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Factors Determining the Consumer Green Behavior: An Application of the Theory of Planned Behavior

by

Umme e Habiba

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degree of Master of Science

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Dedicated to the people I love and admire...My Parents.



CERTIFICATE OF APPROVAL

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Then which of the Blessings of your Lord will you deny.

(Surah Ar-Rehman)

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Abstract

As per the expeditious growth in the current patterns of our economy, the consumption values as well as the purchasing patterns of consumers are the major reason of causing deterioration in environment just because of this the environment deteriorates day by day. It is now the responsibility of organizations to make people aware of the current situation by providing best possible solutions which are beneficial for the environment. Particularly present study is based on the Theory of Planned Behavior so to scrutinize the effects of attitude towards using green products on intentions to use green products which then enhance green consumption behavior, by understanding the moderating role of Quality on the relationship between the mediator and the dependent variable of this study. For conducting this research thesis from 307 respondents, the data were collected and the respondents were only those who were the consumers living in twin cities of Pakistan. This study explains the influence of Attitude to use green on Green Consumption Behavior with the help of intention to use green plays a role of mediator. The findings suggest that attitude does not significantly influences directly on green consumption behavior but have impact on it through an indirect path and intention to use green product has a significant mediation in between attitude to use green products and green consumption behavior, whereas the moderating role of quality of green products has no significant moderation on the relationship between intention to use green products and green consumption behavior. Specifically, this study contributes to the area of enhancing green consumption behaviors. The limitations, implications and future directions are also discussed in this study.

Keywords: Attitude Towards Usage of Green Products, Intention to Use Green Products, Green Consumption Behavior, Quality of Green Product

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Abbreviations

ATT	Attitude Towards Usage of Green Products
CFA	Confirmatory Factor Analysis
DV	Dependent Variable
GCB	Green Consumption Behavior
GPQ	Green Product Quality
IV	Independent Variable
INT	Intention to Use Green Products
LLCI	Lower Limit Confidence Interval
Med	Mediator
Mod	Moderator
SPSS	Statistical Package for Social Sciences
TPB	Theory of Planned Behavior
ULCI	Upper Limit Confidence Interval

Chapter 1

Introduction

1.1 Background of Study

Last few years are the witness for worldwide fast growth of economy by the increase in the consumption of consumers and in turn over consumption and resources usage causes the deterioration in environment. Continuously the environment deteriorates, so in the countries which are developed it becomes a dogged public concern. While it creates awareness among under developed countries regarding greenness (Chen, & Chai, 2010). For the sustainable growth of economy and in wider environmental protection context marketing is therefore playing a marked role in order to understand the motivations of consumers. (Pagiaslis, & Krontalis, 2014).

The inside consciousness with in the well organized group of people are now grown regarding the dangerous chemicals effects which are injurious for environment and for health as well. So they are now worried for such kind of uncertain changes in the environment, thus made changes in the behaviors of consumers. In fact, the concerns of consumers regarding their environment is increases when their behaviors engaged with those products which are environment friendly and they changed their buying patterns in order to be greener (Souri, Sajjadian , Sheikh, & Sana, 2018). The unstable use of natural resources brings burden on supporting the surroundings (Manaktola, & Jauhari, 2007).

A huge number of customers are now making major changes in their behaviors

in order to minimize the effects of their consumption on environment. The whole conversation about consuming more eco-friendly products is known as green consumption (Perera, Auger, & Klein, 2018). The past related to the human social development is actually the history of understanding humans, the transformation and utilization of natural resources as well as the interaction with environment. While fundamental changes takes place in the process of production and in individual's life style after industrial revolution.

Simultaneously, this created issues related to environment and brought out some ecological disasters globally in the form of pollution and depletion of other natural resources. Therefore, value of the individual behavior towards environment in one of the most deepest cause of all these crisis, which then affects not only the health of individuals but also affects the long term development plans of society. Consequently, the fair consumption pattern and right environmental values are considered as the basic counteractions to achieve the sustainable environmental development also to resolve any kind of environmental issues. To understand the green behaviors, environmentally sensitive individuals are considered as crucial issues. If the market has to survive and to run under the fast conditions of competition, the understanding of consumer motivation and other components related to behaviors of consumers is crucial. Thus the decision makers, stakeholders and other organizations are required to interpret the differing relationships which is present in between the important precursors and other motivators behind green behaviors of consumers (Pagiaslis, & Krontalis, 2014). The perceptions of consumers regarding consumption of eco-friendly goods, might in form of concerns about product price, their urge to get recognition in society and also the situational variables effects, have powerful impacts on the consumption of green products (Biswas, & Roy, 2015).

As people become aware about different problems related to environment, so awareness creates a change in the lifestyle and consumption patterns. Their attitudes towards green products has been changed and are trying to diminish their influence on environment actively (Cherian,& Jacob, 2012). The values of individuals their beliefs and emotions along with some other factors affects the green

buying behaviors of consumers, among which the values related to environment also have high influence on green consumption behaviors of consumers. This is the reason most of the scholars and other researchers studied the correlation which is existing in between green consumption behaviors of consumers and environmental values(Liu 2018).

Past literature shows different results, possibilities of different outcomes and findings when things analyzed under different situations for multiple scenarios by using contrasting attributes in different contexts (Xuehua, June 2018). Another study done in Malaysia, investigates generally on eco-friendly products and suggesting further study on green products with the help of individuals intentions and their perceptions towards green products their packaging specifically green services and other types of green goods and there is a need for study the green purchase intentions also for buying green (Chen, & Chai, 2010). Actually such products which are sustainable shows very small number of demand globally. Expressly the given report of actual share of green goods in the market worldwide is less than four percent.

Thus, the less acceptance for eco-friendly goods is like that there are many hurdles existing in the way of consuming green products (Gleim, Smith, Andrews, & Cronin, 2013). However, limited work is there in literature on those mechanisms which effects that how consumers creates value for their environment, after that which deploy some effects on green consumption behavior(Millissa , Cheunga,Tob, 2018).Now the consumers of present time are aware of all the effects of consumption made by them on the humiliation of environment, most of them are very concerned about degradation of all natural resources and with all those threats which are associated with the changes of climate in the last few years.

Ultimately, most researchers had done great studies in this area and shows their keen interest in green consumption as well as explore the role of different operators of green consumption which includes motivation, attitude and demographics etc, all these drivers plays an important role in ecological green purchase (Matthes, Wonneberger, & Schmuck, 2014). The greenness of products potentially effects the numerous kinds of the behaviors of users (Wang, Douglas, Hazen, & Dresner,

2018). Consuming green products and responsible behavior for environment is now considered as a major topic in the literature of marketing.

To consume green products helps to improve the condition of environment and to decrease slump from there, and also provides spur to companies in order to improve the performance of environment (Nguyen, Nguyen, & Hoang, 2019). To owe the moral as well as conceptual complexity of responsible behavior of consumers towards environment but inability to deal with or lack of information about environment, having different concepts about environment consumers have different behaviors. People have different behaviors toward green consumption because they might not know about all environmental behaviors yet having less abilities or might they haven't enough opportunities (Pieters, 1991). Those consumers which are responsible towards their environment, they decide to act responsibly and perform everything which is right for their surroundings.

Thus, those who consume green products, the majority of them do things fairly and their every act is environment friendly. They do only what they think is better for environment. However, not participate on regular basis in environment friendly behaviors they are aware about, but still they consider themselves a green consumer as socially responsible person (Moisander, 2007). A willingness to get information about environment is frequent in some than others so most often the responsible behavior or environment friendly acts must need some knowledge (Thøgersen, & Ölander, 2003).

Organizations need to focus on those products which are green and must develop environment friendly products according to the demands of consumers (Cherian, & Jacob, 2012). Most of the organizations pay attention and market those products which are green or eco-friendly. In this regard a lot of studies have been done and explore those factors that precede green purchase behavior, it includes most of the concerns for market as well as environment and also the green market orientations. The organizations in world are now reshaping the strategies with green marketing slogan in order to meet the greater consumers concerns regarding environment (Miniero, Codini, Bonera, Corvi, & Bertoli, 2014).

