

Determinants of Consumers' Green Purchase Intension. A study of Pakistani consumers.

Abstract

The main goal of this article is to find the potential positive relationships among constructs (environmental knowledge, environmental concern, supposed product price, quality of green products and environmental attitude) to illuminate consumer preference about green brands. The study applies five constructs to develop an integrated model to enhance green purchase intentions. In addition, this research employs an empirical study by means of the questionnaire survey method to verify the hypotheses and to explore its managerial implications. The empirical results show that environmental concern, environmental knowledge, and supposed product price & quality of green products has statistically significant and positive influence on environmental attitude and purchase preferences for green products of consumer. Likewise, a purchaser's environmental attitudes also had statistically notable and substantial influence on consumer green purchase intentions. If consumers' have competitive and high deliberations over the price, quality, environmental concerns, and environmental knowledge of green products, it influentially implies to their purchase intentions.

Keywords- Environmental Concern; Environmental Knowledge; Purchase Intention; Pakistan

Introduction

Green products are those products that have less of an impact on the environment and/ or less detrimental to human health as compared to traditional equivalents (Albino et al., 2009). While crafting design, campaigning, price allocation and distribution of green products according to the customers' need is termed green marketing (Grant 2008; Jain and Kaur 2004; Kangis 1992; Pride and Ferrell 2008). According to Chen and Chai (2010), consumer consumption of goods and services over the last decade has increased immensely globally, that's ultimately leading to depletion of natural resources and damaging environment severely. They further added that some of the severe outcomes of ecological deterioration that has lead a massive escalation in environmental pollution, wildlife degeneration, global warming (Chen and Chai 2010). Globally, several countries including developing countries are now realizing the gravity of the threat, so they have now started initiatives to lower down the impact of non-environmental friendly activities in connection with environment. Nowadays a lot of people have diverted their attention towards green initiatives as their concern for the environment and pollution is growing. Therefore a lot of companies have started green product manufacturing and marketing.

However, according to Straughan and Roberts (1999), green products phenomena in marketing are not new; it was 1960s when greening concept evolved for the first time, to address the pollution and energy conservation issues. Later just due to social and political standing, organizations stepped ahead of these concepts to recycling, product redesigning, alternative products and packaging, as they have less adverse impact on the environmental ruin. Since the inception of 90s, environmental hazard was taken into account of the most chronic issues. The businesses existing in USA and Europe, started realizing that customers' future pur-

chase decisions would base upon environmental considerations, later this consideration was named green marketing (Lampe and Gazdat 1995).

Due to the increase in media coverage, awareness towards environmental issues has been gradually increasing. Peoples are getting more concerns about environmental-related issues as compared to the previous one. As a result, many customers start thinking environment protection as main factors in their buying behavior, increasing realizing that environmental protection is simply not the responsibility of the government but the citizens existing in the environment are mutually responsible (Fraj and Martinez 2006). Notably, in previous researches, even many customers willing to pay for green products irrespective of their expensiveness (Chen and Chai 2010; Fraj and Martinez 2006; Paço and Raposo 2008). For example, surveys about public opinion revealed that nearly 30% of consumers preferably don't hesitate to pay high premium for green energy (Eurobarometer 2003; Eurobarometer 2005; Zarnikau 2003).

Customer's attitudes and preferences are changing in favor of green products, as they have more concerns regarding their environment and these concerns are showing in their purchasing behavior. Similarly, Natural Marketing Institute revealed in Lifestyles of Health and Sustainability (LOHAS) that more than 200 billion \$ market is expected to double by year 2010 and quadruple before the start of year 2016 (Widger 2007). This finding is very encouraging for businesses that are offering or thinking to offers green products. This new dimension of green marketing provides tremendous opportunities for the companies that along with sales of new types of green products they also can make their image better towards customers. Because customers always appreciate the efforts of companies when they think that these efforts are for their better future or better environment.

No doubt, the green revolution has become viral among developed countries, in fact over the time it has been observed that receptiveness among consumers about opting green products in developing countries like Pakistan has increased. However, comparing with developing nations Pakistan is at evolutionary phase when research connected to green purchasing and environmental issues is considered. Resultantly, being considerate about consumers' appreciation for green products is critically important for the marketers from developing countries standpoint. Consequently, scholars and researchers associated with the field of marketing are mainly interested in exploring the antecedents of green purchase intention as it's helpful in the development of viable strategies for the establishment of green products (Biswas and Roy 2015; Chan and Lau 2002; Khare 2015; Ling-Yee 1997). Numerous earlier (Ha and Janda 2012; Han et al., 2010; Kalafatis et al., 1999; Kim et al., 2013; Kun-Shan and Teng 2011) studies on consumer purchase intention and behavior conducted on the perspective of developed countries specifically for assorted green products. In contrast, so far very few studies initiated in context of countries like Pakistan to note down the consumers' responses towards eco-friendly products.

