were adapted from the study of (Ko, Hwang, & Kim, 2013). Five questions related to PS were taken from the studies of Tan, Ojo, and Thurasamy (2019) . The study employed the young generation (university students) based on the multistage sampling technique in the Khyber Pakhtunkhwa (KPK) province of Pakistan. The present study carried out a multistage sampling technique for analyzing the responses from KPK, Pakistan. Structural Equation Modeling were employed for analyzing the connection between variables of the study. Reliabilities of the survey items were checked based on Cronbach alpha values where the acceptable threshold level was marked as 0.7(Amirrudin, Nasution, & Supahar, 2021).

Results and Findings

Descriptive Analysis

Enumeration of the variables is delineated in table 1, comprising the number of observations, mean, standard deviation, skewness and kurtosis. The mean value of EP was 3.87 with a SD value of 0.17. the skewness and kurtosis values of environmental perception were -.1.38 and 2.26 respectively. The mean and standard deviation values of green purchase intentions were found as 4.00 and 0.70 with skewness and kurtosis values of -.1.76 and 2.77 respectively. The PS as moderator between EP and GPI was found as a mean value of 3.90 and a standard deviation of 0.69.

The skewness and kurtosis values were -1.77 and 2.51 respectively. The Cronbach alpha values for environmental perception item were found as 0.951, the value of reliability statistics for green purchase intentions was found as 0.923, the value of price sensitivity was regressed as 0.865. The Kaiser- Meyer-Olkin test was employed in order to determine the sample adequacy with an acceptable adequate range for further factor analysis which is marked as 0.6 or above (Huck, 2012). 200 sample size is treated as adequate for data analysis although 300 and above gives much better results in terms of its generalizability (Holden & Lynch, 2004). The KMO and Bartlett test value for environmental perception was found as 0.846. the KMO value for green purchase intentions was found as 0.890, the KMO value of price sensitivity was regressed as 0.839.

Table 1: Descriptive Statistics

Constructs	N	Mean	Std.Deviation	Skewness	Kurtosis
Environmental Perception	320	3.87	.71	-1.38	2.26
Price Sensitivity	320	3.90	.69	-1.77	2.51
Green Purchase Intention	320	4.05	.73	-1.76	2.77

Regression Analysis Results

The standard loadings of the questions as reported in figure 1 related to EP were .0.90. 0.90, 0.88 and 0.76 for EP1, EP2, EP3, and EP4 respectively. The standard loading of the item covering GPI were 0.83, 0.85, 0.83, 0.85, and 0.85 for GPI1, GPI2, GPI3, GPI4, and GPI5 respectively. The standard loadings of the questions related to PS were 0.86, 0.85, 0.84, and 0.81 for PS1, PS2, PS3, and PS4 respectively. As stated in figure 1 the direct link between EP and GPI was found positively significant. PS as an interaction term between EP and GPI was found significant; indicating significant moderation. H1 and H2 of the study were supported as their values were significant with model fit values depicting acceptable results.