Specifically, in growing Asian economies this trend has become prestigious where the

growing number of consumers who are empowered financially, are spending and willing to spend much more than earlier consumers (Lee, 2008). While most of the researchers start exploring those factors that defines the green consumption behavior. A lot of studies focuses to explain the intentions towards actual behaviors (Hanss,Böhm, Doran, & Homburg, 2016).

However, this study contributes to literature as well in order to explain the gap between attitude towards usage of green products and actual green behavior, that, why some of the consumers having intentions towards environment friendly products are not getting themselves engage for actual green consumption behaviors (Ceglia, Lima,& Leocádio, 2015).Actually, studies related to behaviors of consumers usually shows that intentions are at same or might at least highly correlates with actual behavior of consumer (Ajzen& Fishbein, 2007). Therefore, argument built in this study is all about the effects of attitude and intentions towards green products on actual green behavior by using quality of green products playing a role of mediation in between intentions and green consumption behavior.

1.2 Gap Analysis

Green consumption is now considered as an important topic not only in academia but for practical as well. In early 1960s the concept of green consumption has been emerged, So in order to solve the unstable use of resources people are now trying to promote green behaviors (Nguyen, & Hoang, 2019). Responsible behaviors towards surroundings as well as consuming green is now becoming a predominant concept in the literature of marketing (Catlin, & Wang, 2013).

Ultimately, the range of past literature on green consumption is restricted in size which sooner or later creates a need for this study and also motivates others as well for further investigations on this particular topic. To study the behavior of consumers towards eco-friendly goods is the evidence which shows that it is in developing condition still. Various theoretical perspectives are there in this attitude, behavior relationship.

Firstly, by using Theory of Planned Behavior this study focuses on attitude, intention and behavior of a person towards usage of green products and intention to use green products plays a role of mediation in between Attitude to use green products and green consumption behavior. Secondly, by adding green product quality as a moderator in this study and by analyzing the effects of moderated mediation of green product quality on the relationship between intention to use green products and green consumption behavior which is based on Theory of Planned Behavior to fill out the gap between attitude and behavior specifically for green products. Consequently, to study in this particular field and to highlight the strength of research study in this area, this study also presents a new moderator which will effect the relationship between intentions and actual green consumption.

By utilizing modern technology and new methods for developing green products the managers of the companies produce more fashionable and innovative ideas in order to attract a large number of consumers (Lao,2014).Therefore, enhancing green consumption is now a burning issue for the managers of marketing who are focusing on such means which have some impacts on the green purchasing behavior of consumers (Clark, Haytko, Hermans, & Simmers, 2019). And in the last this study will help managers and others policy makers practically to make decisions which are environment friendly and must produce goods which are less harmful for environment and are demanded by consumers in order to achieve competitive advantage. So to highlight on greener as well as cleaner alternatives it indicates that there is a requirement for other studies and more research work for those consumers who are conscious about their environment (Eze, & Ndubisi, 2013).

1.3 Problem Statement

Recently in last few years no study has been done in the context of green consumption, through the individual attitude and intentions towards usage of green products with the help of quality of green products as a moderator. A feeling of worry for environmental issues now demanded from all the individuals the great responsibility also the consciousness among them to be rational in their day to day

activities. The environmental worry related to future had prompted certainly some to aim for rational living and thus creating a green consumption trend, where as consumers are seeking for environment friendly products. Significantly, the need to develop such business which are sustainable now become important for the survival. Therefore, to identify some important factors that may have impact on green behaviors, would therefore enable the marketers to synthesize the strategies of their businesses and thereon convene their business sustainability.

The moderating role of green product quality is still unexplored in order to present the clear picture of the role of intentions towards actual consumption behavior. So to explore about this and to find out some reasons that could enhance green consumption and help us to understand that how intentions convert attitude into buying behavior, with the help of understating the theory of planned behavior in the context of green consumption behavior. Therefore, this is the novel domain which has not been studied before along with all these variables presenting in this study including attitude towards usage of green products, intentions to use green products, green consumption behavior and quality of green products.

1.4 Research Questions

On the above stated problems, this study is indented to find out the answers for some of the following questions, brief summary of questions are as follows:

Research Question: 1

What does attitude towards green, intentions towards green products usage and green consumption behavior means?

Research Question: 2

Does attitude towards usage of green products effects green consumption behavior?

Research Question: 3

Does intentions towards green products, plays the role of mediation in between attitude and green behavior?

Research Question: 4

Does green product quality plays a moderating role in between intentions and green consumption behavior?

1.5 Research Objectives

This study sets the following general and specific objectives:

1.5.1 General Objectives

The general objective of this study is to access that what actually effects the green consumption and how people use their intentions in order to turn attitude into actionable behaviors so to change their buying patterns and to become a greener to protect environment.

1.5.2 Specific Objectives

The objective of this study is many folds. The basic objective of this study is to investigate the importance of the consumption of consumers, By using green consumption behavior as an important variable in this study, it will helps to explore the effects of attitude of a person and Secondly, to investigate the importance of individual intentions towards using green products that how intentions translate consumer's attitude into actionable behavior. Thirdly, to investigate the effects of green product quality on the relationship existing between green consumption behavior and intentions towards usage of green products. Therefore the arguments of this study is all about the effects of attitude and intentions to use green products on green consumption behavior with the help of quality of products which plays the role of mediation in between these two variables.

1.6 Significance of Study

The efforts to save surroundings from the generation of present time, helps to provide better life to the generation of next time. The intentions help to take decision for consuming green products not only make society better, but for organizations as well in order to get the advantage over competitors and make company able to get more profits (Konuk, Rahman, & Salo, 2015).

This study will be supportive and helpful for all institutions or firms who wants to understand the green buying patterns of consumers and those factors that might enhance or diminish the green consumption although it is difficult to find out all factors but this study will surely helpful and create paths for others. The findings are fruitful and can be used as a reference for other future researchers or those students who are planning to undertake their research work on green consumption.

1.7 Supporting Theory

Different researchers present various theoretical perspective which are used to provide support for studies related to green buying patterns and green consumption behavior theory of reasoned action, Engel, Kollet, Blackwell model and Hawkins Stern Impulse Buying but Theory of Planned Behavior (Ajzen, 1991), can cover all the variables of this study. Theory of planned behavior (TPB) with in the domain of green marketing provides an important insight into the antecedents of intentions (Kalafatis, Pollard, East, & Tsogas, 1999).

Among all the models the most common for green consumption behavior is theory of reasoned action also the theory of planned behavior. Which shows that behavior comes from intentions and then those intentions are driven from attitudes of consumers towards specific behavior. Therefore expected results occurs (Peattie, 2010). So the theory that is supporting all the variables of this study and linking those variables is the Theory of Planned Behavior (Ajzen, 1985).

1.8 Theory of Planned Behavior

From the introduction of this theory till now, the planned behavior theory become the most cited and used very often by the measures of its objectives, also prestigious models to predict the behaviors of individuals (Ajzen, 2011). To understand the behavior and its antecedents in decision making, for social sciences, is the important goal for practitioners , researchers and for theorists as well (Chen, 2008). According to the theory of planned behavior, Intention is an important determinant for behavior (Ajzen, 1991). According to theory the perceived control of behavior impact the intention also the behavior as well. To create a link directly in between the performance of perceived behavior and actual behavior is rationale. In point of fact, theory of planned behavior is successfully used in different studies in order to scrutinize a link in between intentions and actual behavior (Ferdous,2010). In short, three types of considerations are there to guide planned behavior theory it includes beliefs related to alike consequences or other beliefs related to behaviors, other beliefs related to normative expectations some other beliefs which might express or hamper the behavior known as control beliefs. To add up the favorable or might unfavorable attitudes are produced by behavioral beliefs towards behavior, perceived social pressure cause subjective or normative beliefs and further perceived control behavior get rise from control beliefs or ease and difficulty in performing behavior (Ajzen, 2002).

