

## **Determinants of Pakistani Consumers' Green Purchase Behavior: Some Insights from a Developing Country**

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### **Abstract:**

*Many studies have been conducted about consumers' green purchase behavior (GPB) in Europe and North America. This research paper examines Pakistani consumers' intention to buy environmentally friendly products. The primary focus of this research paper was to examine and investigate the hypothesized relationship between predictor and criterion variable i.e. green purchase attitude (GPA) and green purchase intention (GPI). The second was to determine the relationship of criterion variable and outcome variable i.e. GPI and GPB. Finally, the third objective was to ascertain the moderating effect of perceived product price and quality (PPP&Q) between GPI and GPB. Survey was conducted in four university of Rawalpindi and Islamabad. The target population for this study was the under graduate, graduate and postgraduate students. The sample consisted of 400 participants and convenience random sampling was used. The results from this study showed that consumers are ready to buy green products more often, but as for as the price and quality is concern, green products must perform competitively just like the traditional products. Furthermore, this study also discusses how the present findings may help the Pakistani government and businesses/ green marketers to fine-tune their environmental program.*

**Key words-** GPA, GPI, GPB, PPP&Q, Rawalpindi, Islamabad, International Islamic University

### **1.0. Introduction**

In recent times, the environment has emerged as a hot issue for societies, governments, in addition to business organizations. Its significance originates from escalating environmental degradation such as solid wastes, ozone depletion, global warming, and air pollution. It is observed that different activities of business organizations like sourcing, manufacturing, logistics, and marketing have a negative impact on the environment and also considered to be the source of most of the environmental problems (Eltayeb, Zailani & Jayaraman, K, 2010). Though, environmental destruction has always been part of the human story. All through time, people's health, both on the individual and the community level have been affected through environmental problems (Khwaja, 2008).

However, current environmental dreadful conditions are ever more menacing consumer health and wellbeing globally. Therefore, consumers are becoming more sensitive in their environmental attitudes, preferences, and purchases (Sarigöllü, E., 2009). Over the past decades, environmental problems and issues have been extensively recognized and discussed. These days, a large number of respondents all over the world state that they are concerned or very concerned with environmental problems (Diekmann & Franzen, 1999; Dunlap & Mertig, 1995). Chan and Lam (2002) also revealed that during the past few decades, concerns about environmental dreadful conditions have been increasing. Because customers have understood the significance of protecting the environment, environmentalism has become an essential subject in the marketplace (Kalafatis et al., 1999). At present, customers are ever more aware of the seriousness of environmental degradation, resulting more ecologically consciousness and desire to purchase eco-friendly products and services, favoring businesses that prefer environmental practice (Kalafatis et al., 1999; Laroche et al., 2001; Roberts, 1996).

According to Makower (1993), the 1960s was the age of “green awakening”, the 1970s was the years of “taking action” the 1980s was an “accountable” time and the 1990s was “power in the marketplace” time. Over those years, people started demanding environmentally friendly products and services, and the organizations felt political and public pressure to go green. The necessity to increase consumers’ awareness of corporate efforts to meet sustainable standards, the need to identify consumers’ preferences for green products, the possibility of charging a premium price gave rise to a new trend in the marketing field, the so-called Green marketing (Peattie and Crane, 2005). In spite of this, there are also a number of research studies showing that while environmental problems, consequently environmental concerns have hit the public agenda behavioral changes have not-or not to the same extent (Inglehart, 1995; Oliver, 1999; Tarrant & Cordell, 1997).

Like Dunlap, Van Liere, Mertig, & Jones (2000) and Kaplan (2000) reported that though, a lot of people are aware of and be concerned about environmental issue, this is not always reflects in behavior. In the green section of consumer psychology, mostly researchers have been made efforts to explicate the gap between consumers’ reported attitudes and their actual buying behavior. In this regard, they often used Ajzen’s ‘Theory of Planned Behavior’ (Kalafatis, S. P., Pollard, M., East, R., & Tsogas, M. H, 1999). This theory described that intentions towards an act are determined by attitudes, perceived control and subjective norms. Intention, in turn, may lead to actual behavior. Psychologists have examined values, beliefs, motivation and attitudes in order to comprehend this inconsistency and why some people engage in environmentally friendly behavior, while others do not (Allen & Ferrand, 1999; Dunlap, & Mertig, 1995; Nordlund & Garvill, 2002). Even though, there are many factors which interfere in this process, with an impact on whether or not the ecologically conscious attitude will result in actual behavior, which is the purchasing of green products. Researchers identified many factors as influencing this process include GPA, environmental knowledge (Mostafa, M. M, 2006), perceived product price and quality (D’Souza et al., 2007), company’s environmental reputation (Schwepker & Cornwell, 1991), environmental concerns (Phau & Ong, 2007) and credibility of environmental advertising (Thøgersen J, 2000).