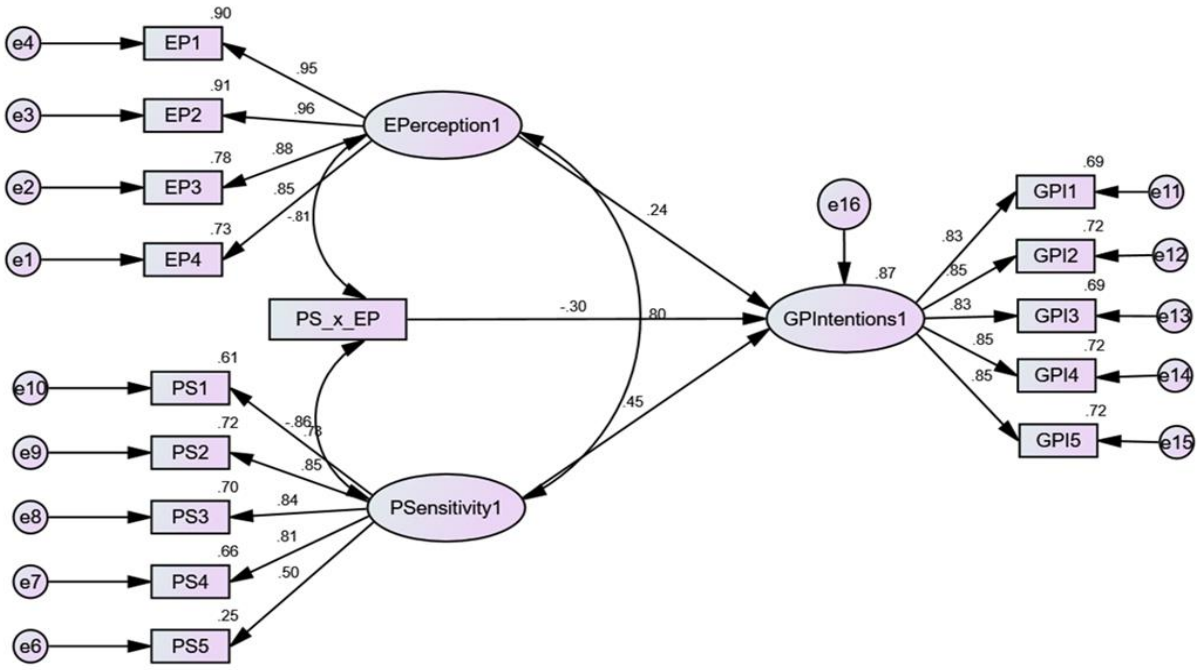

Figure 1: Model fit for Structural path- yielding positive and significant relationship between EP and GPI with role of PS as moderating variable.

Hypotheses Testing

The model fit results are presented in table 2 with a 2 / Degree of Freedom of 2.321, which meets the criteria of tolerable thresholds 1 and 3. The CFI score of 0.97 denotes an acceptable coincide as it is greater than the minimal requirement, i.e., greater than 0.95. The AGFI score of 0.88 indicates an adequate line as it is greater than 0.80. TLI was determined to be 0.97, which indicates a satisfactory match because it exceeds the minimal threshold level of 0.95. The SRMR reading of 0.02 indicates that the fit is satisfactory

since it is below 0.08, and the RMSEA value of 0.05 indicates a good match because it is less than 0.06. The PCLOSE value was determined to be 0.41, indicating a reasonable fit. As demonstrated in Table 3, which follows. The beta value (0.24 with the probability value of 0.000 with a critical percentage of 4.290) was judged to be in the statistically significant zone since the significance level was below 0.05, implying that the first hypothesis of the research, assuming a positive relationship between EP and GPI, was accepted. The most significant finding makes it possible for the investigation of PS's position as a moderator between EP and GPI. Moderation criteria demand that the interaction terms be calculated by multiplying the moderator by the independent variable; moderation holds if the direct relationship between the independent and dependent variables falls within significant domains (Memon et al., 2019). The results of the model one investigation indicated (=0.284 Critical ratio 4.290, p-value 0.000) a significant relationship between EP and GPI, which supports the study's first hypothesis, stating that there is a significant connection between EP and GPI. EP accounted for 24% of the variability in Green Purchase Intentions, according to the standardized regression weight =.24. In the second stage, the values were discovered to be (=0.45, Critical ratio= 5.181, p-value 0.000), indicating a positive link between PS (moderator) and GPI (dependent variable). The standardized regression weight =.45 demonstrated that the PS accounted for 45% of GPI variances. The third stage examines the interaction between PS and EP using the third variable as an interaction term. The study's second hypothesis has been approved since the interaction's probability value was determined to be positive (= -.30, Critical ratio -4.598). The standardized regression weight of -.30 suggests that X x M(EPxPS) accounts for -.30% of GPI fluctuations. PS moderates the association between EP and GPI since the direct effect of EP on GPI was found to be substantial, and PS demonstrates its presence because its probability-value was below 0.000. The resultant output corroborate the second hypothesis, which shows a positive moderation of price sensitivity between environmental perception and green buying intentions

Table 2: Regression analysis with the role of PS as moderator between EI and GPI

Variables	**Standardized Estimates**	**β**	**S.E**	**C.R**	**P-Value**
X(EP)	0.24	.251	.058	4.290	.000
M(PS)	0.45	.673	.130	5.181	.000
XxM(EPxPS)	-0.30	-.104	.023	-4.598	.000

