

Pricing the Green Path: Unveiling the role of Price Sensitivity as a Moderator in Environmental Attitude and Green Purchase Intentions

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Abstract

A global epidemic has transformed the concept of indiscriminate consumerism into environmentally conscious consumption, with buyers reshaping their perceptual systems. Culturally accountable spending refers to how consumers feel, view, experience, and behave in ways that are environmentally conscious and acceptable to society. In light of the importance of environmentally friendly utilization, the primary goal of the current research is to investigate the relationship between environmental attitude (EA) and green purchasing intentions (GPI), with the function of price sensitivity (PS) as a moderator. Amos was used to examine the structural connection between EA and GPI using structural equation modeling (SEM). According to the results, consumer EA has a strong beneficial influence on GPI. Furthermore, PS modifies the association between EA and GPI. This study is an extension of the theory of planned behavior, which assists in understanding the perceptual processes in the human mind about the use of environmentally friendly items. Price sensitivity as a moderating factor showed consumers' intellectual responses to price disparities in ecologically friendly goods. first, it adds to the general literature on green marketing and corporate sustainability problems by improving academics' awareness of the distinctive significance of consumers' attitudes towards the environment and green purchasing intents. Second, this research looks at the effect of PS as a moderator of consumer EA and GPI. The policy consequence of this research is to increase policymakers' awareness of sustainable consumption so that they may design price mechanisms that are consistent with consumer's sustainable attitudes.

Keywords: *Environmental Attitudes, Price Sensitivity, Green Purchase Intentions.*

Introduction

The opinions on the anthropogenic global warming perspective highlighted the need for corporations to adhere to environmentally friendly norms and regulations (Zhuang, Luo, & Riaz, 2021). By adopting new avenues of sustainable offerings, business transactions depend on environmentally sound methods (N. Akbar, Takreem, & Akbar, 2023; Nguyen-Viet, 2022). The human desire to yearn for a sustainable future originates from the gradual transformation in their ecological behavior and consumption habits, dominating the man-nature link (N. Akbar, Zeb, & Ahmad, 2017). N. Akbar and Ahmad (2022) described how the cosmos warns against natural disasters such as forest destruction, catastrophic temperature change, severe trashing, and flora deterioration. As a result, the primary preservation issue is to actively pursue paths that lead to more economically viable and environmentally friendly lifestyles (In, 2017). As suggested by N. Akbar, Ahmad, and Yousafzai (2022) sustainable marketing is the phenomenon that is adopted by firms in order to gain an edge over rival firms. Earning money is not the sole determinant of organizational corporate goals; environmental campaigns and sustainable marketing practices give a boost to the firm's brand identity in the long run (N. Akbar, Yousafzai, & Akbar, 2023). Based on the foregoing considerations, it has been determined that maximizing the firm's both economic and environmental perks is the secret ingredient for achievement, which motivates firms to become green by incorporating environmentally sound practices into their business strategies (Wijekoon & Sabri, 2021).

Sustainability is defined as an equilibrium between economic benefits and concerns about the environment, and it is often referred to as an indicator of differentiation (N. Akbar, Mordhah, & Rafiq, 2021). Furthermore, Bujang, Omar, and Baharum (2018) explored the evolution of traditional marketing into ecological marketing, which forecasts changes in customers' understanding, decisions, and tastes ushering in a full shift in the marketing industry. Businesses are responding to the changing perspective by developing eco-friendly items and services. The swift expansion of the worldwide population is directly related to the growing need for both manufacturing and use of commodities and services, inflicting harm to the planet in terms of the climatic challenges caused by trophic cascades (Severo, de Guimarães, & Dorion, 2018). Given the previous notions, it is apparent that consumer want ecologically safe offerings. However; exponential rise in the demand of resources makes it difficult to attain the sustainability goals (Shah, Yousafzai, & Akbar, 2023). The major goal for corporations is to integrate the notion of sustainable and ecologically sound consumption into the core profit-generating operations within the supply chain procedures (S. Akbar, Akbar, & Yosuf, 2023). Firms wants to highlight their green promotional campaigns with respect to selling their market offerings with major aim to embed them in their organizational statues (Erdil, 2018). As reported by Bhardwaj, Nair, Tariq, Ahmad, and Chitnis (2023) environmental solutions are the core objectives of the global firms that requires serious attention for the preservations of the biodiversity. Similarly, Rahman and Nguyen-Viet (2023) addressed the United Nations sustainable development twelve goals that has considerable emphasis on safe consumption and production. In the view of preceding considerations, it is evaluated that green marketing has become famous acronym world-wide where people exhibit significant worries about ecologically safe consumption practices (Danish, Ali, Ahmad, & Zahid, 2019).