In many developing nations such as Pakistan, green buying is relatively at its early stage of its development. Therefore in order to find out the relationship of consumers GPAs with consumers GPIs, and to understand and identify the factors which can fill up the gap between consumers reported intention and their purchase behavior; still there is a need of research to extend the findings from other new streams. These new streams may include the moderating and mediating role of different variables which may affect the consumer attitude from different angles. After exploring these new streams the researchers could be able to give more inclusive understanding of complicated relationship between consumer GPIs and GPB, and can propose new discoveries which can enhance the generalizability of results not only in developed countries but also in less developed countries. Therefore, this study is although similar to the previous studies like the determinants of consumers’ GPB but it will extend the existing literature on sustainable consumption by investigating the moderating role of PPP&Q which was unobserved in the previous studies. Moreover, despite the fact that environmental concerns in the developed countries are an essential part of many social, economic, and political aspect of their life, we know little about how people in developing countries especially in Pakistan view the environment. Therefore, the primary focus of the research paper was to examines and investigate the hypothesized relationship between predictor and criterion variable i.e. GPA and GPI. The second was to determine the relationship of criterion variable and outcome variable i.e. GPI and GPB. Finally, the third objective was to ascertain the moderating effect of PPP&Q between GPIs and GPB.

## **2.0. Literature Review**

Business sustainability is the concept that has received substantial attention from both academicians and practitioners, and environmental concerns have brought about changes in consumer demands and behaviors (Mendles and Polonsky, 1995). A lot of customers show amplified environmental awareness and inclination for environmentally friendly businesses and their products, unveiling their keenness to purchase and pay more for green products/services (Manaktola and Jauhari, 2007; Vandermerwe and Oliff, 1990). Recently, Athens Laboratory of Research in Marketing in collaboration with the Center of Sustainability done a research about the green marketing revealed above ninety two percent of customers has a favorable attitude concerning the businesses that are susceptible on ecological issues (Papadopoulos et al., 2009). Beside, environmentally concerned person who believe that pollution is a problem and also have a favorable attitude toward greening environment are more inclined to purchase green products. Hence, as people become aware of environmental problems, their attitudes and purchase intentions may in turn change.

Ultimately, by sharing information about environmental problems, we can convince even those who do not currently favor green purchasing (Schwepker-Jr, C. H. & Cornwell, T. B. 1991). In marketing literature purchase intention has been an important concept. To forecast the adaptation of new products as well as repeat purchases of existing ones, most companies used consumers purchase intention. Prior studies have exposed that consumer with intentions to buy product exhibit higher actual buying rates than those customers who demonstrate that they have no intention of buying (Brown, 2003). In this research thesis, the researchers take customer GPI as a dependent variable, whereas customer GPB is the outcome of customer GPI. According to Blackwell et al. (2001), purchase intention represent to what consumers think they will buy. Eagly and Chaiken (1993, p. 168) argued that intention represents a person's conscious plan to exert effort to carry out a behavior. Moreover, behavior towards a particular object is approximated by an intention to perform that behavior, cited by Malhotra & Mccort (2001).

According to Chan (2001) and Beckford et al., (2010) research studies, GPI is a significant predictor of GPB, which means that purchase intention is positively affect the probability of a customer decision that he will buy green products. Straughan, R. D. and Roberts, J. A. (1999) argued that a person with positive ecological behavior will prefer to buy these green products more often, as the positive indication of one's behavior for environment will increase the likelihood to choose these products with greater frequency (Cornelissen et al. 2008). However, still there is a need that business personnel and government together take initiatives to educate and persuade people for green purchase decision. Moreover, it is found that there is a positive relationship between environmental awareness and people attitude, decisions and finally participation (Haron et al. 2005: Fraj, E, & Martinez, E., 2006: Yam-Tang & Chan, 1998). A study conducted by Polonsky, M. J. (1994), concluded that consumer put too much responsibility on businesses and government agencies for safeguarding the environment and, they do not consider themselves as a part of this process, and are not very much devoted in this regard.