Theory of planned behavior used for understanding the green consumption behavior (Albayrak, Aksoy,& Caber,2013). The framework given in this study is fully supported by theory of planned behavior (Ajzen, 1985), this framework shows the link between three variables, from attitude towards usage of green products to one's intentions that how both variable leads towards actual behaviors (Ajzen, 2002).

Chapter 2

Literature Review

2.1 Important Definitions

2.1.1 Attitude Towards Usage of Green

According to Allport (1935) “attitude is a person’s neural and mental state for readiness which then create paths and impact on the responses of person towards any particular thing or any specific situation”. Schultz and Zelezny (2000) defines “that attitude of individual towards the concern for environment is deeply rooted in self-concept of person, and the degree in which person become cognizant of self to become an essential part of their natural surroundings.”

2.1.2 Green Purchase Intention

According to Fishbein and Ajzen, (1975) “intention is an estimate of a degree in which a person likes and are willing to conduct any particular behavior”. Behavioral intention is the strength or emotion shown by the consumer at the spur of the moment for taking a part in any specific behavior”. (Dangelico, & Pontrandolfo, 2010).

According to Nik (2009), “the chances of purchase or individual give preference to any item which contain some environmental friendly characteristics over other ordinary products in their purchases.” Beckford et al. (2010) and Chan (2001) said

that, the intention to purchase green products is actually a predictor for green behavior it means that intentions to purchase affects positively to the decision of consumers so that they will purchase environment friendly product.”

2.1.3 Green Consumption Behavior

According to Pieters (1991) “Consuming green is an activity that must satisfy the needs and wants of human, which has very little damaging effects on environment”.

2.1.4 Green Product

“The environmentally secure and eco-friendly product, which is valuable for” (Davis, 1994). According to Reinhardt (1998) “the products developed by organizations, that are beneficial for environment and impose less cost on the environment than other ordinary products of the market.”

2.2 Attitude Towards Usage of Green Products and Green Consumption Behavior

The most important factor considered by the participants that they can estimate with regards to the advantages of green goods purchase is attitude (Ajzen 1985). Suggested that consumers are much more anticipated to act when the consumer thinks that to take part in something will benefits them. Since then, behavior of individuals can be investigated on the basis of the attitude of consumers. In the context of this study, individual’s attitude towards environment friendly goods is considered as the degree to which the behavior towards green consumption is valued by the individuals positively or negatively (Chen and Deng, 2016). Just as the humans are now more conscious about the effects of different activities of businesses on environment the researchers proposes that those consumers who are aware about environmental issues are more likely to reveal pro-environmental acts than those who are unaware (Lee and Moscardo 2005).

The four proportions of environmentally safer attitudes identified by the researchers are as following: first the perceived severity of problems related to environment, troubles in becoming eco-friendly, the responsibility of corporate and the significance of environment friendly behavior(Laroche, Bergeron, and Forleo 2001).The first dimension is dealing with the concept that trees, energy as well as water is limited, then troubles in becoming ecological alludes to those extra attempts which takes place due to the biodegradable attempts. While importance of environment friendly behavior outlines that particular ecological affairs will helps to diminish pollution and helps to improve environment condition and in the last the level of responsibilities of corporate addresses that the business activities must be anxious regarding environmental issues(Baker, Davis, & Weaver,2013).

The attitude towards consuming green reflects the beliefs of individuals with respect to the outcomes related to green behavior of consumers (Ajzen, & Fishbein, 1980).Different studies shows notable association of attitude of individuals with green behavior of consumers.Clearly the attitudes are crucially determined as pro-environmental behavior, thus on the otherside most of the research studies on theory of reasoned actions as well as planned behavior theory showed gap in between attitude and behavior(Zhao,Gao,Wu,Wang, & Zhu,2014).In academia and in other policy making debates regarding the effects of consumption on environment, the green consumption behavior is considered as one of the significant concept and became an obvious concept in 1970s (Peattie,2010).

Green consumption is an inclination in order to inquire the protection of natural resources through the utilization and purchase patterns of one individual (Bailey, Mishra, & Tiamiyu,2016). A consumption is physical, monetary and social process which is effected by conditions of nature, the individuals' psychology and by geology as well and also the infrastructure, cultural laws and politics of the surroundings where they are living. To understand it like this it requires broad scope contribution from social sciences and from the discipline of physics (Peattie, 2010).

A research related to green behavior of consumer is one of that areas which investigate all over, therefore every study found is not naturally restrictive. So the

purchasing patterns and psychology of them is consider an important task while deciding green product's success. A lot of components are there which are critical for consumers at the time of making decisions but still one of the most important is the awareness of consumers regarding eco-friendly products. To concentrate on the personal standards of conduct of the buyer expose it out that consumers who consider green purchases are confused type of customers (Narula, &Desore, 2016). Those who think and accept greater utility of their purchase, they are bounded and purchase those products which are recycled. Particularly, beliefs of commitment to responsible behavior and positive attitude for recycled and green goods, like a belief towards reused goods are more superior in quality then other goods which are ordinary in nature (Mainieri, Barnett, Valdero, Unipan, &Oskamp, 1997).

The developed countries pays more attention on the issues related to environment and their relationships with business operations, which might be in terms of public related concerns or governmental policies. To generalize the conditions is not possible always in those countries which are still developing. The different economic conditions are considered as an important factor which affects the environmental practices. Although, it is clear and confirmed that different cultures and societies with different structures have dissimilar customer's green orientation and have different buying patterns. Likewise, if the consumers have high concerns related to environment, the higher the chances of their readiness to pay high for green products (Lita, Surya, Ma'ruf, & Syahrul,2014). Individual's behavior is more likely to do particular behavior if the attitude of one is favorable more towards that behavior. When the evaluated outcomes are positive than the individual is likely to possess attitude which is favorable, therefore they might engage in specifically that particular behavior (Yadav, & Pathak, 2016). By using the assumptions based on theory of planned behavior and understanding past literature the whole above discussion proposed a following hypothesis:

H₁: The attitude towards using green products significantly influences on green consumption behavior.

2.3 Attitude Towards Usage of Green Products and Intentions to Use Green Products

Different beliefs towards obvious objects or towards particular actions, which they might translate in definite intentions in order to act some specific actions (Schwartz,1992) while on the other side intentions considered as determination towards performing certain action in a particular way (Ramayah, Lee, & Mohamad, 2010).According toKotchen andReiling (2000), the prime predictor of behavioral intentions is attitude.

While on other side the intentions are the will power to perform in any particular way. Basically the intention in between attitude and actual behavior is determined by those attempts which are required to execute certain behaviors (Bagozzi et al., 1990). Personal judgements of an individual's own experiences regarding any particular outcome which is going to happen and to perform any particular behavior is termed as intentions (Ajzen, & Fishbein,1977). A forecast and operations planned in future, which is considered as a tendency of translating ones beliefs and attitude towards certain actions and to purchase some products is known as purchase intentions (Manaktola and Jauhari, 2007).

The past literature on eco-friendly buying behaviors acclaimed that the environmentally responsible attitudinal measures are only operationalized by taking in the statements regarding the issues related to environment. Additionally they stated that moderated correlation exists in between general measures of attitudes and multiple act behaviors, nevertheless, for the general measures its intensity rises and for single act behaviors where the assenters provide their views which are based upon any particular product (Follows and Jobber's 2000). Also itsestablished that the correlation is greater in between the attitude and behavior, when the attitude as particular environmental behavior is operationalized comparatively to the general attitudes about environment(Hines et al., 1987).

