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Factors Influencing Green Purchase Intention: A Mediation Moderation Study

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Abstract

The requirement for green products is continuously growing in the world as well as in the countries of Asia because of the extreme complications about the environment that are associated with the purchase of ordinary products. Therefore, the key factors for the determination of green purchase intention still need to be explored. The purpose of this research is to bridge the gap by investigating the impact of some key factors on the green purchase intention of the customers of green products through the mediating role of perceived value. Furthermore, the study explored the moderating role of social media on the relationship between perceived value and green purchase intention. The purposive sampling method was employed and the data of 218 participants was gathered to test the conceptual model of the study. The outcomes of the research revealed that all the selected key factors like green trust, green packaging, and perceived quality have a positive significant impact on the green purchase intention of green products. Furthermore, the mediating role of the perceived value between the relationship of above mentioned key factors and green purchase intention was also supported by the findings of the research. The outcomes of the study also confirmed the positive significant moderating role of social media between the association of perceived value and green purchase intention. The theory of reasoned action was utilized for the sustenance of the conceptual model of the study. The conclusions of the study have remarkable implications for theory, policy, practice, and the industry. In the end limitations of the study and directions for future researchers are also discussed.

***Keywords*:** Green Trust, Green packaging, Green perceived Quality, Perceived Value, Green Purchase Intention

1. Introduction

Recently, the concerns regarding global warming, environmental change, depletion of natural resources, water, air pollution, etc., have increased worldwide and impacted badly the life quality of living hoods (Dong et al., 2020; Suki & Suki, 2019). According to another survey, the carbon footprint in Pakistan increases by 6% every year (Abbass, Song, Khan, Begum, & Asif, 2022). Hence, it can be established that Pakistan has been facing the problem of environmental degradation (Rauf et al., 2022), and to date, pollution is rampant in Pakistan (Rehman, Ma, Ozturk, & Ulucak, 2022).

Subsequently, these growing concerns have created awareness among consumers to be health conscious and thus divert their attention towards buying and consuming ecologically favorable products, known as green products (Danish et al., 2019; Khan & Mohsin, 2017). Though, green products are becoming very popular because of the growing needs of the environment and strict regulations about the environment on international levels (Bajwa et al., 2019; Moshood et al., 2022). However, despite the growing tendency for green products, consumers are still unable to understand the meaning of green and are confused. The characterization of green products, benefits of the green products to user's health, and their influence on the environment are still anonymous for a maximum number of consumers (Cervellon & Carey, 2011; Diddi et al., 2019). If we talk about the world 'green' it denotes the "activities that minimize the impressions on the atmosphere, as like purchasing ecological products and reproducing"(Wolfe et al., 2001). Whereas, green products are described as products that are manufactured by the physical environment for example air, water, and the earth (Shrum et al., 1995; Szabo & Webster, 2021). The consideration of green products differs from consumer to consumer and it also differs in accordance to the use of the product and its nature. In general, the products categorized as green are thought to be friendly to the environment, biological in nature, chemicals free, harmless to use, and healthy for the users.

Thus, as compared to traditional products and services, green products have specific features comprising reproduction capability, local production, low outflow, recyclability, strength, energy proficiency, and bio-degradability may top to green buying intentions and fruitful green buying. These features not just increase preferences of consumers' purchase intentions regarding environmentally supportable products but also put pressure on organizations to think about the significance and the consequence of their manufactured products on the consumers' health (Ali & Ahmad, 2016; Lin et al., 2021). Consequently, manufacturers also become conscious to follow standardized procedures of

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manufacturing that are not harmful to the environment and the final products remain safer not only for the consumer's health but also for the atmosphere with their minimal harmful properties (Rajput et al., 2022). Also, the use of green manufacturing methods and processes during product design can affect consumer's emotional state regarding the safety of the environment by keeping in mind that these green products have features like manageable and recyclable use of reserves, generation of minimum wastage, and the minimum pollution (Suki et al., 2022), thus increases their purchasing intention.

Undoubtedly, to minimize environmental problems, the usage of green products is increasing worldwide. However, previous studies have identified only a few numbers of factors to enhance the green purchase intention of green products and brands and there is limited knowledge about the factors to forecast the purchase intention of green brands in developing countries like Pakistan. Therefore, the objective of this study is to explore the important behavioral factors such as green perceived trust, green perceived packing, and green perceived quality that affect the green purchase intention of customers in Pakistan.