In today's world, every culture and industry must address the issue of sustainability. Form the marketing research perspective developing and nurturing the environmental attitude towards green purchase intentions needs prime considerations; it helps in shaping the consumer attitudinal responses towards safe consumption. The propensity to react in a specific way to modifications of both beneficial and detrimental characteristics is the result of customers' attitudes towards selecting a specific course of action (S. Akbar et al., 2023; Marwat, Lalarukh, & Ali, 2023). Thus, the main aim of the current research is to examine the association between EA and GPI with the role of PS as a moderator in the FMCG (Fast moving consumer goods) industry. The FMCG (fast moving consumer goods) industry generates a large quantity of garbage on a daily basis (Singh, 2023). Consumers, on the other hand, are becoming more conscious of the influence their everyday decisions have on the environment. As reported by Grigaliūnaitė, Pažėraitė, and Račkauskas (2023) the threat of climate change is as serious as it can be, and it is also inescapable; with

rising pro-sustainability public awareness, energy transition and eco-friendly lifestyle choices are the only way ahead. Considering the current state of affairs, it is an appropriate moment for the FMCG industry to make some long-term, strategic, and environmentally friendly decisions that will not only help them financially (Mukherjee, Das, & Chakraborty, 2023). The amount of non-biodegradable waste as a result of more industrialization and technological advancement is astonishing, and FMCGs have a specific role to play in it (Mirza, Younus, Javaid, & Waheed, 2023). FMCG industry has many miles to go further; from the green developmental perspective our country ranks closer to the bottom that can be boosted with investment in eco-friendly conducts of the businesses (Siddiqui & ul Karim, 2022). In the light of the preceding arguments the current research theme highlighted the objectives of the study in the light of FMCG industry. The current study aims to identify the consumer EA towards GPI with the role of PS as moderating variable in the context of FMCG industry.

Literature Review and Hypothesis Development

Theoretical Connection Between EA and GPI

Green purchase intentions refers to the purchase, use, and disposal of market offerings that are marked as safe from environmental perspective; articulated as a consumer's intrinsic desire to acquire eco-friendly goods and services (Ahmad & Zhang, 2020). As stated by Coderoni and Perito (2020) green purchase behavior has close associations with consumer's norms, values, and attitudinal preferences merged into their perceptual antidotes to think favorable about preserving the planet (Zeb, Akbar, & Ahmad, 2016). In addition, it is defined as consumers choice to prefer renewable, recycled products in the market (Kamalanon, Chen, & Le, 2022). As a result of the rapid escalation of environmental threats, environmental challenges, and a high degree of consumer concern about ecological issues, green consumption relates to social relevance (Kautish, Paul, & Sharma, 2019). Therefore, green consumption is tied to the supportive stance of companies towards sustainability challenges (N. Akbar, Rafiq, Uddin, & Bilal, 2021; Kumar & Ghodeswar, 2015). The theory of planned behavior (TPB) created by (Ajzen, 1991) is the most thoroughly and frequently employed theory that explains green buying intentions. The current study employed the (TPB) in explaining the link between EA and GPI with the role of PS as potential moderator. In accordance with the Theory of Planned Behaviour (TPB), Bhutto et al. (2022) adds to the existing body of literature on consumers' green purchase intentions as it was found significantly dependent on the attitude, subjective norms, and perceived behavioural control whereby price-sensitivity has been identified as a key moderator, particularly in the context of developing countries like Pakistan. The use of renewable energy sources for sustainable development is gaining popularity among researchers as well as practitioners. Given its sweltering environment, Pakistan has a significant potential to satisfy its energy needs by adopting renewable energy resources, particularly photovoltaic solar green technology. However, the rate of acceptance of this technology among consumers remains fairly low as consumers sensitivity towards prices escalation of eco-friendly products is high (Ali, Poulova, Akbar, Javed, & Danish, 2020).