Clearly, the perceived value considered as a key indicator for attitude towards behavior (Laroche et al., 2001). Sweeney and Soutar, (2001) classify the consumption

values into the functional, social and emotional values, also contend that the consumption values affects the attitude and purchase intentions. The efforts required for the performance of any specific behavior is as following, firstly, any new or the attitude which is already existing is get back through past memories. This indicates that the approach towards the object of attitude or the performance of the act which is targeted will consider as function of the power of attitude of the individual. Attitude leads directly towards behavior if the barriers towards performance are not there or when action needs little efforts. Attitude encourage behaviors with the help of little thoughts in such kind of cases but on the other side if the action require much efforts and barriers are present in the way of actions, this then needed some planning. Therefor attitude has to be strong in order to influence individual's intentions so to lead them towards behavior (Bagozzi, & Baumgartner, 1990).The role of attitude of a person is very clear and understandable in settlement of any particular behavior on the basis of past existing studies, there will be some impact of attitude on the purchasing of green items and in the same manner the next hypothesis for this study can be proposed below.

Hence the second hypothesis of this study on the basis of above proposed discussion would be:

H₂: The attitude towards using green products significantly influences on intentions to use green products.

2.4 Intentions to Use Green Products and Green Consumption Behavior

A concept which deals with the chances or the individual's readiness for giving preference for the purchase of any particular product which contains all those features that are not harmful for environment than other common goods that are existing in their purchase deliberation. According to Beckford et al., (2010) and Chan (2001) the notable predictor of actual green behavior is purchase intentions towards green products, it means that the intentions to purchase green is affected positively the chances of the decision of any consumer that he or she are willing

to purchase eco-friendly goods. Another cross cultural study done in America and China, where the respondents were those consumers who are living in Los Angeles as well as in Shanghai. The results of this study shows that green purchase intentions of an individual asymmetrically affects the actual green consumption behavior (Chan and Lau, 2002).

A most significant factor to explain the behavior of consumer is their intentions towards that behavior and if the consumer's intentions are strong towards certain acts than it results in the actual performance (Ajzen, 1991). The planned behavior theory explains the behavioral intentions concept (Ajzen, 1991), put forward an argument that behavioral intentions are obsessed with the attitudes towards particular behavior, Ajzen and Fishbein (1980) argued that probably the behavior of most of the persons are derived from their intentions. Therefore, many researchers conduct different studies in order to scrutinize the shaping of intentions so that to apprehend the buying behavior of consumers in a better way (Han, Hsu, & Sheu, 2010).

Although in the past studies the explanation of intention differ and generally the investigators go along with the concept that intentions are the willingness of one person to perform any particular behavior (Oliver, 1997). The intentions of a person can be favorable or might be unfavorable. As stated by Zeithaml, Berry and Parasuraman (1996), the favorable and unfavorable intentions correlates with following: the disinclination or agreeableness of a person to pay extra amount, intentions to provide negative or positive guidance and intentions to switch or to repurchase.

To understand the process of decision making of customers in various contexts, Reasoned action theory has been evolved (Han & Kim, 2010). Attitude is one of the best predictor of intention towards the usage of environment friendly products. When a customer's attitude towards the purchase of green goods is positive then it will surely lead towards intentions to use green products (Vazifehdoust, Taleghani, Esmaeilpour, & Nazari, 2013). Furthermore, it was proved in various studies that intentions with regard to green consumption associated positively with actual green behavior (Mostafa 2007).

Therefore, the third hypothesis for current study on the basis of whole above discussion would be:

H₃: The intentions to use green products significantly influence green consumption behavior.

2.5 Attitude Towards Usage of Green Products, Intentions to Use Green Products and Green Consumption Behavior

The knowledge of environmental issues means someone has positive attitude regarding green products and know the importance of actions good for environment (Leonidou, Leonidou, and Kvasova 2010). This concept is included in the theory of cognitive consistency (Festinger 1957), those who are worried about the issues of environment, are motivated and shows their willingness in order to diminish the environmental issues (Leonidou, Leonidou, and Kvasova 2010). Might be mostly the consumers wants to buy products that are eco-friendly but they be facing some issues and disputes which make hurdles in the way of adopting and buying of green products like if consumer is willing to create change in buying behavior and trying to be responsible towards environment and on the other side wanted to keep going with the same way of living (Schwartz, 1990).

Consumers are ready to buy green goods when they have positive attitude towards environment and eco-friendly products (Han, Hsu, and Lee 2009). The socially responsible practices are considered as an important factor for corporate image and then these practices and policies affects the behavior of consumers (Dutta et al. 2008). More effort are required to perform eco-friendly behaviors and these favorable actions are good for the society (Laroche, Bergeron, and Barbaro-Forleo 2001). The research studies finds that in spite of the consumers' knowhow about the issues, the buying patterns of consumers not always reflect those concerns, such as the buying of goods do not produce the instant gains (Lee et al. 2010). According to Azjen (1998) Theory of Planned Behavior the attitude and intentions of buying

are effected by different factors which includes awareness, motivation and knowledge and potential of performing any specific behavior as well as the right set of circumstances to perform something friendly towards environment (Manaktola, & Jauhari, 2007).

Attitudes in the direction of any specific behavior refers to the degree to which individuals expressing approvals or have unfavorable judgements of the behavior which are under consideration (Ajzen, 1991). Furthermore, the judgments on the behavior which is under discussion is good or might be bad, and anyhow the person is willing to perform (Leonard et al., 2004). Ramayah et al. (2010) pinpoint that the attitude including recognized outcomes are associated with behaviors.

Intention's role in the relationship between attitude and behavior is the function of the efforts which is needed to accomplish specific behavior which might include products purchase or buying of some services (Ramayah, Lee, & Mohamad, 2010). Towards any product, when consumer shows tendency then the probability of purchasing the goods are greater. In other words the behavior towards buying positively related to the intentions. However the intentions towards usage of green products positively influence the actual behavior regarding green consumption (Wu, & Chen, 2014). People will carry out intentions of them when they have great behavioral control (Hagger, 2019).

As per theory of reasoned action the intentions of an individual towards usage of green goods is sets on the attitude of them towards the consumption of green products and thus translate into actual behavior (Orbell, Hodgkins, & Sheeran, 1997). Thus in relationship between attitude and actual behavior the role of intention is depends on the efforts which are required for any specific behavior. When high level of efforts are needed the process becomes much conscious therefore, then which establish the intentions. Most of the responsible behaviors towards environment needs extra efforts from individual side or personal consequences might includes in it. Consequently, the influence of attitude on individual's behavior is expected as it will mediate by the intentions (Follows, & Jobber, 2000).

On the basis of previous studies, this study proposed following hypothesis:

H₄: Intentions to use green products significantly mediates between

attitude towards usage of green products and green consumption behavior.

2.6 Moderation of Green Product Quality: on the relationship between Intentions to Use Green Products and Green Consumption Behavior

Mainly, the eco-friendly or green goods are defined as those products that must not be harmful for environment and do not contaminate the earth, and which can be reprocess(Shamdasani et al., 1993). Another global study done by Starch (1996) finds out that 15 Ultimately, by the increase in the number of green customers, the marketers are now trying to target those segments that prefer green products. The plastic or the recycled products are considered as the products which are situated on the basis environmental call(Banerjee et al., 1995). The responsiveness towards surroundings is not considered only as the beliefs of idealist of the society but now it is considered as the state of competition in the markets(McCloskey and Maddock, 1994) and which effects the behavior of consumers (Followsand Jobber, 1999). D'Souza (2004), he profess that green perception is actuality and it requires to understand more functionally in order to make marketers more authorize so that they become able to come up with those strategies that must fulfill the needs of green customers.