Yet it's notable that several research studies (Biswas and Roy 2015; Chan and Lau 2002; Khare 2015) attempted to put a light on consumers' green purchasing intentions, among which researchers have tried to identify the factors determining consumers' purchase behavior for environment friendly products focusing industrialized countries (Biswas and Roy 2015; Chatterjee 2009; Davis 1993; Khare 2015), however the findings often be contradictory (Elham and Nabsiah 2011). In consideration of that, the outcomes may only be pertinent under stable demo-

graphical, socio-cultural, economic, geographical contexts and time. Due to the convolute nature of consumers' green purchasing behavior, often generalization is practically can't prevail under various demographical, socio-cultural, economic and geographical settings. In the support of this statement, Elham and Nabsiah (2011); Ottman (1992) found that user demand and insistence for environment oriented products are probable to be unequal within diverse market fragments as well as different cultures (Peattie 1992). Resultantly, study regarding the effects of different factors about consumers' intentions green purchase specifically for Asian markets could be advantageous.

The authors' intend to find the potential positive relationships between hypotheses (environmental knowledge, environmental concern, supposed green product price, quality and environmental attitude) to explain consumer purchasing behavior green brands. Moreover, the present research examines (1) the impact of environmental knowledge, environmental concern, supposed green product price and quality on consumers' environmental inclination; and (2) the influence of environmental knowledge, environmental concern, perceived product price and quality of a green product and consumers' environmental attitude on consumers green products purchase preference. Understanding these relationships under developing societies can enable policymakers' and marketers to surface marketing communications about the environment oriented products as well as services. Undoubtedly, considering such could reveal meaningful insights of related to the green product consumption of respective country along with the further idea to advance consistently. Moreover, pertaining research could furnish innovation for South Asian green product marketers about operation startup and expansion specifically in terms of Pakistan. Hence, the study aims to find the pertinent determinants of consumers' green purchase preferences.

The significance of the study:

Although, the promotional content about green purchasing focusing individual consumers has progressed as compared from earlier times, and so far green purchasing is nowadays trending in Pakistan, yet it's still not sufficient enough to meet the competitive needs. Though, it is observed that large companies particularly multinationals where the head office is from the UK, USA, and other European countries are promoting 'green' practices (Biswas and Roy 2015; Khare 2015). On the contrary, local businesses still have the attitude of 'wait and see'. Therefore, if the authors compare Pakistan, as well as in the wider context of South Asia with the practices adopted in the West, consumers are more aware about simply getting awareness of green products. As in Pakistan, green issues are comparatively new for all, the consumers, industries and the government, because they have never considered these issues before.

Nowadays, Pakistani consumers and companies under the line of global protocols and requirements are mature about the usage of non-environment friendly commodities, and they're cognitive about the fact refraining environment deteriorating products is in their interest, so it's one of widely discussed topics in recent years. International regulations and requirements, nowadays consumers and corporations operating in Pakistan have become more sensible about less environment friendly products as they consider it in their own welfare and interest; and that is why the issue is the most extensive topic in Pakistan under discussion (Ali et al., 2015). Hence, it would be a right time to pursue consumer research that studies factors motivating to adopt green products along with behaviors in the context of South Asia not specific to Western region (Ha

and Janda 2012). So far, the count of researches discussing green marketing conducted in the light of Pakistan is very low, to improve this void in literature, study attempts to put forward various factors that affect the green purchase intention of Pakistani consumers (Ali and Ahmed 2012).

Moreover, exploration attempts to prevail responsiveness among consumers, businessmen, and policymakers regarding the issue and to realize them that environmental degradation is also an equally important issue just like terrorism, poverty, and illiteracy (Chatterjee 2009). This research study aims to provide valuable information to policymakers, NGOs, businesses people and the government about green purchase intentions of Pakistani people. The researchers also provide many useful suggestions at the end of this study, which will help companies to direct future development in this field.

Literature Review

Conceptual understanding

Being considerate about consumers' green buying behavior is not only important for academicians and practitioners, but the phenomenon is equally critical for marketers especially for environment caring businesses as well. For that sake, many models propose the influence of different factors on consumer behavior across Pakistan. Nevertheless, few studies recommends the Theory of Planned Behavior (TPB) model to fetch out the determinants of green product purchase intention in Pakistan, that's taken as the point of departure for the current research referring Pakistani consumers'. Incidentally, TPB defines intention as the proximal determinant of behavior, i.e. promoting more engagement in a particular behavior, it would be more probable to actually engage in it (Ajzen 1985; Kalafatis et al., 1999).

The positive effect of Environmental Concern on Environmental Attitude

Milfont and Gouveia (2006); Yeung (2004) denoted environmental concern to "*consumers' emotional reactions such as worries, dislikes, compassions, toward the environmental problems*". Whereas (Dunlap and Jones 2002) declared environmental concern as "*the degree to which people are aware of environmental problems and assist struggles to solve them or signify the readiness to contribute personally to their solution*". Previous studies refer that many researchers examined the effects of environmental concern over products choice, for example, organic food (Hoffmann and Schlicht 2013), renewable energy (Bang et al., 2000), cosmetics and toiletries (Prothero and McDonagh 1992), laundry detergents (Kinneer and Taylor 1973). (Suki 2014) asserts that people mindful and concerned about environmental factor manifest positive attitude towards green products (Karatu and Mat 2015).