Trust can be defined as the confidence of individuals(Malik & Singh, 2022; Tan et al., 2022). Therefore, for product manufacturers, the factor of trust shows a very important role in maintaining a customer base and in appealing to new customers as well as empowering them to endorse positive attitudes from the consumers by maintaining their trust in their products and services offerings to increase customers' purchase intentions. Product packaging and quality also play a very important role in increasing the purchase intention of the customers. Plastic packaging with non-recyclable attributes harms the consumers and consumers prefer the products having eco-friendly packaging (Yoon et al., 2022). So, it can be assumed that packaging has the power to create environmentally favorable perceptions of the customers. However, only limited studies are available that have outlined the impact of ecological packaging on the purchase intention of customers (Larceneux et al., 2012). Similarly, the profitability of the organization is noticeably influenced using the quality of the product (Ophuis & Van Trijp, 1995; Petrescu et al., 2020).

Further, the current study incorporated two extra factors i.e., customer perceived value and social media in measuring the intentions of the consumers regarding ecological packaging. Danish et al. (2019) studied that organizations have to well understand that today's customers are extremely sanctioned and preferred to purchase only goods and services with greater value and with the ability to provide a purchase experience with more satisfaction. The perceived value belonging to ecological products is comprised of the presence of nutrients in the product, taste, safety, and the best price (Shaharudin et al., 2010). Consumers become conscious of the multiple benefits of organic products, that not just increase their purchase intention but also they are agreed to pay higher prices for them most of the time. Likewise, before deciding to buy a specific product or service, customers normally gather some information and gain knowledge regarding the product and service. According to Zhao et al. (2021), the utmost significant means of knowledge about the product is the real user experience of the merchandise and the advertisement on the media that impacts the selection of customers to choose a specific product and service. As stated by Burton et al. (2009), knowledge about the product affects the behavior of the consumers. In parallel, an ecological advertisement with growing green movements overall in the world and with increasing individual interest in ecological issues, many companies have carefully chosen ecologically friendly advertisements via social media or newspapers as green strategies to introduce their products and services to ecologically conscious customers.

To sum up, the purpose of the study is to see whether behavioral factors i.e. green perceived trust, green perceived packing, and green perceived quality influence customers' green purchase intention. Also, this study investigates the mediating role of green perceived value between behavioral factors and green purchase intention, and the moderating role of social media between green perceived value and green purchase intention.

2. Theoretical Framework and Hypothesis Development

The theory of Reasoned Action (TRA) belongs to a social psychology theory that tries to know and foretell different behavior of personalities Fishbein and Ajzen (1977). There are two concepts in the theory that is attitude and subjective norms. Conferring to the theory behavioral intention of the individuals is the contribution of two elements one is the attitude of the people and the other is social norms (BI= A+SN). Definition of the attitude is a positive or negative assessment of people's behavior and its results (Ajzen, 1991). Explanation of the subjective norms can be as 'supposed pressure from the society to not perform or to perform a specific behavior. On the other hand, subjective norms can be defined as the opinion of other people who are valuable to an individual and impact him in making decisions(Usman et al., 2020).

If an individual believes that people significant to him/her approve or disapprove of the behavior he will behave or intend to behave in a manner that will help him get approval or avoid disapproval (Conner & Armitage, 1998; Yuriev et al., 2020). Behavioral intention is an indication of an individual's readiness to perform a given behavior. It is assumed to be an immediate antecedent of behavior.

According to Ajzen (1991), "people consider implications of their actions before they decide to engage or not engage in a given behavior." This led the authors to propose their theory - The Theory of Reasoned Action (TRA). The theory of Reasoned Action (TRA) has been broadly used by researchers to foresee the purchase intention of the consumers in green marketing category, like reprocessing behaviors, and green purchase behavior (Tandon & Sethi, 2017). Further, the current study incorporated two extra factors (Green packaging and social media) in measuring intentions of the consumers regarding ecological packaging. In general understanding of the factors, green packaging and social media were identified as appropriate for the current study.

TRA delivers a justifiable viewpoint on the research questions of the current research. Consequently, the existing research selected the crucial factors of the TRA with added factors as the theory can be reformed or protracted for a particular population and behaviors (La Barbera & Ajzen, 2021). Overhead argument backings the usefulness of the TRA in the forecasting of green purchase intention of the consumers and the attitude of the consumers regarding the protection of the living environment (Iqbal et al., 2023).