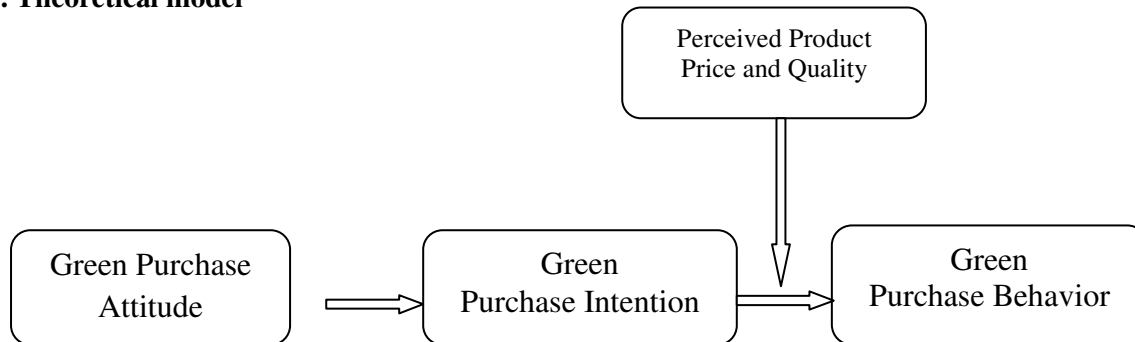
Therefore, green marketing does not strongly influence all consumers, thus it is necessary to identify and target environmentally concerned market segments (Lampe & Gazdat, 1995). Like in Europe and the United states where the prices of green products have typically been higher to reflect the additional costs of reengineering the production process, the disposal process or the packaging. Because, a high price of green product is an indicator of environmental performance, because less polluting products are more costly to produce (Mahenc, 2008). However, because of increase environmental concerns consumers are willing to pay little more for green products. Furthermore, a survey indicated that consumers are ready to pay from 7 to 20% additional for green products (Reitman, 1992). Besides, Bhate and Lawle (1997) indicated that a larger number of people have considered the prices of the green products higher than others; however even though they are ready to buy these green products. Contrary to these findings D'Souza et al., (2006) reported that generally perception of green products is negatively associated with customer's intention to purchase them if they are of higher prices and low quality in comparison to traditional products.

Consequently, it may be argued that there is an expectation on the part of customers that all products offered should be environmentally safe without a need to sacrifice quality. Hence, as for as the product quality is concerned, green consumes will not compromise on it, so businesses must enhance green product quality as well as focus on environmental benefits of a product, and share these aspects with customers in order to achieve the recognition in the market (D'Souza., Taghian & Lamb, 2006).Schlegelmilch., Bohlen and Diamantopoulos (1996) recommended that those organizations aiming to enhance market penetration of the existing green products offerings must launch an advertising campaign directed at increasing concern about environmental quality in the consumer base.

Second, organizations make it possible that their products perform competitively in other dimensions. If these two things are achieved, then environmental considerations will no longer take back seat in purchasing decision. Furthermore, perceived risk is lower in most popular brands than for those less well-known. So customers generally trust on these brand and are not ready to compromise on quality. Therefore like non-green alternative, green product must function effectively (Pickett-Baker & Ozaki, 2008).According to Tang et al., (2004), a wealth of literature shows that there is a troublesome gap between what consumers says, they will do and how they actually behave. Most of the consumers say that they choose a product because of its environmentally friendly nature, but they do not make actual allocations of dollars in purchases. Therefore, environmental concerns are not the only reason for the customers to purchase environmentally friendly products, and also they do not agree to trade-off other product attributes for a better environment.

This reveals that traditional product characteristics such as brand name, its price and quality are still the most important ones that consumers considered when making purchasing decision (Gan., Wee., Ozanne & Kao, 2008). Another study revealed that many consumers are unwilling to forgo essential product benefits during their purchase decision. So, green products must also perform competitively not only according to environmental aspects, but also on the basis of other important product characteristics for instance convenience or durability (Diamantopoulos, A., Schlegelmilch, B. B., Sinkovics, R. R. and Bohlen, G. M, 2003). Moreover, now Firms recognized that the future prospects for green goods remain bleak, until/ unless they can balance environmental compatibility with customers’ primary desire for high quality products that perform well. Because, it is not comprehensible for customers to pay more for a product that does not offer basic benefits, whatever the environmental benefits (Wong, V., Turner, W. & Stoneman, P., 1996).

**2.1. Theoretical model**



**2.2. Research hypothesis**

1. GPA is positively correlated with GPI.
2. GPI is positively correlated with GPB.
3. PPP&Q moderates the relationship between GPI and GPB.