Discussion

The findings of our analysis, which demonstrated positively significant relationship between EP and GPI, eventually resulted in the enactment of the study's first hypothesis. The finding is consistent with a small number of empirical studies that used ambient perception to predict green purchasing behaviour. The findings are comparable with another study done by Rizwan, Mahmood, Siddiqui, and Tahir (2014), in which EP and GPI were revealed as positive and substantially associated. In contrast to the findings of this work, Zhang et al. (2018) conducted a detailed investigations on green-washing perceptual mechanisms and its associated emotions, and their findings demonstrated an inverse relationship between greenwashing perception and green purchasing intentions. Similarly, Dahiya (2020) evaluated significantly positive on the relationship between an organisations sustainable regulations and workers sustainable attitudes using EP as a mediator; the results revealed positive mediation of EP, which opens up new avenues for highlighting green regulations in an organisational setups. Based on structural analysis, the study findings show a positive association between EP and GPI, indicating that favourable perceptual perceptions regarding environmental degradation that galvanise sustainable consumptions.

Conclusions

This research aimed to examine the relationship between EP and GPI with the role of PS as a moderator in the realm of low-income country. The results revealed a positive significant association between EP and GPI. PS as a moderator has a significant positive influence on the bond between EP and GPI. The positive

ties of environmental perception and green purchase intentions play a significant role in examining the socially responsible consumption patterns of consumers. Consequently, it yields a sound rationale for understating who is a sustainably responsible consumer. The results of the study reveal that the notion of perceptions about environment can positively reinforce sustainable consumption. Price sensitivity role can contribute to the marketing field by setting price mechanisms for boosting the sales of ecologically safe products. This culminates the desire for potential researchers in adopting a synergistic approach to enlarge the study settings in other areas of Pakistan. Governments should boost the implementation of green growth initiative strategies for the prosperity of coming generations. This research adds to the knowledge of green marketing and company sustainable development by improving researchers' comprehension of the distinctive importance of customers' views of ecology and environmentally conscious buying intentions. Second, this research looks at the effect of PS as a moderator of consumer EP and GPI. As a turning point in the link between environmental perception and green purchasing intention, the current study can aid policymakers in establishing and monitoring green pricing policies. The research only took into account one province of Pakistan (Khyber-Pakhtunkhwa). Since human perception of environment is an intricate phenomenon and disparity occurs because of topographical proximity (N. Akbar, Rafiq, Hussain, & Perveen, 2022; S. Akbar, Akbar, & Yosuf, 2023). As a consequence, it is suggested that future research widen the research setting to other provinces of Pakistan in order to provide a comprehensive overview of customer environmental perception and green purchasing intents in order to determine the ability to generalized the results.

References

Abdulla, N., Wrya, H., & Durmaz, O. (2020). Green product perception in Kurdistan Region of Iraq. *Black Sea Journal of Management and Marketing, 1*(1), 1-15.

Ahmad, W., & Zhang, Q. (2020). Green purchase intention: Effects of electronic service quality and customer green psychology. *Journal of cleaner production, 267*, 122053.

Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes, 50*(2), 179-211.

Akbar, N., Ahmad, D. S., & Yousafzai, M. T. (2022). Examining the Impact of Environmental-Beliefs on Green Purchase Intentions Via Price Sensitivity as Moderator. *City University Research Journal, 12*(1).

Akbar, N., & Ahmad, S. (2022). The Moderating Effect of Price Sensitivity on the Relationship between Consumers Environmental Knowledge and Green Purchase Intentions. *Journal of Managerial Sciences, 16*(3), 110-125.

Akbar, N., Ahmad, S., & Yousafzai, M. T. (2023). The power of consumer values: Assessing role of Price Sensitivity in driving Environmental values and Green Purchase Intentions. *City University Research Journal, 13*(1), 91-102.

Akbar, N., Mordhah, N., & Rafiq, I. (2021). Examining The Moderating Role Of Gender And Also Investigating The Influence Of Marketing Strategies On Online Consumer Buying Behavior. *Webology, 18*(1), 895-912.

Akbar, N., Rafiq, D. I., Takrim, D. K., Tauqeer, D. F., & Sajjad, S. (2023). From Recognition to Purchase: Understanding the Role of Brand Awareness in Driving Consumer Behavior in Pakistan. *International Journal of Special Education, 38*(1), 308-319.

Akbar, N., Rafiq, I., Hussain, D. J., & Perveen, D. A. (2022). Application of Brand Resonance Model, Assessing the relationship between Brand Resonance dimensions and Extroversion Consumer Personality traits. *International Journal of Special Education, 37*(1).