2.1. Green Perceived Trust and Green Purchase Intention

As per Li et al. (2020), gaining customers' trust is very important for managers to achieve the loyalty of the customers. Thus, trust is well-thought-out to be the standard of long-term customer association, as it has an important connection with attitudinal beliefs. The role of trust in emerging an optimistic attitude of the customers that will ultimately inspire them to purchase green products. Moorman et al. (1992), have explained consumer trust as feelings, beliefs, or expectations regarding the loyalty of the partners involve in trading with each other, which derives from the purchase intention of the individuals, their reliability, and their capability. Barrett et al. (2002), have revealed that certification of organic or herbal is grounded on the traits about the protection and restoration of the ecological system and people, and specifies that the production of green products must be accomplished deprived of the use of ingredients that have chemicals and other pesticides. Sønderskov and Daugbjerg (2011), examined that the source of certification and certification system affects the trust of the consumers and relatively the green purchase intention of the customers. Concerning the effects of consumer trust on green purchase intention, a positive and significant relationship has been found between these two paradigms (Teng & Wang, 2015). The theory of planned behavior has also been tested by including trust in the fundamental model and it has been suggested by the outcomes that trust takes an optimistic effect on consumers' intent to buy ecological goods (Nuttavuthisit & Thøgersen, 2017; Roh et al., 2022). Rendering to circumstances of ecological managing, it is hypothesized in the present research that Green Trust about the purchasers has a positive effect on the Green Purchase Intention of the purchasers and accordingly proposes the below hypothesis.

H1: Green perceived trust has a positive significant impact on consumers' green purchase intention.

2.2. Green Perceived Packaging and Green Purchase Intention

Rokka and Uusitalo (2008) discovered that product packaging is one of the imperative characteristics that affect consumer decision-making regarding the selection of the products impacted by green packaging. In the process of purchase especially in the food items, it is very important to develop a direct relationship with the customer the visual aspect of the packaging should be attractive due to its important role in leaving long effects on the customer's mind (Nguyen et al., 2020; Simmonds & Spence, 2017). In unexpected purchases customers are mainly affected by the physical appearance of the product especially with the packaging of the product and this factor can have a momentous quick effect on customers' purchase intention (Cahyorini & Rusfian, 2012). In numerous studies, it has also been concluded that packaging has a significant impact on consumer purchase intentions. As stated by Khraim (2011), Brand loyalty has been significantly impacted by the packaging of the products which has an impact on the purchase intention of the customers as well. As an outcome, conferring to the discussion, the second hypothesis of this research is proposed:

H2: Green perceived packaging has a positive significant impact on consumers' green purchase intention.

2.3. Green Perceived Quality and Green Purchase Intention

Product quality is an important factor in the examination of the intention to purchase from the buyers. Product quality is the ongoing process of improvement by which changes have been made to enhance the performance of the products for the satisfaction of the needs of the customers (Falahat et al., 2020). If a good has the best quality at that moment the buyer will be extra motivated to buy the product and it is also identified that the quality of the merchandise has a constructive impression on the procurement purpose of the clients (Chi & Qu, 2008; Tasci, 2021). Products with high quality create higher purchase intention as compared to lower-quality products (Mirabi et al., 2015; Sukhumalanon et al., 2020). The consequence of the artifact quality on the acquisition intention is also identified by a survey of 242 customers and it is brought into being that artifact quality has an optimistic noteworthy impact on the acquisition intention of the customers (Jalilvand et al., 2011). As a conclusion of the above discussion, the third hypothesis is:

H3: Green perceived quality has a positive significant impact on consumers' green purchase intention.

2.4. Green Perceived Value and Green Purchase Intention

According to Parasuraman and Grewal (2000), customer-perceived value affects the decision-making of the customers in the first stage of the buying process which is the pre-purchase stage. Customer perceived value also impacts behavioral intention and satisfaction of the customers at the post-purchase stage of the buying process, for example, in customer-to-customer interactions, referrals, and again purchase behavior (Itani et al., 2019). Also, in previous studies, it has been identified that the perceived value of the products for money is the most important feature for the customers after the concern related to the quality of food in the customer's selection for restaurants (Filimonau & Krivcova, 2017; Rejeb et al., 2022). In other studies, some researchers have also revealed that perceived value has a contribution to customer satisfaction and customer purchase intention (Liu et al., 2021). Accordingly, it is hypothesized in the current research that the green perceived value belongs to the purchasers is optimistically associated with the purchaser's green trust, green packaging, and also green perceived quality, and positively impacts the green purchase intention (GPIN) of the buyers, thus proposes the following hypotheses:

H4: Green perceived value mediates the relationship between green perceived trust and green purchase intentions.