Schultz et al., (2004) takes environmental attitude as "*a collection of beliefs, affect, behavioral intentions a person holds regarding environmentally related activities or issues*". Lee (2009) recommends about consumers' evaluation activities focusing environmental protection. A lot of previous studies alleged to take environmental attitude as a predictor of individuals' behaviors environment such as ecological behaviors (Lynne and Rola 1988), recycling (Park and Ha 2012) and organic food consumption (Chen 2009). The climatic deterioration along with development of consumers' environmental cognition ultimately incline to adopt eco-friendly products so as to preserve the environment from further ruin (Luck and Ginanti 2009). So they deem to take pragmatic measures towards the environment conservation which is trending their per-

sonal preferences concerning eco-friendly consumption habits (Solomon et al., 2010). Consumers mostly patronize about the brand preferences, so they intend to support and contribute for a sustainable environment and a controlled climatic change (Hartmann and Apaolaza-Ibanez 2012).

In a research study, (Lee 2009) found concern for the environment is the second top predictor influencing consumers' attitudes towards the environment. Similarly, Laskova (2007) added that individuals having high environmental concerns are more likely to develop a proactive attitude towards the environment conservation against the individuals who consider themselves helpless for environment protection. Kim and Choi (2005) further substantiated this argument and added that apprehensive environmental attitude retains direct and potential impact on the green product purchasing intentions of purchasers. According to Irianto (2014), ecofriendly bothering drive the buyer to have a potentially positive attitude towards nature oriented products (Aman 2012). Hence, it is hypothesized as:

Hypothesis- 1: There is a positive and significant relationship between consumer environmental concerns and environmental attitudes.

The positive effect of Environmental Knowledge on Environmental Attitude

Fryxell and Lo (2003) considers environmental knowledge as "*general knowledge of facts, concepts, relationships concerning the natural environment and its major ecosystems*". Therefore, it encompasses public familiarity about the environmental issue, an admiration of the entire humanistic society, fundamental relationships regarding ecological facets or effects besides common conscientiousness to ensure sustainable development. Knowledge about environmental issue on individual basis is the best possible solution for pertaining problems, availability of alternatives are another aspect of problem that affect the consumers' purchasing behavior changes persistently with after certain time.

According to D'Souza et al., (2006), environmental knowledge ensures awareness, also develops potential positive attitude about ecofriendly commodities. Fraj and Martinez (2006) evaluated that environmental awareness and people's attitude, decisions and their participation are positively correlated. Haron et al., (2005) further added that if consumers' awareness about environmental issues is improved, it eventually elevates their sustainable consumption behavior (Yam-Tang and Chan 1998). Several previous researchers (Saleki et al., 2012; Gracia et al., 2010) asserted that both environmental knowledge and consumers' positive environmental attitudes have a potentially positive relation with each other. Therefore, we hypothesized as:

Hypothesis- 2: There is a positive and significant relationship between consumer environmental knowledge and consumer environmental attitude.

The Positive Effect of Perceived Product Price & Quality on Environmental Attitude

Perceived Product Price & Quality

This study referred by Zeithaml (1988) terms ecological product perceived quality as "*the customer's judgment about a brand's (or a product's) overall environmental excellence or superiority*". Typically, the prices of green products in USA and Europe are higher due to the additional disposal process charges and/ or production process or the packaging reengineering. According

to Mahenc (2008), takes green product high pricing as an indicator for environmental performance, due to the fact that the production of less polluting products is relatively expensive. Research surveys indicate that consumers of developed countries are voluntarily convinced to pay little more for green products, due to relatively high motivated to reflect concerns about environment. For example, Reitman (1992) evaluated that buyers are convinced to pay nearly 7 to 20% additional of the green products price. Similarly, Bhate and Lawle (1997) found similar findings which showed that people are willing to purchase environment friendly commodities rather than the green merchandises with high prices. On contrary, the findings Bhate and Lawle (1997) and D'Souza et al., (2006), takes up general perception about green products that if the green products have low quality and high price, then there is a negative relation between traditional products and customer's purchase intention. Therefore, consumers might have reservations in this regard that the green products available to them must not have quality compromised, alternatively it would deviate their purchase intentions.

Several researchers have reported that environmental reason is not only the motivation behind the purchase of green products, as customers are willing to adopt substitutive attributes to contribute in the betterment of environment (Gan et al., 2008). This reveals that traditional characteristics of product such as price, quality, and brand name are still the most important factors that consumers consider while making purchasing decisions (Kim and Choi 2005). Therefore, businesses have recognized that future prospects of their products would remain be unprogressive, unless they adhere compatibility with customers' environment conservation concern with a major aspiration for high-quality products that are competitive against the traditional counterparts (Wong et al., 1996). Moreover, it seems completely irrational to pay higher for the commodities that doesn't satisfy basic needs of consumers such as high quality, competitive price, etc., whatever no matter how much they're beneficial from environmental standpoint (Schlegelmilch et al., 1996; Wong et al., 1996).