**3.0. Methodology**

**3.1. Subject**

Survey was conducted in four university of Rawalpindi and Islamabad. The universities were International Islamic University Islamabad (IIUI), Muhammad Ali Jinnah University (MAJU), Quaid-i-Azam University (QAU) and Foundation of Applied Science and Technology (FAST). The target population for this study was the under graduate, graduate and postgraduate students. Business students are chosen as there is a common perception among people that these students are more knowledgeable and concerned about the environment than students belong to other disciplines. The sample consisted of 400 participants, and due to time and cost constraints convenience random sampling was used to obtain data from these respondents.

**3.2. Sample characteristics**

<b>Table I. Respondents' Demographic Profile</b>	<b>Frequency</b>	<b>%</b>
<b>Gender</b>		
Male	210	55.7
Female	167	44.3
<b>Age</b>		
Between 20 to 24	277	73.5
Above 24	150	26.5
<b>Academic program</b>		
Bachelors	182	
Master	136	36.1
MS/PhD	59	15.6

Table I shows the demographic profile of the respondents. According to this table, males comprised about 56, while female constituted 44 per cent of the sample. The profile of the respondent discloses that out of 377 respondents, 277 respondents were between 20 to 24 years of age, whereas 150 were above 25 years of age.

Then researcher divided educational level of the respondents into three categories i.e. Bachelor, Master and MS/PhD. One hundred and eighty students were those who were doing bachelors, similarly one hundred and thirty six were doing Masters, and finally MS/PhD category comprised of fifty nine students.

**3.3. Procedure**

Questionnaire was self administered. The research team visited each of these four universities. A total of four hundred questionnaires were distributed among the male and female respondents in four universities. Twenty three respondents did not complete their question papers. Therefore, researchers drop these twenty three uncompleted question papers. Three hundred and seventy seven were those respondents who completely filled their question papers. Before the disbursement of these questionnaires to students; the research team introduced themselves and explained the purpose of their visit, and then brief the students about the concept of green marketing, GPI and environmentally friendly products/green products. Questionnaires of one printed pages, consisted twelve items/questions were circulated among respondents, and approximately 8 to 10 minutes time were required to complete it.

**3.4. Measure/Instrument**

Due to their established reliability and validity all these constructs were carried out from marketing perspective. Three statements were used to measure respondents’ intention to engage in green purchases (cf. Li, 1997; Taylor & Todd, 1995). Likewise, for measuring the variable of PPP&Q D’Souza et al. (2007) has developed items and researcher used these items in this study. While for measuring the variable of GPB, research team used the item from Lee, K. (2008) study. GPA was measured using a three-item scale found to be valid and reliable (Taylor & Todd, 1995). A questionnaire was developed. It has two parts. First part contained demographic information and the second part contained the variables and their items. In order to measure, the scale was adopted. The scale contains 12 items. Each was a measured on five-point Likert scale with response options ranging from strongly agree to strongly disagree.

**3.5. Pilot study**

Out of four hundred questionnaires, 377 were selected to investigate the hypothesized relationship between the variables. Prior to further data collection, researcher conducted a pilot study to test the suitability of the instruments used in this study. A total of 30 questionnaires were circulated among university students, collected, and analyzed, so that the reliability of the instrument can be checked. The results of the pilot study confirmed the suitability of the used instruments. Table 1 reveals the results of Cronbach’s alphas along with the numbers of items of each variable.

	No. of Items	Cronbach Alpha
GPA	3	0.757
GPI	3	0.779
GPB	4	0.704
PPP&O	2	0.803

**4.0. Results and data analysis**

**4.1. Hypothesis One:**

**H1: GPA is positively correlated with GPI.**

**Correlations results**

On the basis of literature review and research hypothesis H1, researchers used correlation matrix and regression for the interpretation of data. Table III shows the correlation results for GPA, and GPI.

GPA	Pearson	0.429**
	̄Sig. (2-tailed)	.000
	N	377

**Note: \*\*.** Correlation is significant at the 0.01 level (2-tailed)

The overall correlation results in table III indicate that GPA is positively and significantly correlated with GPI of consumers in Pakistan (0.429\*\*,  $p < 0.01$ , H1 is supported).