H5: Green perceived value mediates the relationship between green-perceived packaging and green purchase intentions.

H6: Green perceived value mediates the relationship between green perceived quality and green purchase intentions.

2.5. Social Media and Green Purchase Intention

As per Cheung et al. (2009), preceding knowledge is very crucial in the dispensation of information about a particular product. Research carried out from the perspective of the attitude of the customers has reflected that knowledge is one of the basic factors of the customer's purchase intention and purchase choice (Castro et al., 2018). Many studies have been conducted by researchers where lack of knowledge and awareness have been determined as one of the behavioral factors for not buying the products and services (Ejye Omar & Owusu-Frimpong, 2007; Raza et al., 2020). It is also examined in the study that advertising positively impacts consumer purchase behavior (Chukwu et al., 2019). As customer creates a feeling with the advertisement of the brands when they pay attention to the advertising the customers also build good feelings and a favorite attitude concerning the brands that lead to the promotion of the brands. Green advertisement has an important purpose to inspire the customers and to enhance purchase intention of the customers by inspiring them to purchase products that have no bad impact on their environment and also forward their focus towards the positive impacts of their purchase of green products on themselves as well as on the environment (Pittman et al., 2022). Green advertisement is the means through which organizations can create awareness among their consumers related to green products. Social media is a strong instrument that is used to create awareness for customers through effective advertisement (Kumar & Tripathi, 2022). In the areas where there is advertisement of green products is strong the procurements of ecological merchandise is too extraordinary. Therefore, in this research, a moderating impact of information and knowledge of the customers from social media on the relationship between behavioral factors and green purchase intention is suggested. Henceforward, it is hypothesized that:

H7: Social Media advertisement moderates the relationship between green perceived value and Green Purchase Intention.

3. Research Model

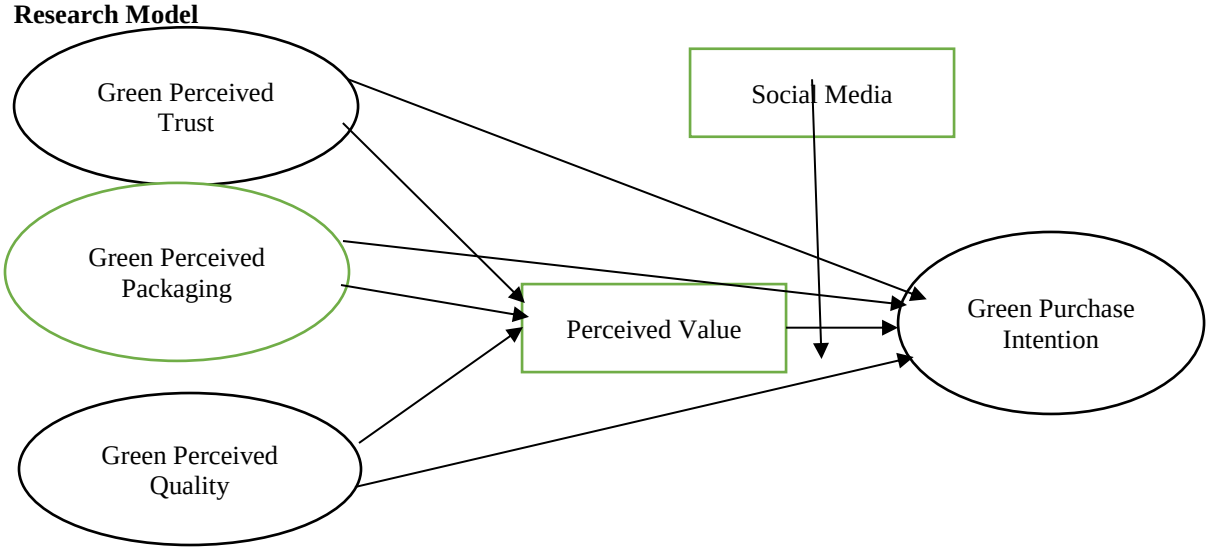

Figure 1: Research Model for green purchase intention

4. Methodology

This research is quantitative in its design. The data were collected through the survey method using a questionnaire. For the fulfillment of the purpose of the study, a purposive sampling technique was induced and the survey was conducted. Despite low generalizability non-probability sampling design offers appropriate and timely information. When there is a specific purpose of the study that has to accomplish then the purposive sampling technique is very suitable and the sample is carefully chosen by keeping in view the physiognomies of the respondents that can assist to achieve that determination in the best way by eliminating those informants who do not have the relevant individualities (Etikan et al., 2016).