Similarly, (Bonini and Oppenheim 2008) argued that mostly consumers are very particular about the rates of green commodities, so they precisely compare their price with the conventional products. In the same way, (Anvar and Venter 2014) and (Hansla et al., 2008) documented that customers might have encouraging attitudes towards the purchase of green products or recycling, but it can't be predicted whether they're willing to pay more against the high prices. Hence, it is hypothesized as:

Hypothesis- 3: There's a positive and significant relationship between perceived product price & quality of a green product and environmental attitude.

The Positive effect of Environmental Knowledge, Concern, Assumed Product Price & Quality and Environmental Attitude about Green Purchase Intention

Netemeyer et al., (2004) and Morrison (1979) defines intention of purchase as *"the likelihood that a consumer would buy a particular product resulting from his or her environmental needs"* whereas green purchase intention abstracted by (Chan 2001) as *"the probability and willingness of a person to give preference to products having eco-friendly features over other traditional products in their purchase considerations"*. Chan (2001) and Beckford et al., (2010) added that purchase intention of green products is a significant indicator to forecast about their purchase

behavior, which indicates that purchase intention affects positively the likelihood of customer's purchase decision regarding ecofriendly products. Moreover, preceding studies clearly reflects that some consumers' exhibit buying at higher actual rates of products than other kind of customers with no intention of buying (Brown 2003).

According to Ajzen (1991), more would be the positive attitude towards the behavior, if there's a stronger intention to reveal such behavior. Some other past studies (Sukato and Elsey 2009; Wilson 2007; Blackwell et al., 2006) have indicated that a belief is a good predictor to measure intention. For a belief, attitudes, social aspects, experiences, and feelings are also some factors that actively affect. Therefore, there is a strong need to realize consumers believe about green marketing and action that make them choose environment friendly commodities. In terms of non-green (Rahab and Wahyuni 2013; Ibragimova et al., 2012; Kuang et al., 2012) and green (Magistris and Gracia 2008; Gracia et al., 2010; Mostafa 2006) products, there're several researchers who found a significant association between attitude and intention.

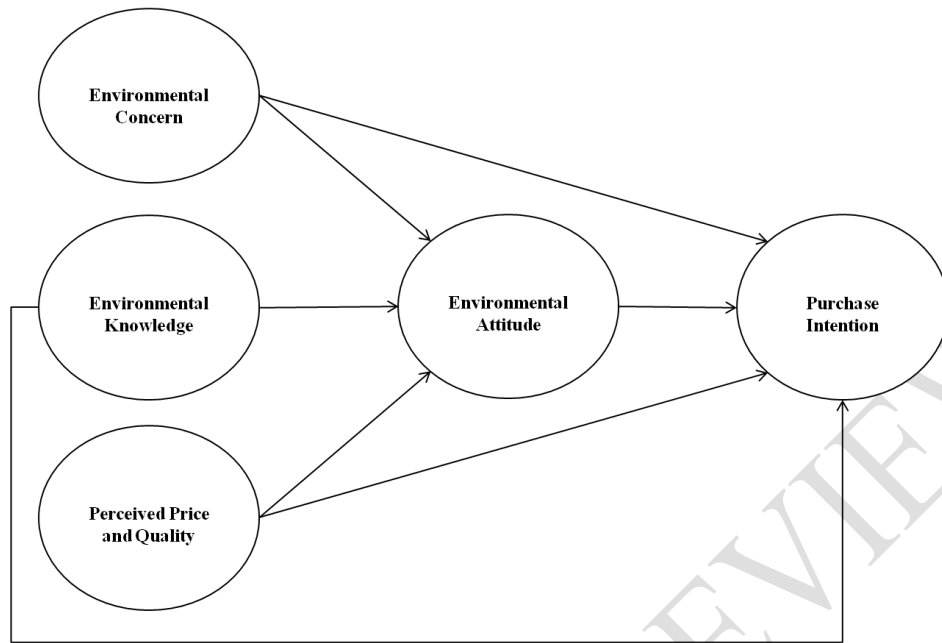
Prior investigators also discovered direct influence on the green purchase intention of consumers' due to their concerns about environment (Fraj and Martinez 2006; Haron et al., 2005; Yam-Tang and Chan 1998). Adding further about previous studies, a direct relationship between consumers' knowledge about environment and purchase intention of consumers green commodities was examined, in their light it's proposed that enhancement of environmental knowledge could be favorable to boost the green purchase intention of buyer (Kim and Choi 2005; Laskova 2007; Mostafa 2009). A link to the perceived price and quality of the product with consumers' green purchase intention was also studied. It was also discovered that purchase intention lays deep impression due to perceived price and quality of green products (Anvar and Venter 2014; Bonini and Oppenheim 2008; Hansla et al., 2008). Therefore, we hypothesized as:

Hypothesis- 4: A positive and substantial association between consumer ecological knowledge and consumer green product purchase intentions exists.