Akbar, N., Takreem, D. K., & Akbar, S. (2023). Examining the Connection between Glass Ceiling Beliefs and Job Performance of Female Employees in Directorates of Education, Khyber Pakhtunkhwa, Pakistan. *Global Economic Review, 8*(II), 172-185.

Akbar, N., Yousafzai, M. T., & Akbar, S. (2023). Measuring the impact of Green Brand Positioning on Green Brand Attitude in the context of Pakistan. *Journal of Managerial Sciences, 17*(1), 47-70.

Akbar, S., Akbar, N., & Yosuf, M. (2023). Neuromarketing; Its Significance in the Marketing World. *Global Social Sciences Review, 8*(2), 376-389.

Akgün, V. Ö., Zerenler, M., & Şahin, E. (2013). Green Marketing Perception: A Study on Konya Automotıve Supplier Industry. *Mediterranean Journal of Social Sciences, 4*(10), 758.

Amirrudin, M., Nasution, K., & Supahar, S. (2021). Effect of variability on Cronbach alpha reliability in research practice. *Jurnal Matematika, Statistika dan Komputasi, 17*(2), 223-230.

Aruna, S., & Thirumaran, R. (2017). Consumers' perception, satisfaction and post purchase behaviour towards green convenience products in Chennai. *ZENITH International Journal of Multidisciplinary Research, 7*(11), 1-13.

Bhutto, M. H., Tariq, B., Azhar, S., Ahmed, K., Khuwaja, F. M., & Han, H. (2020). Predicting consumer purchase intention toward hybrid vehicles: testing the moderating role of price sensitivity. *European Business Review*.

Bolton, R. N., & Lemon, K. N. (1999). A Dynamic Model of Customers' Usage of Services: Usage as an Antecedent and Consequence of Satisfaction. *Journal of marketing research, 36*(2), 171-186. doi:10.1177/002224379903600203

Casalegno, C., Candelo, E., & Santoro, G. (2022). Exploring the antecedents of green and sustainable purchase behaviour: A comparison among different generations. *Psychology & Marketing*.

Chacon, L., Lavoine, N., & Venditti, R. A. (2022). Valorization of mixed office waste as macro-, micro-, and nano-sized particles in recycled paper containerboards for enhanced performance and improved environmental perception. *Resources, Conservation and Recycling, 180*, 106125.

Choshaly, S. H. (2017). Consumer perception of green issues and intention to purchase green products. *International Journal of Management, Accounting and Economics, 4*(1), 66-79.

Coderoni, S., & Perito, M. A. (2020). Sustainable consumption in the circular economy. An analysis of consumers' purchase intentions for waste-to-value food. *Journal of cleaner production, 252*, 119870.

Dahiya, R. (2020). Does organisational sustainability policies affect environmental attitude of employees? The missing link of green work climate perceptions. *Business Strategy & Development, 3*(3), 395-403.

Danko, Y., & Nifatova, O. (2022). Agro-sphere determinants of green branding: eco-consumption, loyalty, and price premium. *Humanities and Social Sciences Communications, 9*(1), 1-9.

Duan, Y., & Li, S. (2022). Study of Different Vegetation Types in Green Space Landscape Preference: Comparison of Environmental Perception in Winter and Summer. *Sustainability, 14*(7), 3906.

Ehigiamusoe, K. U., & Dogan, E. (2022). The role of interaction effect between renewable energy consumption and real income in carbon emissions: Evidence from low-income countries. *Renewable and Sustainable Energy Reviews, 154*, 111883.

Erba, M. W., & Tamak, R. K. (2017). An Assessment of Consumer Perception on Green Marketing Practices in Manufacturing Industries: A Case of Hawassa City Administration, Ethiopia.

Fischer, D., Reinermann, J.-L., Mandujano, G. G., DesRoches, C. T., Diddi, S., & Vergragt, P. J. (2021). Sustainable consumption communication: A review of an emerging field of research. *Journal of Cleaner Production, 300*, 126880.

Holden, M. T., & Lynch, P. (2004). Choosing the appropriate methodology: Understanding research philosophy. *The marketing review, 4*(4), 397-409.

Hsu, C.-L., Chang, C.-Y., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. *Journal of Retailing and Consumer Services, 34*, 145-152.

Huck, S. W. (2012). *Reading statistics and research*: Pearson Education.