Graduated individuals had been targeted because they were more social on social media and knowledgeable group of society. Casaló and Escario (2018) described, that women and young individuals have a robust attitude towards the protection of the environment and are more inclined to participate in movements belonging to the protection of the environment.

A total of 300 questionnaires were circulated among the respondents using a purposive sampling technique. Questionnaires were handed over to the available audience directly. Out of a total of 300 questionnaires, 243 questionnaires were returned. 25 questionnaires out of 243, were not completed and were excluded, and the 218 usable questionnaires were incorporated in the generation of the research findings with a response rate of 73%.

Furthermore, the demographics of the sample include gender, age, education level, and income level of the participants. The demographic of the study is more clearly elaborated in the following table 1.

Table 1: Sample Demographics

		Frequency	Percent
Gender	Male	113	51.8
	Female	104	47.7
	Others	1	0.50
Age	20-25	88	40.4
	26-30	52	23.9
	31-35	44	20.2
	>36	34	15.6
Education Level	Bachelor	67	30.7
	Master	64	29.4
	MS /M-Phil	51	23.4
	PHD	36	16.5
Income Level	20,000-30,000	57	26.1
	31,000-40,000	45	20.6
	41,000-50,000	43	19.7
	51,000-60,000	41	18.8
	Above 60,000	32	14.7
	Total	218	100.0

4.1. Research Instrument

All items in the questionnaire of the study were measured by a “five-point Likert scale ranging from 1 to 5” ratings from 1 for strongly disagree to 5 for strongly agree. In this study, the scale of green purchase intention was adapted from the previous studies concerning Pavlou (2003). The scale of green trust was adapted from the study of Chen (2010). Green packaging was measured by using the validated scale developed by Mainieri et al. (1997). Perceived quality was measured by the scale of Magistris and Gracia (2008). The scale of green perceived value was adapted from the study of Patterson and Spreng (1997). The scale of Social media advertising comprised of three items was adapted from the previous study of Saeed et al. (2014) to measure this research variable.

5. Results and Discussion

5.1. Preliminary Data Screening

Preliminary, it is very critical to scan data for the identification and elimination of missing data, aberrant values, and multivariate outliers before performing statistical tests. There were a few missing values and multivariate outliers in the data set and all such cases were removed from the data set.

5.2. Common Method Bias (CMB)

CMB particularly denotes the degree of difference that occurred due to the method used for measurement instead of the variables included in the study (Podsakoff et al., 2003). The impact of CMB must be examined by the researchers for their set of data because due to the incorporation of the same technique for the examination of both types of independent as well as dependent variables of the study (Podsakoff et al., 2003), might "portend the soundness of the inferences regarding the associations amongst measurers" (Podakoff, et al., 2003; p. 879). Thus, to diminish CMB consequence in our data set, the following statistical and procedural cures were adopted in the study as suggested by Podakoff et al., (2003). For the examination of the existence or non-appearance of the CMB, Harman's single-factor test was performed. Therefore, SPSS was used to perform the exploratory factor analysis (Cattaneo et al.), and all questions were loaded to gather in a single factor to check the factor's value of variance. The outcomes of the EFA indicated the value of total variance explained by the single factor as 28.73%. Hence, no indications of CMB were noticed.

5.3. Measurement Model

The measurement model is tested for analyzing the reliability and validity of the scales. Therefore, confirmatory factor analysis (CFA), was performed for all constructs of the model such as green trust, green packaging, green perceived quality, and green social media advertisement. The outcomes of the primary CFA displayed comparatively deprived fit indices. Some of the items (i.e., < .50) were removed from the model to improve the fit indices (i.e., < .50), and afterward that CFA analysis is performed again.

Furthermore, the error terms of the indicators were covariate by the researcher based on modification indices, and CFA was performed once again. The outcomes of CFA showed the improved values of CFI, TLI, RMSEA, and CMIN/df remained in the acceptable assortment similar to C.M.I.N./df. = 1.582, C.F.I. = .928, T.L.I = .916, and RMSEA. = .052 as per the recommendations of Hair et al., (2010), Schreiber et al., (2006), and Byrne (2010).