Environmental attitude is a combination of individual ideas that operate in a holistically conceptual framework of mind to environmentally friendly goods (Groening, Sarkis, & Zhu, 2018). The Attitude-Behavior-Context (ABC) theory is a blended approach for analyzing environmentally crucial consumer conduct; it relies on the concept that behavior (B) is the end result of a combination of personalized attitudinal (A) factors and context-related factors (C) (Stern, 2000). As a result, attitudinal factors include consumers' overall proclivity to behave in a specific way, as well as their own views, conventions, and values (Mohd Suki, 2016). Contextual factors, on the other hand, relate to social norms that encompass a wide variety of interpersonal influences, incentives, recognitions, social pressures, and environmental group effects (N. Akbar, Rafiq, Takrim, Tauqeer, & Sajjad, 2023; Chou, Horng, Liu, & Lin, 2020). Previous researchers investigated the difference between green mindset and real behavioral intentions of customers and discovered a significant gap (Achchuthan & Thirunavukkarasu, 2016). Furthermore, the gap between customers' green beliefs and the real sensual behavior can be described by a variety of firm characteristics, including a lack of organized measures for predicting, inspiring, and implementing

sustainable practices (N. Akbar, D. K. Takreem, et al., 2023; Viechtbauer et al., 2015). Therefore, the green attitudinal gap, explains the discrepancies in attitude and behavior (Sadiq, Adil, & Paul, 2022). In emerging countries, customers who are more aware of the environmental threats are more worried about preserving their surroundings (Luthra & Deshwal, 2022). Thus, An environmental attitude encourages customers to actively seek the assurances and promises provided by producers and dealers when purchasing certain items (Cheung & To, 2019).

Prior research has been conducted on the notion of environmental attitude and green purchase intentions in diverse cultural backgrounds such as Han (2020) reported a significant percentage of consumers' recognition about the ecologically safe offerings, indicating strong attitudinal responses towards the implementation of sustainable lifestyles. Based on the previous study on environmental attitudes, it is estimated that; target market that prefer green offerings willingly pay price premium for sustainably safe products (Witek & Kuźniar, 2021). Similarly, Riskos, Dekoulou, Mylonas, and Tsourvakas (2021) evaluated the influence of ecologically safe labeling imparts considerable impact on the customers attitudes towards green products; the study's findings demonstrated significant association of mediation function of attitude towards green consumerism. Likewise, attitudinal response and related research takes into account when predicting customer behavior (Han, 2020). In addition, attitude influences behavioral inclinations as well as consumer choices and priorities (Loureiro, Guerreiro, & Han, 2022). Following the same tactics, an attitude towards green consumption aids in initiating consumer behavior towards sustainable consumption practices. (Mohd Suki, 2016). Moreover, Farjam, Nikolaychuk, and Bravo (2019) made an important contribution to the green marketing literature by conducting a series of experimentation for analyzing the association between EA and behavior of customers under contrived settings. The findings of web-experimentations identified that customers psychological discomforts can be minimized by taking strategic fits between EA and sustainable lifestyles. Cheung and To (2019) revealed the connection between customers personality attributes and their attitudinal responses towards ecologically sound offerings by employing Value-Attitude model; the results described positive relationship between customers' value and attitudes towards green goods and services; Based on prior research studies following hypothesis was developed:

H1: EA has a significant positive impact on GPI

PS as Moderator Between EA and GPI

Ajzen (1991) cited price sensitivity as a significant driver of customers' pro-environmental behavior towards ecologically sound items as an experientially factual report in the theory of planned behavior. According to Ogiemwonyi (2022) products that are sustainably highlighted tends to be positioned as costly as the fixed and variable costs associated with purchasing green inputs are more expensive than regular raw materials. Customers perception about the real benefits associated with environment trigger their emotion to pay more for the sustainable products and services (Bhutto et al., 2020). In addition, the equity theory has a significant relationship with PS, that is employed to measure and predict price fluctuations (Ogiemwonyi, 2022; Yousafzai, Nawaz, Xin, Tsai, & Lee, 2020). According to the Bolton and Lemon (1999), the equity theory demonstrates customer's strategic alliance with product costs in their minds; it is a combination of monetary and non-monetary sacrifices associated with buying a specific offer. The findings of equity theory are contrasted with the sacrifices and advantages made by both sides (customers and enterprises) in the exchange process (Luthra & Deshwal, 2022). A substantial amount of study has previously been done in the setting of industrialized nations on PS and its association with green buying behavior (Cao & Xu, 2023; Sakaya, 2023; Wang, Pham, & Dang, 2020; Witek & Kuźniar, 2020). In developing nations, studies on green buying intentions intertwined with price sensitivity are notably lacking. PS moderated the association between environmental concern, attitude, and GPI (Erdil, 2018). Mohd Suki (2016) investigated the price sensitivity relationship with eco-friendly items, finding that customers who favor green products are less sensitive to price differences when purchasing green products.