The up above discussion shows that for business organizations the environment friendly products have much value in terms of earning more profits or to get good image of corporate. Research done by Polonsky (1994), he drawn the inference that the customers influence on the organizations and the government authorities so to make safe and clean environment, moreover for this whole process they not consider themselves a part of it and do not take it serious. For this reason, all the consumers are not influenced by green marketing(Lampe and Gazdat, 1995). In addition to this, Wong et al., (1996) reports that opposite to passionate opinions

poll evidence regarding the attitudes of general public towards the green consumption, the number of those consumers who consume friendly products is very limited. Consequently, it is crucial to find out those factors that create hurdles in the way of customers from developing their attitudes towards consuming green and to make them environment friendly consumers (Astous and Legendre, 2009). Specifically, the concept of greening is not defined well. Regarding green products, the consumers, the producers and also the policy makers all have different views and have different thoughts about the actual benefits of those products on environment (Kleiner1991). The development of green goods tends to environmental issues through the advancement or design of items, resistant to end of traditional pipe control from government, the clients, businesses on all sides of the world (Chen,2001).

The factors of environmental concerns which are under development and quality in different areas of markets and industry plays an important role. Thus organizations should focus on production of green goods and for approaches of quality control at the top of company's agenda (Gharaei, Karimi, &Shekarabi, 2019).In 1990s green management and the concept of corporate environmentalism has been emerged and now becoming more and more popular at international level (Chang, & Fong, 2010).

Green is now much famous among whole present generation (Cherian, & Jacob, 2012). Green products development is an industrial trend, so organizations accept the green items as to achieve an edge over competitors. As build, indeed it alludes the issues regarding advancement in the practical dimensions of environment, the investment for eco-friendly dedicated to the different measurements have totally effects unexpectedly on the game of rivalry for greenness to the market which is targeted (Guo, Choi, & Shen, 2019).

Planned behavior theory put forward three basic antecedents of intention which are independent. The first determinant towards behavior is attitude which mentions a degree which shows unfavorable or favorable ratings of individual and behavior appraisals in question (Ajzen,1991). A study held for green products by using the planned behavior theory, which measures the consumption behavior related to

green products in the two different cultures including America, China. Their findings show different results in different cultures so the variance between different groups shows difference in cultures and help policy makers to resolve environmental issues and also provide insight which are useful for marketers (Chan, & Lau, 2002).

The quality of product is the performance of product which affects the requirements of consumers regarding designs, warranties and other features of that product they had purchased. Therefore, good quality products get more attraction from customers and then cause purchase or repurchase intentions. Providing better quality goods can be considered as a beginning for loyalty offering or originating faithfulness among consumers. To depict the quality as execution's after effects, consequently which can be termed as imperfection freedom or customization level and how dependable the product meets the requirements of consumers. The dimensions of quality consider bundling of products, design, warranties and features of products as well (Chang, & Fong, 2010).

Presenting green image is an asset of brand in perceptions in the minds of customers who are responsible towards environment, are connected to natural and environmental concerns. A green picture of firms in the minds of consumers will help the firm to attract and to get more and more customers by attracting choice of consumers also by improving the customer brand loyalty (Xie, Huo, & Zou, 2019). Among the popular trend of consumer environmentalism, also the rules and regulations regarding environmental issues most of the companies not only provide green products with good features but also providing different packages which helps them to create an edge against others, further they must have to create loyal customers so that it will help customer to translate their intentions to actual behavior. Therefore all these acts linked with satisfaction and purchase intentions which then become a purchase behavior (Chang, & Fong, 2010).

Ali et al., (2010) content the concept that the consumers are now ready to purchase eco-friendly goods, frequently. Yet, the consumers are still concerned about the quality and the prices of green products, the performance of eco-friendly goods must be competitive just like the other common goods. Uniformly, the other study

disclose that most of the customers show their unwillingness to go without benefits of important goods at the time of the buying decision. So the performance of friendly goods must not be as stated by the environmental features but also be very competitive and must be based on the other attributes and include some essential characteristics related to products such as the quality and the durability of product (Diamantopoulos et al. 2003). Through above discussions the fifth hypothesis of this study would be:

H₅: Green product quality has a significant mediation on the relationship between intentions to use green products and green consumption behavior.

2.7 Research Model

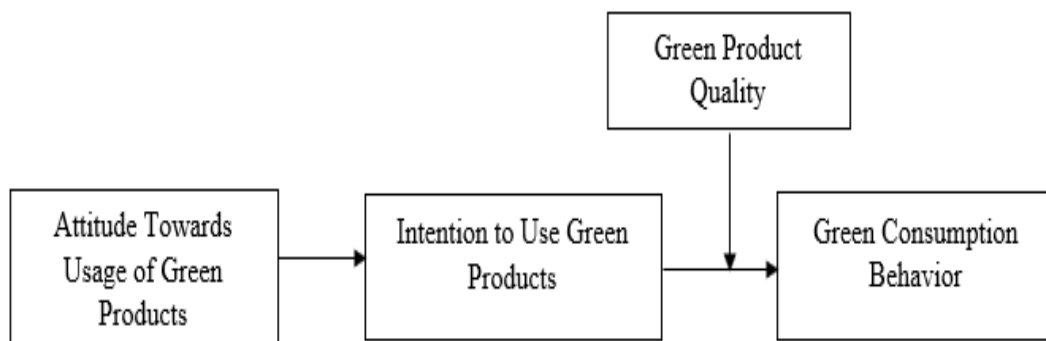


FIGURE 2.1: Relationship between Attitude towards Usage of Green Products and Green Consumption Behavior through Intentions to Use Green Products and a Moderating Role of Green Product Quality

2.8 Research Hypotheses

H₁: The attitude towards using green products significantly influences on green consumption behavior.

H₂: The attitude towards using green products significantly influences on intentions to use green products.

H₃: The intentions to use green products significantly influences the green consumption behavior

H₄: Intentions to use green products significantly mediates between attitude towards usage and green consumption behavior.

H₅: Green product quality has a significant mediation on the relationship between intentions to use green products and green consumption behavior.

Chapter 3

Research Methodology

This section includes almost all the methods and procedures which are applied here in this study to find out the reliable outcomes. The whole discussion contains details about the population of study, the design of research study, sample size, characteristics and sampling techniques, other tools and techniques, instruments, scale reliability, pilot testing and the reliability of variables and all those items studied under this research.

3.1 Research Design

Research design is an action plan showing the methods of collecting the relevant data and the analysis of particular data.

3.1.1 Type of the Study

This study is used to highlight the inference of attitude towards usage of green products on green consumption behavior and to understand this relationship an inter-relational study is conducted. The consumers who are purchasing goods from shopping malls is targeted as the population for this research project and to get the required data for authentic results. Among the targeted population, total 380 questionnaires were distributed and 307 responses were collected. The

sample is consist of those consumers who are consuming goods from the malls located in Rawalpindi and Islamabad. a field study was conducted so to collect the data from those consumers who were purchasing goods from malls and shops. So ultimately this study will contribute in generalization of the results from the sample statistics that will possibly revealed by the realistic result on the entire population of Pakistan.

3.1.2 Research Philosophy and Design

There are various philosophical approaches specifically for the social sciences that underpin the scientific investigations. Instruments for collection of data is the one, which have an affect on adaption of any specific philosophy which is relevant to the research(Bazeley, 2003). This study is on hypothetical deductive research method, totally which is based upon determinism philosophy in which we utilize the previous research works and already existing theories in order to demonstrate and to provide the support our hypothesis, then will be tested empirically for the verification of proposed hypothesis.

Generally in research studies, the qualitative methods are used and are appreciated in order to extent larger population. However this study is also based on quantitative method, so to assemble the quality data, to correlate the studied variables and to understand the existing relationship between all the variables which are deployed in this research work.

3.1.3 Study Setting

Current study is field study instead of an artificial setting. All the variables of this research study were neither the manipulated variables nor the controlled variables. This study was detained with the consumers of twin cities and by approaching them so to make all of them able to fill up the survey questionnaires.