5.4. Reliability and Validity of Scales

The results displayed in Table 2 assured the reliability and the validity of complete model of the study. In this study, the reliability of the scales was measured through Composite reliability (CR) while convergent validity was measured through average variance extracted (AVE), and discriminant validity was measured through Maximum squared shared variance (MSV).

Table 2: Full measure model Reliability and validity

	CR.	AVE.	MSV.
Green Trust	0.775	0.536	0.053
Green Packaging	0.749	0.578	0.520
Green Perceived Quality	0.712	0.563	0.080
Perceived Value	0.743	0.570	0.530
Social Media	0.889	0.707	0.557
Green Purchase Intention	0.704	0.540	0.230

5.5. The Correlation and Descriptive Summary

The assessment of the correlation stands utilized in the direction of examination of the relationship amongst the variables and the correlation value lies within ±1.0, if the correlation value is = 0, it specifies that the two variables are not associated with each other, and if the value lies within ±1.0 it specifies that the association is perfectly negative or positive (Pallant, 2020). Inspection of the inter-correlation matrix reflects that every construct is linked with another construct and none amongst the correlations is more than 0.77. Hence, the difficulty of the multicollinearity is relatively small, the results of the SEM be able to be impacted by the multicollinearity and the value of the correlation more than 0.80. can be a sign of a problem and the value of a correlation more than 0.90 must be examined (Hair et al., 2006).

The outcomes in Table 3 specify the values of the correlation amongst the exploration variables. The outcomes represent that green trust has noteworthy association with green purchase intention (r. = 0.595**; p. < .01), green packaging has noteworthy connotation with green purchase intention (r. = 0.639**; p. < .01), and green perceived

quality also takes weighty association with green purchase intention (r. = 0.110**; p. < .01). The Correlation conclusions describe that connection between variables are good and there is no sign of the multicollinearity.

Table 3: Summary of correlation and descriptive statistics

	Mean	SD	1	2	3	4	5	6
1. GT	5.41	.64	1					
2. GP	5.61	.61	.772**	1				
3. GPQ	5.56	.55	-.007	-.020	1			
4. GSMA	5.90	.51	.390**	.380**	.158*	1		
5. GSMA	5.35	.97	.425**	.453**	-.008	.419**	1	
6. GPI	5.77	.65	.595**	.639**	.110	.513**	.590**	1

**. Correlation is significant at the 0.01 level (2-tailed). *. Correlation is significant at the 0.05 level (2-tailed).

5.6. The Path Model

After examining the measure model for the achievement of the satisfactory goodness of fit the next move in data analysis is the assessment of the relationships amongst the constructs (Anderson & Gerbing, 1988; Elahi et al., 2022). This process is named as an assessment of the path model (Joseph et al., 2010). The path model symbolizes a well-known method being used by a large number of scholars. AMOS program is used for testing the proposed hypothesis of the study.

5.7. The Direct Effects of the Green Perceived Trust, Green Perceived Packaging, and Green Perceived Quality on the Green Purchase Intention

The path model was used to examine the direct effects of green-perceived trust, green-perceived packaging, and green-perceived quality on the green purchase intention. The results of the Path model supported H1, H2, and H3 respectively. The results displayed in Table 4, validated that green trust has a significant influence on green purchase intention (H1: β = 0.237; p = 0.049), green packaging also has a positive significant influence on green purchase intention (H2: β = 0.318; p = 0.000), and green perceived quality has a positive influence on green purchase intention (H3: β = 0.102; p = 0.024).

Table 4: Path Analysis Values

Relationships			Estimate (β)	P	R^2
GT.	⟶	GPI.	0.237	0.049	
GP.	⟶	GPI.	0.318	0.000	0.575
GPQ.	⟶	GPI.	0.102	0.024	

5.8. Testing indirect effects

For the examination of the indirect effects of perceived value, the present research employed a 5000 bootstrap sample technique. This procedure is suitable to examine explicit indirect effects for the mediators individually with the help of AMOS. Table 5 reflects the outcomes of the analysis performed for mediation, to check the indirect effect of green trust, green packaging, and the green perceived quality on the green purchase intention through perceived value.