An enterprises' competitive initiatives in implementing advertising claims for which customers are prepared to pay high prices are influenced by a variety of factors such as advertising organic materials, ecologically safe measures, and contributing to environmental-friendly enterprises (N. Akbar, Ahmad, & Yousafzai, 2023; Salve, Pabalkar, & Roy, 2021). Likewise, Yue, Sheng, She, and Xu (2020) investigated the role of PS and environmental concern as moderators and mediators, respectively, on crossing the environmental responsibility on green consumption; The results identified that environmental responsibility open up avenues for adoption of ecologically safe consumption lifestyles. PS was identified as having inverse role as moderator between environmental attitudes and GPI. Increase in price sensitivity exhibits high reactions to price fluctuations with respect to jumps in prices (Nawaz et al., 2021; Yousafzai et al., 2022). PS refers to variations in consumer buying patterns in response to rise and fall of prices; whereas low sensitivities towards prices depicts low concerns of customers towards price changes (Yue et al., 2020). Therefore, PS is the consequence of a combination of the elements relating to customer perceptual thought processes, changing marketing circumstances, and the firm's strategic considerations (N. Akbar, Mordhah, Takreem, & Dr, 2023; Srivastava & Gupta, 2023). PS is higher with respect to hedonic items than in functional products. Price sensitivity is tempered by income and social status, with higher-income customers less likely to be influenced by price changes (Cao & Xu, 2023). Ghali-Zinoubi (2020) identified price as an essential element in green purchasing decisions and identified it as a barrier to obtaining environmental products since sustainable items are charged high in some regions. Similarly, Erdil (2018) shown that less price-sensitive customers had a stronger preference for sustainable items due to their willingness to spend more for environmental welfare. On the basis of prior research; the following hypothesis was developed.

HA1: PS moderates the connection between EA and GPI

Methodology

The current study is quantitative in nature which employed positivistic philosophy; the data were gathered from an adapted questionnaire through multistage sampling technique from the university students of Khyber Pakhtunkhwa province of Pakistan. Multistage sampling allows researchers to divide the population based on series of steps that relies on equal representation from all geographical proximities in order to showcase the fair generalization of results (Basti & Madadzadeh, 2021).

According to Beaumont and Émond (2022) multistage is the division of large populations into small clusters in order to make the primary data collection more efficient and effective; it avoids the problems that come with randomly sampling from a large group of population. This form of sampling can be used by people who have little between-group variation to make the population easier to grasp. Public sector universities were chosen from each district as the government regulatory authorities launch environmental campaigns in the form of green growth initiatives and seasonal plantations that require all the public sector entities to follow the rules of their environmental campaigns. Public sector universities are abided by the state rules and regulations in terms of following green policies in their universities.

Gomal university was chosen from Southern region of KPK. Bacha Khan University, Charsadda and Institute of management studies (Peshawar University) were picked from central region. However, university of Swat and university of Malakand were picked from northern region of KPK. The current study undertakes students of all educational levels (BBA, MBA, Masters level, MS, and PhD). The questions that measures EA were taken from the study conducted by (Paul, Modi, & Patel, 2016). The items that measured PS were taken and adapted from the study carried out by (Graciola, De Toni, de Lima, & Milan, 2018). The questions which covered the dependent variable GPI were extracted from the study conducted by (Kautish et al., 2019). Structural equation modeling was used for analyzing the structural connection between variables of the study.