Hypothesis- 5: A positive and substantial association between consumer environmental concerns and consumer green product purchase intentions exists.

Hypothesis- 6: A positive and substantial association between assumed product price & quality of a green commodity and consumer intension to purchase green product exists.

Hypothesis- 7: A positive and substantial association between consumer environment friendly attitude and consumer intentions to purchase green product exists.



Theoretical Framework

Methodology

Sample and Data Collection

To provide necessary evidence, the respondents were given a survey instrument preferably a self-administered questionnaire. For this purpose, group team members developed a question paper with the help of a supervisor. The reason behind the preference of questionnaire is because this technique was used in the previous studies by the researchers to collect the data about green products, along with that there are other benefits of this technique such as low cost and minimal intervention of the researcher. Along with that technique also assists respondents to take sufficient time to complete questionnaire to input responses according to their comfort, which ultimately reduces the interference of researcher.

The researchers deploy convenience sampling technique to collect the data while observing the theme of research from Quaid-e-Azam University Islamabad (QAU), FAST National University, International Islamic University Islamabad (IIUI) and Muhammad Ali Jinnah University (Capital University of Science and Technology (CUST)) that're four prestigious academia of Islamabad. The researchers chose Islamabad because the selected universities situates in the city and its population is well educated and understand the need and importance of research. The final sample consisted of 313 students of these selected universities. Apart from 313 responses, we drop 14 uncompleted questionnaires. Due to time and cost constraints, the researchers used a convenience sampling technique. In addition, the researchers selected the students' sample. First, there is a common perception that educated respondents are more knowledgeable, familiar and concerned about the environment than others. Secondly, the researchers collected data from students owing to common characteristics shared by the target population. Finally, our questionnaire comprised of 22 items. We collected data from targeted respondents through face-to-face technique by using hard paper questionnaire in this regard. The researchers collected data from dif-

ferent areas of Islamabad, Rawalpindi, and Taxila from **30th September 2020 19 December, 2020.**

Scale Development

The current study questionnaire has two parts. The first part contained demographic information and the second part contained the variables and their items. The demographic profile included four items: Gender, age, education level, professional status. The researchers included eighteen questions in questioner related to variables. Four items measuring the degree of environmental concern of the survey respondents' were used adapted from (Mostafa 2007) and (Roberts and Bacon 1997). Similarly, the researchers adapted four items scale measuring environmental knowledge from Chan and Lau (2002) and Kaiser et al., (1999). Moreover, to measure the consumers' perception towards perceived product price and quality of a green product, two questions were adapted from the study of D'Souza et al., (2007). Furthermore, following the measurement scale by Chen (2009) and Laroche et al., (2001), the environmental attitude consisted of four indicators. Finally, green purchase intention was measured using the four-item scale adapted from Chan and Lau (2002). A little modification in scales was made in order to make them simple and easy to understand for the respondents of the study. The researchers measured all items on a five-point Likert-type scale ranging from strongly disagree to strongly agree (0 to 5).

Sample Characteristics

The sample composed of 313 collected data from different areas of Islamabad, Rawalpindi, and Taxila from **30th September 2020 19 December, 2020** among which male respondents participated with high margin than female respondents i.e., 73.5% of male (230 respondents) and 26.5% of female (83 respondents, see Table I). Majority of the sample i.e. almost 40 % is composed of people who are “*between 21-25*” years old, 30.4% are “*between 26-30*” years old, 19.8% are “*less than 20*” years old, so we have a minority which is “*more than 30*” years old (10.2 5%). In terms of education level, the majority of the respondents were “*Master*” (50.5%) followed by “*Bachelor*” (47%) and “*Ph.D.*” respectively (2.6%). Finally, an overwhelming majority of respondents are students (73.5% i.e. 230 respondents) followed by those who were doing part-time jobs (26.5% i.e. 83 respondents).

Table- I: Demographics of the final sample		
	F	%
Gender		
Male	230	73.5
Female	83	26.5
Age		
Less than 20	62	19.8
Between 21-25	124	39.6
Between 26-30	95	30.4
More than 30	32	10.2
Education		
Bachelor	147	47
Master	158	50.5
Ph.D.	8	2.6
Profession status		

Full-time student	230	73.5
Part-time employment	83	26.5
N= 313		

Source: IBM Corp. Released 2019. IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp

Data Analysis and Results

Based on the literature review and conceptual model, correlation analysis followed by regression analysis was used for the analysis of data.

Reliability Analysis

Reliability tests show that the Cronbach's α value of environmental concern is 0.81, environmental knowledge is 0.71, perceived product price & quality is 0.84, environmental attitude is 0.75 and purchase intention is 0.77.