Kamalanon, P., Chen, J.-S., & Le, T.-T.-Y. (2022). "Why Do We Buy Green Products?" An Extended Theory of the Planned Behavior Model for Green Product Purchase Behavior. *Sustainability, 14*(2), 689.

Ko, E., Hwang, Y. K., & Kim, E. Y. (2013). Green marketing'functions in building corporate image in the retail setting. *Journal of Business Research, 66*(10), 1709-1715.

Koengkan, M. (2018). The positive impact of trade openness on consumption of energy: Fresh evidence from Andean community countries. *Energy, 158*, 936-943.

Kumar, P., & Ghodeswar, B. M. (2015). Factors affecting consumers' green product purchase decisions. *Marketing Intelligence & Planning*.

Lavuri, R. (2022). Organic green purchasing: Moderation of environmental protection emotion and price sensitivity. *Journal of Cleaner Production, 368*, 133113.

Li, X., He, J., Huang, Y., Li, J., Liu, X., & Dai, J. (2022). Predicting the factors influencing construction enterprises' adoption of green development behaviors using artificial neural network. *Humanities and Social Sciences Communications, 9*(1), 1-12.

Lubowiecki-Vikuk, A., Dąbrowska, A., & Machnik, A. (2021). Responsible consumer and lifestyle: Sustainability insights. *Sustainable production and consumption, 25*, 91-101.

Marques, V., Ursi, S., Lima, E., & Katon, G. (2020). Environmental Perception: Notes on Transdisciplinary Approach. *Scientific Journal of Biology & Life Sciences, 1*(3), 1-9.

Marques, V., Ursi, S., Silva, E. L., & Katon, G. (2020). Environmental Perception: Notes on Transdisciplinary Approach. *Scientific Journal of Biology & Life Sciences, 1*(3), 1-9.

Marwat, N. A., Ahmad, S., & Yousafzai, M. T. (2022). Examining The Impact of Environmental-Beliefs on Green Purchase Intentions Via Price Sensitivity as Moderator. *City University Research Journal, 12*(1), 11-24.

Memon, M. A., Cheah, J.-H., Ramayah, T., Ting, H., Chuah, F., & Cham, T. H. (2019). Moderation analysis: issues and guidelines. *Journal of Applied Structural Equation Modeling, 3*(1), 1-11.

Mottaleb, K. A. (2018). Perception and adoption of a new agricultural technology: Evidence from a developing country. *Technology in society, 55*, 126-135.

Mukaromah, A. L., Teja, I. G. N. A. E., & Anggraini, N. P. N. (2019). The effect of green marketing, brand awareness and price perception on purchase decision. *International Journal of Applied Business and International Management (IJABIM), 4*(3), 75-83.

Naidoo, V., & Verma, R. (2019). *Green Marketing as a Positive Driver Toward Business Sustainability*: IGI Global.

Nawaz, M., Yousafzai, M. T., Shah, T., Xin, C., & Ahmad, W. (2021). Sustainability of recycling waste picker sustainopreneurs for prevention and mitigation of municipal solid waste in swat. *Sustainability, 13*(12), 6533.

Nevitt, M. (2022). Climate Justice and Loss and Damage in the Pakistan Flood Crisis. *Lawfare (Brookings Institute)*.

Nozari, H., Szmelter-Jarosz, A., & Ghahremani-Nahr, J. (2021). The Ideas of Sustainable and Green Marketing Based on the Internet of Everything—The Case of the Dairy Industry. *Future Internet, 13*(10), 266.

Ogiemwonyi, O. (2022). Factors influencing generation Y green behaviour on green products in Nigeria: An application of theory of planned behaviour. *Environmental and Sustainability Indicators, 13*, 100164.

Oliver, R. L., & DeSarbo, W. S. (1988). Response determinants in satisfaction judgments. *Journal of consumer research, 14*(4), 495-507.

Prakash, G., Choudhary, S., Kumar, A., Garza-Reyes, J. A., Khan, S. A. R., & Panda, T. K. (2019). Do altruistic and egoistic values influence consumers' attitudes and purchase intentions towards eco-friendly packaged products? An empirical investigation. *Journal of Retailing and Consumer Services, 50*, 163-169.

Rahman, A. S., Barua, A., Hoque, R., & Zahir, M. R. (2017). Influence of green marketing on consumer behavior: a realistic study on Bangladesh. *Global Journal of Management And Business Research*.