<b>Table IV: Regression analysis</b>	<b>Beta</b>	<b>t-value</b>	<b>Sig.</b>
<b>GPA</b>	0.220	4.728	.000

n = 377 ; R Square = .248;      Adjusted R Square = .242; F = 40.977; Significance F = 0.00; Dependent variable = GPI
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Results of regression analysis in Table IV show that overall the full model, with one independent and one dependent variable was significant with an overall F value of 40.977 ( $p < 0.01$ ). Moreover this explained 24.2% of the variation in the dependent variable as indicated by the adjusted R<sup>2</sup> value. According to the results of regression analysis, a hypothesis 1 was accepted. Furthermore, the result shows that a person GPA had the significant impact on customers GPIs ( $t = 4.728$ ,  $p < 0.01$ ) with standardized Beta values, 0.220.

#### 4.2. Hypothesis Two:

H2: GPI is positively correlated with GPB.

<b>Table V: GPB</b>			
The	<b>GPI</b>	<b>Pearson Correlation</b>	<b>0.128*</b>
		<b>Sig. (2-tailed)</b>	<b>.013</b>
		<b>N</b>	<b>377</b>
<b>Note: **. Correlation is significant at the 0.01 level (2-tailed).</b>			
<b>*. Correlation is significant at the 0.05 level (2-tailed).</b>			

correlation matrix (Table V) indicates a positive relationship between individual GPIs and GPB (.128\*,  $p < 0.05$ , H4 is supported).

<b>Table VI: Regression analysis</b>	<b>Beta</b>	<b>t-value</b>	<b>Sig.</b>
<b>GPI</b>	0.128	2.506	0.013

n = 377 ; R Square = .016;      Adjusted R Square = .014; F = 6.278; Significance F = 0.013; Dependent variable = GPB
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Table VI results of regression analysis show that overall this model for hypothesis 4 was positive with an overall F value of 6.278 ( $p < 0.013$ ). However, this explained 1.4% of the variation in the dependent variable as indicated by the adjusted R<sup>2</sup> value. According to the results of regression analysis, hypothesis 4 was accepted. Table VI results also explicated that GPI of a customer had the positive impact on customer GPB as indicated by the standardized beta values (Beta=12.8). Furthermore, the result shows that individual GPIs are associated reasonably with his GPB ( $t = 2.506$ ,  $p < 0.013$ ). The results of this study confirmed that a person with positive intentions to buy green product show higher actual buying rates than those people who have low or no intention of buying green products. Prior studies have also exposed that consumer with intentions to buy product exhibit higher actual buying rates than those customers who demonstrate that they have no intention of buying (Brown, 2003). Chan & Lau (2002) conducted a cross-cultural research study in China and America, wherein consumers in Shanghai and Los Angeles were surveyed, concluded that the asymmetric influence of green purchasing intention on green purchasing behavior warrants further attention. In marketing literature purchase intention has been an important concept. To forecast the adaptation of new products as well as repeat purchases of existing ones, most companies used consumers purchase intention. To test the moderating effect of PPP&Q between GPI and GPB, hierarchical regression analysis was used. Sharma et al. (1981) suggested a three-step hierarchical regression analysis to test for a moderating effect. On the bases of these suggestions, firstly independent variables were entered.

4.3. Hypothesis Three:

H3: Perceived Product Price & Quality moderates the relationship between GPI and GPB

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.302	.393		5.850	.000
	GPI	.245	.098	0.128	2.506	.013
2	(Constant)	1.218	.429		2.837	.005
	GPI	.279	.094	.146	2.953	.003
	PPP&Q	.249	.046	.267	5.398	.000
3	(Constant)	8.499	1.658		5.126	.000
	GPI	1.530	.409	.803	3.741	.000
	PPP&Q	1.566	.402	.683	3.892	.000
	GPI *PPP&Q	1.452	.099	.123	4.538	.000

a. Predictors: (Constant)- GPI \*PPP&Q, GPI, PPP&Q, b. Dependent Variable: GPB

In the second step the moderator variable was entered, and at the last step the interaction between the moderator and the independent variables were entered. A moderator effect will be present if the interaction term is statistically significant. In order to calculate the moderating effect of PPP&Q in between the relationship of GPI and GPB, on the first step, GPI was entered. Table VI (Step#1) results revealed that GPI had positive impact on customer GPB as indicated by the standardized Beta values, 0.128. Furthermore, the result shows that the relationship between GPI and customers GPB is positive, though a person intention to purchase green products do not significantly associated with the customers GPB (t = 2.506, p < 0.05). The second step shows that the main effect of PPP&Q was entered next. GPI variable is still in the step 2. PPP&Q had the high impact on customer GPB as indicated by the standardized beta values (Beta=0.267). The positive Beta indicates that PPP&Q is associated with higher level of his GPB (t = 5.398, p < 0.01). In the third steps of Table VI showed that the interaction between GPI and PPP&Q was found to be significant (t = 4.538, p < 0.01).