Hypotheses Testing:

Indicated in Table- II shows means, standard deviations, Cronbach's alphas of each construct as well as Pearson correlation analysis of each research variable.

The results reveal that environmental concerns ($r=0.23^{**}$, $B= .33$, $t\text{-value}= 3.77$, $p< 0.05$), environmental knowledge ($r=0.35^{**}$, $B= .31$, $t\text{-value}= 3.51$, $p< 0.05$) and perceived product price and quality ($r=0.34^{**}$, $B= .29$, $t\text{-value}= 3.30$, $p< 0.05$) are positively and significantly correlated with consumers' environmental attitudes, hence supporting H1, H2 and H3. In terms of effect size, environmental knowledge contributes high to consumers' environmental attitude, which suggests that environmental knowledge of an individual play a more important role to enhance his/ her environmental attitude. In other words, environmental concerns, high environmental knowledge, and perception about perceived product price and quality of a green product enhance the consumers' positive environmental attitude.

Similarly, results also reveal that environmental concerns ($r=0.29^{**}$, $B= .32$, $t\text{-value}= 3.50$, $p< 0.05$), environmental knowledge ($r=0.25^{**}$, $B= .33$, $t\text{-value}= 4.21$, $p< 0.05$), perceived product price and quality ($r=0.32^{**}$, $B= .30$, $t\text{-value}= 3.59$, $p< 0.05$) and environmental attitude ($r=0.27^{**}$, $B= .34$, $t\text{-value}= 4.25$, $p< 0.05$) are positively and significantly correlated with consumers' intention to purchase a green product, thus supporting H4, H5, H6 and H7. In terms of effect size, environmental attitude contributes high to consumers' green purchase intention followed by environmental knowledge, perceived product price, and quality, environmental concerns respectively, which suggest that environmental attitude plays more important role to enhance consumer green purchase intention. In other words, positive environmental attitude, high environmental knowledge, competitive perceived product price, and quality, high environmental concerns enhance consumer green purchase intentions.

Table II. Means, Standard deviation and Correlations among the variables

	Construct	Mean (S.D)	Cronbach's alpha	1	2	3	4	5
1	EC	3.31(0.93)	.81	1				
2	EK	3.45(0.72)	.71	.30**	1			

3	PP&Q	3.60(0.81)	.84	.33**	.31**	1		
4	EA	3.34(1.07)	.75	.23**	.35*	.34**	1	
5	GPI	3.49(0.92)	.77	.29**	.25*	.32**	.27**	1

Notes: n = 313 **Correlation is significant at the 0.05 level (2-tailed)
 EC= Environmental concern, EK= Environmental knowledge, PPQ= Perceived price & quality, EA= Environmental attitude, GPI= Green purchase intention.

Source: IBM Corp. Released 2019. IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp

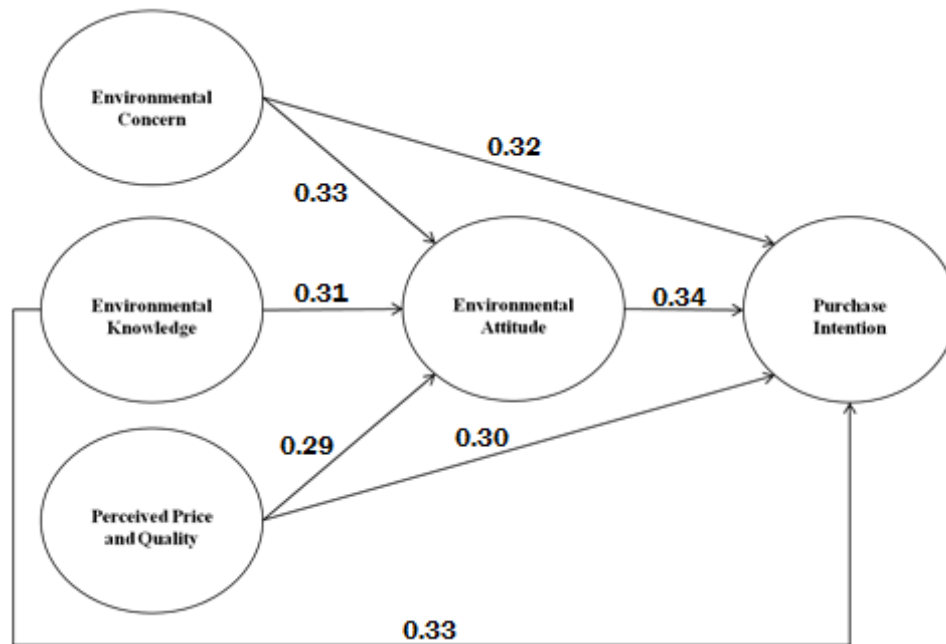


Table- III. Results of Regression Analysis

Hypotheses	Description	(β)	t- value	Sig.	Results
H: 1	EC → EA	0.33	3.77	0.01	Accepted
H: 2	EK → EA	0.31	3.51	0.00	Accepted
H: 3	PQ → EA	0.29	3.30	0.03	Accepted
H: 4	EC → GPI	0.32	3.50	0.02	Accepted
H: 5	EK → GPI	0.33	4.21	0.00	Accepted
H: 6	PP&Q → GPI	0.30	3.59	0.00	Accepted
H: 7	EA → GPI	0.34	4.25	0.00	Accepted

Notes: n = 313, Arrow indicates the direction of impact.