3.1.4 Unit of Analysis

Unit of analysis is considered as the important feature of any research study, this basically explains that which characteristics are being analyzed under this study, it can be a marshalling of different people in any particular group, from different countries, societies or might be from different organizations, anywhere which is suitable and relevant for the researcher according to the study. Hence, this study is carried out to understand the importance of attitude towards usage of green products and how intentions of one person translates into green consumption behavior, so the unit of analysis for this study is that one individual who purchase and consume different products from the shopping malls located in Rawalpindi and Islamabad. That individual/s must have buying power and also they were well educated so they were able to participate and to respond the survey (Floh and Maldberger, 2013).

3.1.5 Time Horizon

Through cross sectional technique of data collection, the data for this study has been collected for only one time by the consumer during the time of conducting this study, the data collection process was completed in 6 weeks and just because of limited time period the cross sectional method was adopted, in order to complete thesis on time. Thus, the nature of data in this study is cross sectional.

3.2 Population and Sample

3.2.1 Population

Data was collected from all those individuals who are the consumers of different items and mostly from those who are consuming different products from the shopping malls located in Rawalpindi and Islamabad but some individuals from other areas of Pakistan also participated in this research study. Maximum 380 questionnaires were distributed and the data was collected to measure all the variables of

this study which includes attitude towards usage of green products, intentions to use green products, green consumption behavior and green product quality.

3.2.2 Sample and Sampling Techniques

An ordinary method for the collection of data is known as sample which is the subset containing almost of the attributes of the population. There are two types of sampling through which we get data from which includes non-probability sampling, in which it is pre-planned that which observation is going to represent as a sample on behalf of whole population and the other type is probability sampling, where every opinion has an equal chances of selection. Both types have their own pros and cons.

Current study select non probability sampling technique and through convenience sampling technique is used to collect the data from respondents. Through convenience sampling technique randomly the data can be collected from the consumers of different goods, having buying power and were purchasing goods from malls located in twin cities, which definitely represents the true image of whole population of Pakistan who are availing the services and purchasing other items by defining the effects of attitude on intentions towards green products and then on actual green consumption behavior through the moderating role of green products quality. Generally, in this study, we only approach those consumers who are living in the twin cities of Pakistan. Basically well-known and modern shopping malls were being approached and mostly the consumers were shopping at that time were reported the data on all four variables including dependent, independent, moderator and mediating variable of the study (i.e., attitude towards usage of green products, intentions to use green products, green consumption behavior and the moderating variable quality of green products).

The respondents were approached through self-administered survey and questionnaires were distributed among the selected malls of Rawalpindi and Islamabad. The respondents were be assured that all their provided information will be kept in confidentiality and informed them that it will be used for educational purpose only and will not be disclose or published anywhere with specified name. All of

them were asked to provide relevant and accurate answers to all questions including in the survey. Almost 380 questionnaire were distributed, out of which only 325 responses were returned and 18 were not filled fully; however only 307 complete responses were useable actually.

3.3 Sample Characteristics

Only one questionnaire was designed for conducting this study, containing the different items of four variable and it includes demographic section as well which contains the gender of respondents, their age and total qualification, the characteristics of the sample are explain as the following:

3.3.1 Age

An important element of demographics is Age, however; some respondents feel uncomfortable to share this openly. Just because of this reason and for their convenience a scale was used so to gather the data about the age of respondents.

TABLE 3.1: Age Distribution

		Frequency	Percent	Valid Percent
Valid	18-25	194	63.2	63.2
	26-33	85	27.7	27.7
	34-41	22	7.2	7.2
	42-49	4	1.3	1.3
	50 and above	2	0.7	0.7
	Total	307	100	100

The **Table: 3.1**, (given above) shows the composition of sample according to the age of respondents. 63.2% of the respondents were belongs to 18-25 age group, then 26-33 age group includes 27.7% of the respondents, 7.2% of the respondents were between 34-41, 42-49 age group only have 1.3% of the respondents, where-as only 0.7% of the respondents were more than 50. Mostly the respondents of this study lie in between range of 18-25 and 26-33 years of age.

3.3.2 Gender

One of the most important elements of demographics is age which is used to maintain and to highlight the gender equality in the study and it helps to create a difference between total number of female and male in the given sample. This study tried to create equality between both genders but still the number of male respondents is greater than female respondents.

TABLE 3.2: Gender Distribution

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	176	57.3	57.3	57.3
	Female	131	42.7	42.7	100
	Total	307	100	100	

Table: 3.2, (given above), shows the total ratio of both genders in the sample including 57.3% male respondents where as 42.7% female respondents. The given percentage of male respondents were high as compared to female respondents.

3.3.3 Qualification

Another important element of demographics is the education of respondents, which have some impact for the peace and prosperity of society. So to collect educational data a scale was used, which is characterized in five sections.

TABLE 3.3: Qualification

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Metric	4	1.3	1.3	1.3
	Inter	31	10.1	10.1	11.4
	Bachelor	101	32.9	32.9	44.3
	Master/M.Phil	166	54.1	54.1	98.4
	Phd	5	1.6	1.6	100
	Total	307	100	100	

The above given **Table: 3.3**, shows the qualification of the respondents in the sample. Only 1.3% of the respondents were included in the category of Matric, Intermediate includes 10.1 % respondents, 32.9% respondents were lie in the category of bachelors, Masters/ M .phil includes 54.1% of respondents and only 1.6% respondents were Phd qualified. Most of the respondents of this study were having the degrees of Master/M. Phil.

3.4 Instrumentation

3.4.1 Measures

To measure all the variables of this study, from different authentic sources the close ended questionnaire was adopted and then those questionnaires were distributed to different people who visited the shopping malls during the time of questionnaire distribution and some questionnaires were also distributed to the consumers of different products, through online webs for quick responses. The respondents were then asked to fill questionnaires, having five sections which includes the following: Demographic variables (Age, Gender and Qualification), Attitude towards purchasing green products, Statement of intention to green purchase, Green consumption behavior, Green product quality. All the responses were analyzed by using five-point Likert Scale. And individual has to indicate their level of agreement with each given statement where-as in the given scale 1 shows “Strongly Disagree” and the other end 5 shows “Strongly Agree”.

Total 380 questionnaires were distributed. Out of which only 325 questionnaires were received back. However, 18 questionnaires were not filled fully, hence considered not appropriate for study. So only 307 questionnaires were analyzed for demonstrating the actual results.

3.4.2 Attitude Towards Purchasing Green Products

From (Paul, Modi, & Patel, 2016) this study used measurement scale that have been validated in earlier studies. The item responses were coded as five point

Likert Scale and operationalized to measure attitude towards purchasing green products. Where 1, represents Strongly Disagree to 5, which represents Strongly Agree. Some of the given items related to this variable are as following: “I like the idea of purchasing”, “Purchasing green is a good idea” etc.

3.4.3 Intention to Green Purchase

A scale for measuring intentions to green purchase is constructed by (Kanchanapibul, Lacka, Wang, & Chan, 2014). This scale contains five items based on Five Point Likert Scale. Respondents were asked to rate their agreement level on given scale ranging from 1, Strongly Disagree to 5, Strongly Agree. Some items of this scale are e.g, “I have changed my principal products for ecological reasons”, “ I make a special effort to buy paper and plastic products that are made from recycled material” etc.

3.4.4 Green Consumption Behavior

Seven items were used for green consumption behavior, which is the dependent variable of this study and to measure green consumption behavior a scale is developed by (Suki,2019). The items were measured on five point Likert scale extending from 1, Strongly Disagree to 5, Strongly Agree. Some items related to this scale are e.g, “ I often buy organic products” , “When I consider buying a product, I will look for a certified environmentally- safe or organic stamp”, “I often buy products that are against animal testing” etc.

3.4.5 Green Product Quality

A scale for measuring green product quality is constructed by (Chang, & Fong, 2010). This scale contains four items based on Five Point Likert Scale. Respondents were asked to rate their agreement level on given scale ranging from 1, Strongly Disagree to 5, Strongly Agree. Some items of this scale are e.g, “product

of the company meet or exceed the requirements of environmental regulations”, “products of the company result in minimum environmental damage” etc.