Title:		Moderation by PPP&Q			
<b>Main effect:</b>		1.530			
<b>Moderating effect:</b>		1.566			
<b>Interaction term:</b>		1.452			
<b>Constant:</b>		8.499			
<b>Step#1</b>	<b>Step#2</b>	<b>Step#3</b>			
<b>Adjusted R-square:</b>		.014	.083	.128	
<b>Change R-square:</b>		.014	.069	.059	
<b>F change:</b>		6.278	17.942	19.454	
<b>Sig. F change:</b>	.013	.000	.000	.000	

The F change and adjusted R-square are significant from step 1 to step 2 and from step 2 to step 3 with the introduction of the interaction terms indicating the moderating effect of PPP&Q. For the interaction effect, the results indicated that the interaction between consumer GPI and PPP&Q is significant (Beta =.123, p<.01). Thus, we could now conclusively state that the higher the offerings of green products with competitive price and quality as compared to traditional products, the stronger the relationship between a respondent purchase intention and his purchase behavior. Moreover, Table VI (Step# 3) show that the moderating effect of PPP&Q on the relationship between GPI and GPB. This shows that competitive price and quality of a green product have positive impact on customers GPB, if they have high and positive intention to purchase them. This reveal that if businesses offer environmentally friendly products to respondents with identical price and quality as compared to traditional products, along this respondents have positive intentions to purchase green products, GPB will be high. In other word, consumers will purchase green products more often, if businesses offer competitive green products in term of price and quality as compared to traditional products to those customers who are willing and give preference to products having eco-friendly features. Furthermore, D’Souza. (2006) reported that generally perception of green products is negatively associated with customer’s intention to purchase them if they are of higher prices and low quality in comparison to traditional products.

Thus, businesses must ensure competitive pricing strategies along with strong quality controls to attract the prospective green customers. One more imperative facet that the marketers must consider is that the customers are often skeptical of the green claims; hence, organizations must guarantee that the offered environmentally friendly products perfectly meet the ecological values to define the customers' criticism.

### **5.0. Marketing Implications**

This research study has some useful implications for researchers, public and private sector institutions, marketers/managers as well as NGOs. Marketers/managers of the companies, private and public sector organizations, NGOs, should highlight the significance of environmental protection in their businesses advertising, newsletters to educate the public regarding the masses of the looming threats of environments in Pakistan. Government and NGOs exposure about environmentally friendly products, practices, and alternatives is still small. While positive signs of customers environmental attitudes demand that government should consider some initiatives to attract people to tolerate with the environment. For example tax exemptions, subsidies and better investment opportunities to environmental friendly businesses to promote green products and practices among Pakistani consumers. This will be a good motivation for businesses and consumers. Yet strict rules and regulations are required to enforce everyone to protect the environment. Furthermore, these research findings may also benefit businesses who want to offer environmentally friendly products to educated consumers. As the respondents of this study consisted of under graduate, graduate, and post graduate students. The results from this study show that these educated respondents have high positive attitude regarding green products and are ready to buy green

products more often, but as for as the product price and quality is concern, green products must perform competitively just like the traditional products. There are a number of research studies showing that while environmental problems, consequently environmental concerns have hit the public agenda behavioral changes have not-or not to the same extent (Inglehart, 1995; Oliver, 1999; Tarrant & Cordell, 1997). Like Dunlap, Van Liere, Mertig, & Jones (2000) and Kaplan (2000) reported that though, a lot of people are aware of and be concerned about environmental issue, this is not always reflects in behavior. So this study may play its crucial role in the sense to explicate the gap between consumers reported intentions and their actual buying behavior, as according to study findings that there are many customers who have positive and high intentions to purchase green products but due to higher prices and poorer quality as compare to non-green products, they do not buy them. Hence, along with environmental aspects manufacturers should consider the prices and quality of green products to attract these consumers

### **5.1. Limitation and Future Research**

In this research thesis, there are some limitations that deserve of future research. The first restriction is about the use of student samples, as researcher made this research in Pakistan using four universities under graduate, graduate and post graduate students as subject. Therefore, results must be used with caution. Though students are often being used as a substitute to what the actual customers think, but the generalizability of the results is a gray area of the current research. By considering this very limitation, future research might extend the list of other universities and colleges located in different cities to assess more accurate and reliable results. Secondly, the research did not identify the green products; as a result the respondents' response might vary for different categories of green products. Future research should address this issue by considering focused green products.

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