Results

Descriptive Analysis

The descriptive statistics of the study explains the number of observations, mean value, Std Deviations score accompanied with skewness and kurtosis of the main variables. The value of Mean for EA was regressed as 3.92 with std variation score of 0.73. The score of skewness for EA was identified as -1.38 with kurtosis value of 1.46. The mean value for PS was ascertained as 3.90 with std deviation score of 0.69. PS skewness and kurtosis values were determined as -1.77 and 2.51 respectively. The GPI mean value was identified as 4.05 with std deviation score of 0.73. The skewness and kurtosis values of GPI was ascertained as -1.76 and 2.77 respectively. The values of reliability statistics in the form of Cronbach alpha depicted 0.919 for EA, 0.865 for PS, and 0.923 for GPI. The Kaiser Meyer Olkin test was conducted to identify the sample adequacy for factor analysis that is determined to be 0.60 or above (Huck, 2012). The sample of 200 respondents is marked as sufficient for analysis of the data; although the sample size of 300 and above yields much finer results that helps in better generalization of the findings (Holden & Lynch, 2004). The current research has taken the responses of 320 participants that is suitable for sample adequacy. The score of Kaiser Mayer Olkin test for EA was ascertained as 0.889, the value of KMO for PS was determined as 0.879, and the value for GPI was found as 0.922.

Factor Analysis (Hypotheses Testing)

Conformity factor analysis was carried out with standard loading values as indicated in figure 1 of the study; the standard loading of the items covering EA were ascertained as 0.79, 0.84, 0.86, 0.85, 0.83 for E-Attitude 1, 2, 3, 4, and 5 respectively. The score of factor loadings for PS was determined as 0.86, 0.85, 0.84, 0.81 for P-Sensitivity 1, 2, 3, 4, and 5. The standard loading for the items covering GPI were identified as 0.83, 0.85, 0.83, 0.85, and 0.85 for GP-Intentions 1, 2, 3, 4, and 5 respectively. The model fit scores were determined within acceptable range with χ^2 / DF value was discovered as 2.063; which fell within permissible threshold values 1 and 3. CFI score of 0.97 was determined to be a good fit as the value should be greater than 0.95. The value of GFI was ascertained as 0.92; AGFI value 0.90; TLI score 0.97; SRMR value was determined as 0.05 less than the cut off level. As indicated in figure 1 of the study the relationship between E-Attitude and GP-Intentions is significant and positive which leads to acceptance of the first hypothesis of the study; moderation role of PS was found as the product and interaction term between E-Attitude and GP-Intentions which were found significant. The positive interaction term indicates the presence of moderation role of PS between E-Attitude and GP-Intentions. The second hypothesis of the study is accepted as the interaction term value was ascertained in significant zones.

Hypotheses Testing

The link between EA and GPI was ascertained positive and significant with beta coefficient score of 0.36; p-value of 0.00; CR score of 6.71; which accepts the first hypothesis of the study hypothesizing the positive impact of EA on GPI. The positive association between EA and GPI allow us for checking the role of PS as moderator variable. The first part of the hypothesis testing process yields significant results which indicates that EA accounts for 36% of variation in GPI. The second part of the hypotheses testing with beta coefficient value of 0.42; CR of 5.08; P-Value 0.00 indicates significantly positive link of PS as moderator and dependent variable GPI; which assists that PS accounts for 42% variations in GPI. The third part of the study describes the interaction term between PS and EA which constitutes interaction term with beta value of -0.22; CR of -3.545. the interaction term (X x M)(E-Attitude X P-Sensitivity) accounts for 22% variations in GPI. The second hypothesis of the study is accepted as the p-value of the interaction term was identified as positive and significant. PS moderates the association between EA and GPI.