Mediation analysis results, provided in Table 5, supported the H4 by analyzing the mediating effects of perceived value between green trust and green purchase intention (H4: β = 0.040; p = 0.012). The results indicated full mediation because the direct path of green trust with green purchase intention is insignificant (β = 0.140; p = 0.113). Moreover, results show that perceived value is partially mediating between green packaging and green purchase intention (H5: β = 0.034; p = 0.025) because the direct path of green packaging with green purchase intention is also significant (β = 0.318; p = 0.001). Likewise, results indicated that perceived value partially mediated the relationship between green

perceived quality and green purchase intention (H6: β = 0.028; p = 0.007) because the direct path of green perceived quality with green purchase intention is significant (β = 0.102; p = 0.010) respectively.

Table 5: Path model results for mediation analysis (with 5000 bootstrap samples)

	Green Purchase Intention			
		BC 95% CI		
	P.E	L.B	U.B	p
Green Trust Total Effects	0.180	0.000	0.372	0.049
Direct Effects	0.140	-0.036	0.329	0.113
Indirect Effects via perceived value	0.040	0.009	0.093	0.012
Green Packaging Total Effects	0.352	0.150	0.570	0.001
Direct Effects	0.318	0.119	0.520	0.001
Indirect Effects via perceived value	0.034	0.003	0.094	0.025
Green Perceived Quality Total Effects	0.130	0.046	0.223	0.006
Direct Effects	0.102	0.027	0.194	0.010
Indirect Effects via perceived value	0.028	0.006	0.071	0.007

C = Biased Corrected. CI = Confidence Intervals (for 5000 bootstrap samples). P.E = Point of Estimate (β).

5.9. Moderation Analysis

Hypothesis H7 of the study indicated the presence of moderators in the theoretical model of the study. Hypothesis 7 of the study indicated that "H7: The relationship between social media moderate the relationship between perceived value and green purchase intention, such as the positive relationship between perceived value and green purchase intention becomes stronger when social media is high as compared to when it is low".

Likewise, as per Henseler and Fassott (2010), "given that the results of the product term approach are usually equal or superior to those of the group comparison approach, we recommend always using the product term approach" (p. 721). Therefore, for detecting and estimating the strength of interaction effects, hypothesis (H7) was analyzed using SEM through a product indicator approach i.e., by taking the product of the latent independent variable and latent moderator variable. For example, the moderating effect of social media and perceived value was analyzed using product terms i.e., INT_SM (by taking the product of green perceived value (independent variable) and social media (moderator)) to see its interaction impact on dependent variable i.e., green purchased intention. The results displayed in Table 6, that the interaction effect has a positive significant moderation influence on the connection of perceived value and the ecological buying intention (β = 0.105, P value = 0.024). Therefore, the H7 of the study is supported.

Table 6: Path Analysis Values

Relationships			Estimate (β)	P
SM.	→	GPI.	0.312	0.002
GPV*SM	→	GPI	0.105	0.024

The following moderation graph shows the relationship between green perceived value and green purchase intention becomes stronger when there is a high influence of social media and vice versa.

The drive behind the exploration is to explore the critical factors that affect the green purchase intention of consumers. The outcomes of the research conclude that a positive relationship existed between eco-friendly trust and eco-friendly intention to purchase (Cho & Sagynov, 2015). Therefore, the first hypothesis of the study stated as there is a positive relationship between ecological perceived trust and ecological buying intention is accepted. The result of the research also showed a positive relationship between green packaging and green purchase intention. The results of this study are in line with previous studies (Ansar, 2013; Pan et al., 2021).