Source: IBM Corp. Released 2019. IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp

Mediation Analysis

A- Mediation results of Environmental Attitude between Environmental Concern and Green Purchase Intentions

As apart from direct relationships, there were also indirect relationships between variables in the model, therefore, the researchers also tested for mediation effects. First, the researchers also postulated that environmental attitude mediated the relationship between environmental concern and intention to purchase a green product. The results of step - 1 in Table IV indicated that “environmental concern value was positively related to environmental attitude” ($\beta = 0.33^{**}$; $t = 3.77$, $p < 0.05$). Moreover, results in step- 2 show that environmental attitude was positively associated with green purchase intention ($B = .32^{**}$, $t\text{-value} = 3.50$, $p < .05$). Moreover, as shown in step- 3 in Table IV, environmental concern was also significantly and positively associated with green purchase intention ($B = .29^{**}$, $t\text{-value} = 3.30$, $p < .05$). This indicates that environmental attitude partially mediates the relationship between environmental concern and intention to purchase a green product.

	Description	B	t-value	p-value
Step 01	EC → EA	0.33	3.77	0.01
Step 02	EA → GPI	0.32	3.50	0.02
Step 03	EC → GPI	0.29	3.30	0.03

Note: n=313, * $p < .05$; ** $p < .01$, Arrow indicates the direction of impact.

Source: IBM Corp. Released 2019. IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp

B- Mediation results of Environmental Attitude between Environmental Knowledge and Green Purchase Intentions

Similarly, the researchers postulated that environmental attitude mediated the relationship between environmental knowledge and intention to purchase a green product. The results of step- 1 in Table V indicated that “environmental knowledge value was positively related to environmental attitude” ($\beta = 0.31^{**}$; $t = 3.51$, $p < 0.05$). Moreover, results in step- 2 show that environmental attitude was positively associated with green purchase intention ($B = .33^{**}$, $t\text{-value} = 4.21$, $p < .05$). Moreover, as shown in step- 3 in Table V, environmental knowledge was also significantly and positively associated with green purchase intention ($B = .29^{**}$, $t\text{-value} = 3.30$, $p < .05$). This indicates that environmental attitude partially mediates the relationship between environmental knowledge and intention to purchase a green product.

	Description	B	t-value	p-value
Step 01	EK → CA	0.31	3.51	0.00
Step 02	EA → GPI	0.33	4.21	0.00
Step 03	EK → GPI	0.29	3.30	0.03

Note: n=313, * $p < .05$; ** $p < .01$, Arrow indicates the direction of impact.

Source: IBM Corp. Released 2019. IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp

C- Mediating role of Consumer Attitude in between Perceived Product Price & Quality of a Green Product and Consumers Green Purchase Intentions

Finally, the researchers postulated that environmental attitude mediated the relationship between perceived product price & quality and intention to purchase a green product. The results of step- 1 in Table VI indicated that “perceived product price & quality value was positively related to environmental attitude” ($\beta = 0.36^{**}$; $t = 2.98$, $p < 0.05$). Moreover, results in step- 2 show that environmental attitude was positively associated with green purchase intention ($B = .31^{**}$, $t\text{-value} = 3.39$, $p < .05$). Moreover, as shown in step- 3 in Table VI, perceived product price & quality was also significantly and positively associated with green purchase intention ($B = .19^*$, $t\text{-value} = 2.84$, $p < .05$). This indicates that environmental attitude partially mediates the relationship between perceived product price & quality and intention to purchase a green product.

	Description	B	t-value	p-value
Step 01	PQ → CA	0.36	2.98	0.01
Step 02	EA → GPI	0.31	3.39	0.00
Step 03	PP&Q → GPI	0.19	2.84	0.03
Note: n=331, * $p < .05$; ** $p < .01$, Arrow indicates the direction of impact.				

Source: IBM Corp. Released 2019. IBM SPSS Statistics for Windows, Version 26.0. Armonk, NY: IBM Corp

Conclusion, Discussions, and Implications

The empirical results show that environmental concern, environmental knowledge, and perceived product price & quality of a green product has statistically significant and positive influence on consumer environmental attitude and consumer green purchase intentions. Similarly, consumer environmental attitudes also had statistically significant and positive impact on consumer green purchase intentions. This implies those consumers' purchase intentions are influenced if they have high environmental concerns (Fraj and Martinez 2006; Haron et al., 2005; Yam-Tang and Chan 1998), environmental knowledge (Kim and Choi 2005; Laskova 2007; Mostafa 2009), and if the price and quality of a green product (Wong et al., 1996; Schlegelmilch et al., 1996; Bonini and Oppenheim 2008) are competitive. Moreover, consumers' positive attitude toward the environment has also a positive and direct effect on consumer green purchase intentions (Ajzen 1991; Sukato and Elsej 2009). In the current research, all seven proposed hypotheses are supported. The empirical results suggest further that consumer environmental attitude partially mediates the relationship between environmental concern, environmental knowledge, and perceived product price & quality, intention to purchase a green product.