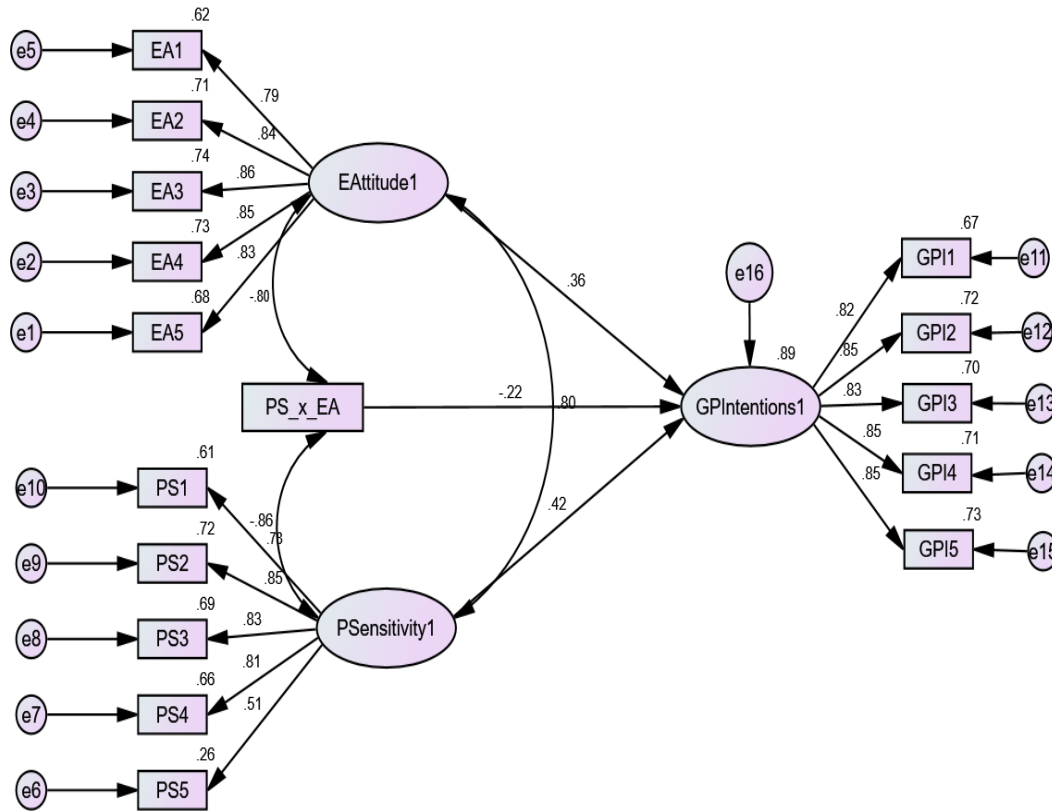


Figure 1 Structural Connection Between E-Attitude And Gpi; PS As Moderator

Discussion

H1 and H1a of the study were accepted as the values of both structural bonds ascertained significant and positive associations. Hypothesis 1 of the study assumed positive and significant relationship between EA and GPI. The findings were consistent with previous research conducted by Kaur, Gangwar, and Dash (2022) where the environmental attitudes was regressed as moderator between strategic marketing mix practices and green purchase behavior; the findings revealed that environmental attitudes plays significant role as moderator between green marketing mix strategies and green purchase behavior. Similarly; the findings go in harmony with prior work done by Kusuma and Handayani (2018) that identified significant and positive relationship between E-Knowledge, Green advertising, E-Attitudes and GPI on Starbucks consumers in Mataram City. Likewise; in a similar nature study conducted by Zaremohzzabieh, Ismail, Ahrari, and Samah (2021) presented a comprehensive sketch of the environmental attitudes as mediator in developing and shaping consumer behavior; the findings revealed consumer sustainable attitudes as self-explanatory powers in shaping consumer behavior.

Conclusions

The current study aims to assess the structural connectivity between E-Attitudes and Green purchase intentions with the role of Price Sensitivity as moderating variable in the context of fast-moving consumer goods market. The study employed AMOS; structural equation modeling; confirmatory factor analysis to examine the relationship between variables of the study. The findings of the study accepted the hypotheses of the study. The impact of environmental attitudes on green purchase intentions is positive and significant

which supports the first hypothesis of the study. Price sensitivity moderates the connection between environmental attitudes and green purchase intentions; which leads to acceptance of the second hypothesis of the study. The findings describe the significance of consumers attitudes in developing favorable responses towards green consumption habits. The role of price sensitivity is the key to success in developing marketing mix strategies for the firm. The firms can set their pricing in accordance to the consumer green attitudes as it is the fairly reliable technique to boost the sales of green market offerings. Government authorities can plan green promotional plan in driving the youngsters to participate in the environmental campaigns. The current research adds into the literature of sustainable marketing by increasing awareness about the attitudinal responses of consumers towards green products with the role of price sensitivity as moderator. The study can guide the policymakers in devising strategic moves for setting prices as a prime contributor in developing and nurturing the green attitudes of the masses. The study has been conducted in Khyber-Pakhtunkhwa region of Pakistan. Thus, it is suggested for the potential researchers to carry out the study framework in other regions of Pakistan.

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