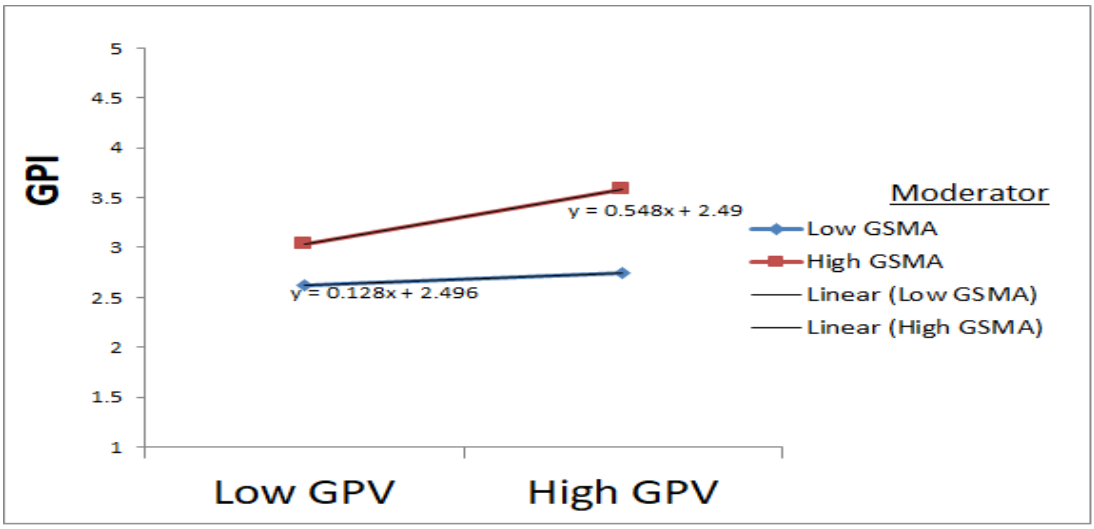

Figure 2: Moderation for social media advertisement and perceived value

Hence, the second hypothesis of the study that green packaging has a noteworthy impact on consumers' green purchase intention is also accepted. The third hypothesis of the study that the green perceived quality has a significant impact on the consumers' green purchase intention is also supported with the help of the results. Similarly, the outcomes of the study also reveal a positive mediating role of perceived value between the association of ecological trust, ecological packaging, ecologically perceived quality, and ecological buying intention which supports the fourth, fifth, and sixth hypotheses that were green perceived value mediates the relationship between green trust and green purchase intentions, green perceived value mediates the relationship between green packaging and green purchase intentions and green perceived value mediates the relationship between green perceived quality and green purchase intentions respectively. Previous findings of the studies which specify the direct or indirect relationship between perceived value and green purchase intention were also confirmed by the outcomes of the present study (Chen et al., 2021; Chen & Chang, 2012). It was also supposed that social media advertising has a moderating role between perceived value and green purchase intention, the results also confirmed our seventh hypothesis that social media advertisement diminishes the association between ecologically perceived value and ecological intention to purchase because the outcomes of the study establish a favorable moderating relationship amongst perceived value and green purchase intention.

5.10. Limitations and Future Directions

In addition to the knowledge of literature, the research takes more or less boundaries which might be spoken in the forthcoming research. As the nature of the current research is cross-sectional, we are not able to examine the behavior and intention of the consumers over time consequently, future research should examine the variations in consumers' behavior and intention through longitudinal research.

The data was gathered from the university faculty and students, therefore the research did not underwrite enough to investigate the green purchase intention of consumers with other demographics. Hence, it is recommended for future research to expand the population with a wide demographic background to investigate their purchase intention and patterns of green products.

We also tried our best to make the best generalizability of the study by taking samples from the university students and faculty with different cultural and demographic backgrounds but the generalizability is still low. Therefore, future researchers are suggested to contribute to the current study by taking a large sample from the different peoples of the different villages and cities of Pakistan to make the results more generalizable.

The study involves educated consumers only. However, a wide range of the Pakistani population is belonging to the rural areas of Pakistan. The awareness level of the rural population of Pakistan about the environment and ecological products is questionable. Thus, it is a big challenge as well as an opportunity for future researchers to focus on and involve this segment in future studies.

For future studies, the model of the current study can be used in a different context (having different geographic, demographic, cultural, and socioeconomic characteristics) to examine and compare the results with the current study. Moreover, researchers are suggested to magnify this research model by taking into account the green purchasing behavior of the consumers by exploring more factors that play a vital role in and lead the green intention of the consumers towards green purchasing behavior.

The moderating impact of consumers' personality traits does not investigate in our study for the forecasting of green purchase intention of the consumers. Therefore, it is directed to expand future research to comprehend the consumer's differences in forecasting green purchase intention by studying the current model with the incorporation of different personality traits of the consumers as mediating and moderating variables to best understand the purchase intentions of the consumers.

6. Conclusion

The purpose of the study is to stimulate the green purchase intention of consumers toward ecological products by forecasting better marketing strategies in the current era of the organic industry. The impression of this research was to enhance the understanding of the marketers and the consumers by developing a rich relationship between them through the enhancement of the ecological intention to buy off the buyers. The discoveries derived from the research conclude the results as behavioral factors devise a critical contribution in the prediction of the purchase intention of Pakistani consumers. However, green perceived value is found to have a major mediating impact on the relationship between behavioral factors and green purchase intention. Moreover, social media advertising was found to be a moderating variable in the prediction of the relationship between perceived value and green purchase intention.

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