Rizwan, M., Mahmood, U., Siddiqui, H., & Tahir, A. (2014). An empirical study about green purchase intentions. *Journal of Sociological Research, 5*(1), 290-305.

Sachs, J. D., Schmidt-Traub, G., Mazzucato, M., Messner, D., Nakicenovic, N., & Rockström, J. (2019). Six transformations to achieve the sustainable development goals. *Nature sustainability, 2*(9), 805-814.

Schweiker, M., Ampatzi, E., Andargie, M. S., Andersen, R. K., Azar, E., Barthelmes, V. M., . . . Chinazzo, G. (2020). Review of multi-domain approaches to indoor environmental perception and behaviour. *Building and Environment, 176*, 106804.

Shah, T., Yousafzai, M. T., & Akbar, N. (2023). Assessing the implications of farm advisory services of Model Farm Services Center from a Productivity Perspective. *Journal of applied economics and business studies*, *7*(2), 1-22.

Sivapalan, A., von der Heidt, T., Scherrer, P., & Sorwar, G. (2021). A consumer values-based approach to enhancing green consumption. *Sustainable production and consumption*, *28*, 699-715.

Sonetti, G., Brown, M., & Naboni, E. (2019). About the triggering of UN sustainable development goals and regenerative sustainability in higher education. *Sustainability*, *11*(1), 254.

Szabo, S., & Webster, J. (2020). Perceived greenwashing: the effects of green marketing on environmental and product perceptions. *Journal of business ethics*, 1-21.

Tan, C. N. L., Ojo, A. O., & Thurasamy, R. (2019). Determinants of green product buying decision among young consumers in Malaysia. *Young consumers*.

Ting, C.-T., Hsieh, C.-M., Chang, H.-P., & Chen, H.-S. (2019). Environmental consciousness and green customer behavior: The moderating roles of incentive mechanisms. *Sustainability*, *11*(3), 819.

Trudel, R. (2019). Sustainable consumer behavior. *Consumer psychology review*, *2*(1), 85-96.

Ullman, J. B., & Bentler, P. M. (2012). Structural equation modeling. *Handbook of Psychology, Second Edition*, *2*.

Umer Sial, M. (2019). *Consumer Perception about Green Marketing: Really Green or just Green washed?* Griffith College,

Völckner, F. (2008). The dual role of price: decomposing consumers' reactions to price. *Journal of the academy of marketing science*, *36*(3), 359-377.

Walker, T. R., McGuinty, E., Charlebois, S., & Music, J. (2021). Single-use plastic packaging in the Canadian food industry: Consumer behavior and perceptions. *Humanities and Social Sciences Communications*, *8*(1), 1-11.

Wang, H., Ma, B., & Bai, R. (2019). How does green product knowledge effectively promote green purchase intention? *Sustainability*, *11*(4), 1193.

Wang, J., Pham, T. L., & Dang, V. T. (2020). Environmental consciousness and organic food purchase intention: a moderated mediation model of perceived food quality and price sensitivity. *International Journal of Environmental Research and Public Health*, *17*(3), 850.

Yao, J., Guo, X., Wang, L., & Jiang, H. (2022). Understanding green consumption: a literature review based on factor analysis and bibliometric method. *Sustainability*, *14*(14), 8324.

Yousafzai, M. T., Nawaz, M., Xin, C., Tsai, S.-B., & Lee, C.-H. (2020). Sustainability of waste picker sustainopreneurs in Pakistan's informal solid waste management system for cleaner production. *Journal of Cleaner Production*, *267*, 121913.

Zeb, A., Akbar, N., & Ahmad, S. (2016). Analyzing the role of cultural determinants on visitors satisfaction in hospitality and tourism industry of pakistan. *Journal of Rural Development and Administration*, *47*(2), 19-30.

Zhang, L., Li, D., Cao, C., & Huang, S. (2018). The influence of greenwashing perception on green purchasing intentions: The mediating role of green word-of-mouth and moderating role of green concern. *Journal of cleaner production*, *187*, 740-750.

Zhao, G., Geng, Y., Sun, H., Tian, X., Chen, W., & Wu, D. (2020). Mapping the knowledge of green consumption: a meta-analysis. *Environmental Science and Pollution Research*, *27*(36), 44937-44950.