TABLE 3.4: List of Variables and Instruments

Variables	Sources	Items
Attitude towards Purchasing Green Products(IV)	Paul, Modi, & Patel, (2016)	3
Intention to Purchase Green (Med)	Kanchanapibul ,Lacka,Wang, & Chan, (2014)	5
Green Consumption Behavior (DV)	Suki, (2019)	7
Green Product Quality (Mod)	Chang, & Fong, (2010)	4

3.5 Statistical Tool

For statistical analysis of hypothesized statements, After data collection, data analysis software named as SPSS were used where data tests were run to examine various statistical tests and to investigate the correlation and regression. And to check model fitness before hypothesis testing, we use AMOS which is basically extension of SPSS.SEM generally divided into Variance-based SEM / PLS-SEM includes Smart PLS and Covariance-based SEM includes AMOS which is an extension module from SPSS, which is mean based approach. Variance-based SEM i.e. Smart PLS can be used for exploratory research whereas Covariance-based SEM is meant for confirmatory research / analysis. The basic objective of covariance based SEM is that it focus on covariance i.e. explanation of items’ relationships, the sample size must be greater than 300 and you must need to address missing values before analysis. Reliability analysis was conducted to calculate the Cronbach’s alpha for all those variables which are analyzed under this study. Descriptive analysis revealed the central tendency and the variance of data by reporting the frequencies of demographical variable. However, before hypothesis testing,

initially worked on AMOS to check the model fitness in order to confirm that the instruments which we used for data collection were suitable for our study or not. Through confirmatory factor analysis (CFA), the reliability and the validity of scale was tested by using AMOS. Multiple indices are involved in such statistics, including Chi square, comparative fit indices (CFI), (RMSEA) Root Mean Square Error of Approximation. The CFI presumes that no correlation exists in between latent variables and contrast the sample covariance matrix with the null model. The values between 0 to 1 is considered acceptable and values close to 1 shows better model fit and values above than 0.90 represents good model fit. However, the values below reveal poor model fit.

3.5.1 Model Fitness

Model fitness was checked with the help of confirmatory factor analysis. It is used to understand the goodness of existing model in order to check that the proposed hypothesis on the basis of the framework developed in study met the criteria of reliability or not and even it is used to check the validity of framework.

Initially the results were as poor model fit and some modification required after that by applying the modification indices then the model fit becomes better than before and the findings represents that the proposed model of this study is a good model fit with new values Chi square = 287.042, CNIM df= 2.021, TLI= 0.904, CFI= 0.922, RMSEA= 0.058.

TABLE 3.5: Confirmatory Factor Analysis

	CHI Square	DF	CMIN DF	TLI	CFI	RMSEA
Initial Model	363.108	146	2.486	0.861	0.883	0.7
Modified Model	287.042	142	2.021	0.904	0.922	0.058

The **Table: 3.5**, shows that all the values are significant and model is fit. The values for TLI,CFI are greater than 0.9 whereas the RMSEA is 0.058. This gives the

proof that model is good in health and shows scale validity. The figure 3.1(given below) provides more explanation about Confirmatory Factor Analysis.

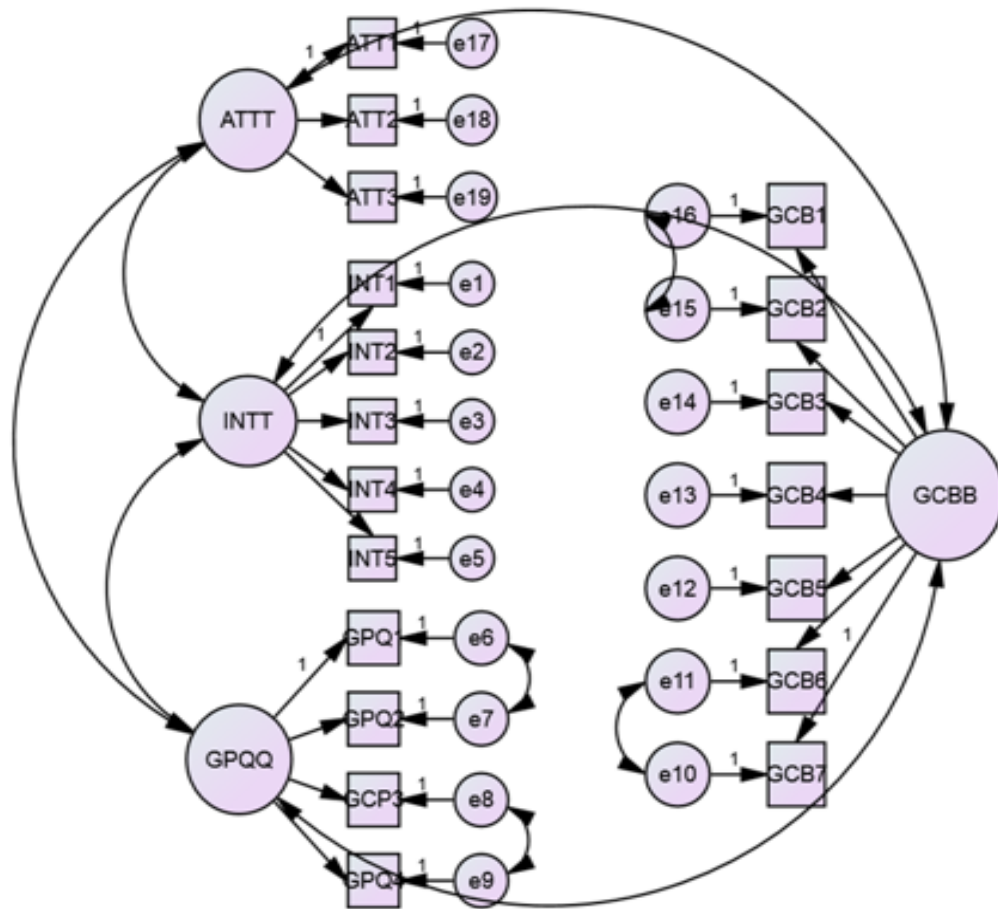


FIGURE 3.1: Confirmatory Factor Analysis

3.6 Pilot Testing

Pilot testing is considered as very effectual approach, before performing something extensively. As it will help to refrain from different risks including the wastage of time and other resources. Primarily to administer the pilot study, the researcher of the study should be clear about the topic and about those tools and techniques which are relevant in order to re-work on them in order to understand that how will they go to perform practically. Consequently, to ratify that whether the results intimate and in accordance with the proposed hypothesis of the study or not, almost 30 questionnaires were tested through pilot testing. Hence the results were

valid and no any significant issue was there with the variables and all scales were authentic and reliable for the pilot study conducted.

3.7 Reliability Analysis of Scales Used

Reliability is a process of showing harmonious results, whenever the particular items being tested again and again in different time periods and is same for the scales. The reliability of the scales basically represents the capability of scale in order to provide similar results whenever being tested for different time periods. So that to check reliability I have conducted a test through Cronbach alpha, it will notify the internal reliability of all variables and shows that whether there is a link between variables or not. Besides this also it measures single construct.

According to Cronbach (1951), the range from 0 to 1 is significant, the higher the value the more reliable scale will be to measure any construct. Scale is reliable when the values are higher than 0.7 and if the value is less than 0.7 it means that selected set of measures or scale is less reliable. The table given below shows the values of Cronbach alpha of selected scale for the collection of data. All the values of related variables studied under this research are above 0.7, however only one variable has value above than 0.6 which is not very good but still acceptable. So, all the items of variables shows that scales are reliable to conduct this particular study in the context of Pakistan.