However, the results indicate that it is extremely important for the companies to ensure that along with green attributes, the functional performance of their products is very important to attract green-conscious customers. Similarly, high environmental concerns, environmental knowledge, competitive price, and quality of a green product and positive environmental attitude

play an important role to influence consumers' purchase intentions (Kim and Choi 2005; Haron et al., 2005; Anvar and Venter 2014). From another perspective, when the traditional product attributes of the green brand are at par with competing brands, the green attributes will act to serve as the source of additional value that could generate consumer preference towards such brands. One can infer that the results confirm the traditional thinking even in green products that without the provision of core functional quality and competitive price, organizational effort to successfully attract green-conscious customers with green product attributes will face difficulties.

The findings have significant implications that may help the marketers to develop suitable strategies for green products and their purchasing. With the increase of environmental knowledge and environmental concerns among consumers, green products demand in develop as well as developing countries are rising. Moreover, green products branding is one of the expected trends for businesses in developing countries, its concept has been widely accepted and applied in recent years. Because the environmental concerns have increased consumers desire for green brands such that consumers are more willing to purchase products that are environmentally friendly and also offer traditional brand features such as competitive price and high quality etc. This also indicates that ignoring the important quality elements of a brand could be costly to marketers who failed to realize the importance of traditional brand attributes whilst embracing green marketing initiatives. In addition, green branding can allow businesses to access new markets, to enjoy more competitive advantages, to increase their profitability by selling at higher prices with higher profit margins.

Green products are at its initial stage in Pakistani markets and consumers also have less knowledge about green marketing and green products. This is a new concept and literature for promoting green products for the consumers still lacking. With the passage of time, consumers and some corporations are going towards environmentally friendly products due to some international regulations and concerns from international environmental regulations. Companies are showing their concerns about the less environmentally friendly products due to their own survival and business interests, that why the issue of the green product is a very hot topic nowadays in Pakistan. Although Pakistan is currently facing some other problems, therefore, this issue has been completely neglected by the businesses, NGOs as well as by the government. Other issues also have importance but the researchers have to save the environment for our people and for our future generations. For this purpose, the researchers together have to play our role to save this environment by adopting green practices at the individual and organizational levels. A majority of the Pakistani population consist of youth, therefore, the researchers must try their best to target youth as much as possible to spread this message so that the researchers can check the behavior of younger people.

In the current study, general consumers showed a positive attitude towards green products. Most of the respondents were agreed that it is the responsibility of every citizen to make efforts in protecting the environment. Companies need to make special programs for the promotion of green products and green practices. In these programs, companies need to highlight the available green alternatives and their advantage for the current as well for future generations.

Green products also give the new product development and new business market opportunities to the companies, as companies always seeking new business opportunities for their survival. So,

the researchers think, companies should take these opportunities seriously and should immediate action plans towards green products. Along with these products development process, it is the social responsibility of the companies to initiate programs to educate the consumers about the importance of these programs, challenges faced by the environment and how the researchers can save our environments through green products. Furthermore, a business may discourage anti-environmental practices in their manufacturing process and should offer recyclable products which are less harmful to the environments. Secondly, the researchers know that social influence has a very high impact on youth adults in their decision-making process. Hence, companies should have to use word-of-mouth or referral marketing may be effective tools in promoting green products in adults. The researchers know that now's a day's internet technologies like, blogs, Twitter and Facebook are very famous and common among the adults, so marketers of green products can use these online social networks for advertising or promote their products.

Limitations and Future Research Directions

In the current study, all of the respondents were Pakistani students studying at various universities in Pakistan. The study, however, would have yielded more and varied answers should it be conducted in a comparative study mode by considering some other developing country sample such as India together with Pakistani sample. Moreover, in this study, the researchers measured only consumers' intentions to purchase a green luxury product. For this reason, actual purchase behavior towards green products might lead to different research results. Therefore, future researchers can study the actual behaviors of consumers who might have purchased at least one green product to cover intention-behavior discrepancy. Furthermore, due to limited resources and time constraints, the researchers collected data only from four universities located in three cities, from a student sample. By considering this very limitation, it is recommended that future researchers shall utilize a broader demographic profile to analyze respondents. As young adults are not the only green consumers. There may be other age groups like middle-agers and elderly people who are also potential green consumers. Finally, the researchers only consider four research variables that can possibly affect consumers' green purchase intention. It is strongly recommended that future studies should include other most relevant variables such as demographic variables, cultural variables, social and psychological variables to improve the study model.

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