TABLE 3.6: Scale Reliability

Variables	Cronbach's Alpha	Items
Attitude towards Purchasing Green Products	0.829	3
Intention to use Green Products	0.667	5
Green Consumption Behavior	0.837	7
Quality of Green Products	0.825	4

The **Table: 3.6**, shows the Cronbach's Alpha of all the scales which were used in the data collection. It represents the results of Reliability as well as the Validity analysis after the complete collection of required data. The Cronbach Alpha value

for Attitude towards purchasing green is 0.829, for Intention to use green products the value of Cronbach Alpha is 0.667, Green consumption behavior is 0.837, and for quality of green products the value is 0.825.

3.8 Data Analysis Procedure

In social sciences, for producing the statistical outcomes, various statistical tools has been used. These techniques have different pros and cons. However, the selection of authentic and accurate tools and techniques are strongly linked with research model, objectives of study, with the study type and also with the nature of data. Correlation is used by the researchers to check the links in between variables and regression test is used to analyze the effects of independent variable on the dependent variable. Structural equation modelling or process macros used to test the links in between multiple dependent and independent variables. After relevant data collection for conducting study form maximum 307 respondents, this data was analyzed through SPSS and through AMOS.

At the time of data analyses specific procedure is used which includes the following:

- Only accurately filled questionnaires by the respondents were selected for data analysis.
- The items of the variables in questionnaire were properly coded and that coded variables were utilized for analysis.
- To explain the characteristics of sample, the frequency tables were generated.
- Then descriptive statistics was carried out through different numerical values.
- The reliability test was conducted for each variable to check the reliability of all variables through Cronbach Alpha.
- For the justification of measurement model, confirmatory factor analysis was used in this regard.

- To check the significant relationship existing among particular variables, a correlation analysis was conducted in this study.
- The single linear regression for dependent and independent variable was carried out in order to modify the proposed relationship.
- The Preacher and Hayes model was used in order to identify the roles of moderator and mediator in between dependent variable and independent variable.
- And by using correlation and the Preacher and Hayes model, the intended hypothesis of this study was analyzed so to check the acceptance, rejection of all the proposed hypothesis of the study.

Chapter 4

Results and Analysis

The statistical analysis with their interpretation which will then lead towards further discussion is included in this chapter.

4.1 Results

The descriptive statistics for the variables of this study including attitude towards usage of green products, intention to use green products, green consumption behavior and quality of green products encompasses the essential proofs about the data and other standard values. It contains number of the respondents, the maximum value and the minimum value for one and all variables and furthermore it includes standard deviation and mean values for all variables. The mean values gives a demonstration about average of all responses whereas the values of standard deviation specify the variation of all the responses from the means of all variables. The variables of this study were estimated at five point Likert scale.

The Descriptive statistics provides information about whole data as it highlight the significant statistic points of the data. The table given here confer some important figures that represents the complete data of study. Basically the descriptive statistics consists of some particulars including population size, the maximum and the minimum values, the standard deviation and the mean values of data.

The given **Table: 4.1**, shows the descriptive statistic of data for this study. The

very first column of this table provides details about all the variables studied under this research work and then from column second till sixth column shows the size of sample, the upper most, lower most, the means values and the standard deviation respectively.

TABLE 4.1: Descriptive Statistics

	N	Min	Max	Mean	Std. Deviation
Attitude towards usage of green Products	307	1.33	5	4.1954	0.708
Intention to use green products	307	1	5	3.7739	0.62964
Green Consumption Behavior	307	1	5	3.7171	0.6889
Green Product Quality	307	1	5	3.6987	0.68212
Valid N (list wise)	307				

Table: 4.1, shows some information about four variables of this study and shows that the size of sample is 307. The variables of this study including Attitude towards usage of green products, intentions to use green products, green consumption behavior and green product quality, all were rated on five points Likert scale whereas 1 demonstrates “Strongly Disagree”, 5 demonstrates “Strongly Agree”. The essence of the responses shown by the mean values and by standard deviation. It is basically the observation of the respondents regarding specific variable.

The mean of Attitude towards using Green products (ATT) was 4.1954 and value of standard deviation was 0.70800, mean of Intentions towards green products (INT) was 3.7739 whereas standard deviation of INT was 0.62964, the mean for Green Consumption Behavior (GCB) was 3.7171 and its standard deviation was 0.68890 and in the end the mean for last variable which is Green Product Quality (GPQ) was 3.6987 where the standard deviation value for GPQ was 0.68212.

4.2 Correlation

So to confirm the relationship between the existing variables, the correlation analysis is carried out. The purpose of conducting correlation analysis in this study is to ascertain the correlation among attitude towards green products and green consumption behavior, the mediating role of intentions to green purchase and the moderating role of green product quality in order to make sure that proposed hypothesis of study are valid. The correlation analysis does not evoke relation in between two or more variables as it differs from regression analysis.

The correlation analysis is conducted generally to know the variation nature in between variables and is used to measure the association between two variables just because this method is based upon covariance, the acceptable range of Pearson correlation is between -0.1 to +0.1. Therefore, the magnitude value we supposed the strength of relation in between variables also that magnitude value generalize by distance of correlation from zero. And if values of correlation faraway from 0 it means that the relationship is strong between two variables and if value is near to 0 it means relationship between two variables is weak. Nevertheless, if values are zero it simply means that there is no any relation exists between variables which are understudies.

Whereas the signs with values describes the nature of relation between variables. If there is a positive sign it means that if one variable increases the other one also increases and this is considered as existence of direct relation and on the other side if negative sign is there with values it shows that when one variable decreases it cause a decrease in other variable, that would be considered as an indirect relationship.

TABLE 4.2: Correlation Statistics

Sr.No	Variables	1	2	3	4
1	Attitude towards green products	1			
2	Intention to use green products	0.252**	1		
3	Green Consumption Behavior	0.215**	0.602**	1	
4	Quality of Green products	0.251**	0.445**	0.516**	1

***Correlation is significant at the 0.01 level (2-tailed) N=307, *p<0.05, **p<0.01, ***P<0.001 (ATT=Attitude towards green products, INT= Intentions to use green products, GCB= green consumption behavior, GPQ= green product quality).*

The given **Table: 4.2**, reports the results of correlation between studied variables. Attitude towards green products was positively correlates with intentions to use green products ($r = 0.252^{**}$, $p < 0.01$), with Green product quality ($r = 0.215^{**}$, $p < 0.01$), and with Green product quality ($r = 0.215^{**}$, $p < 0.01$). Intention to use green products correlated with Green consumption behavior ($r = 0.602^{**}$, $p < 0.01$), with Green product quality ($r = 0.445^{**}$, $p < 0.01$). Green consumption behavior was positively correlated with Green product quality ($r = 0.516$, $p < 0.01$).

4.3 Regression Analysis

The existence of relationship between variables has been analyzed by using correlation analysis. However, the reliance only on correlation was basic but not be adequate because it only clears the existence of relationship between variables by using scanty support and even do not explain the causal relationship among all variables.

Therefore, the regression analysis was conducted to ratify the dependency of one variable on the other variable. The regression analysis narrates the dependency of one variable on the other, that is the independent variable on which its being regressed. Preacher and Hayes (2008) method has been used in this study, for the analysis of both moderation and the mediation. From Preacher and Hayes

process, Model 4 and model 14 was used to analyze moderation and mediation. Both the moderation and mediation analysis conducted separately.

TABLE 4.3: Mediating Effect of Intention to use Green Products between Attitude towards usage and Actual Green Behavior

Effect of X on M					
Effect	SE	t	p	LLCI	ULCI
0.2245	0.0492	4.5556	0	0.1275	0.3214
Total and Direct Effect of X on Y					
Effect	SE	t	p	LLCI	ULCI
0.0657	0.0459	1.4311	0.1534	-0.0246	0.156
Direct and Total Effect of M on Y					
Effect	SE	t	p	LLCI	ULCI
0.6403	0.0516	12.4093	0	0.5388	0.7418
Indirect Effect using Bootstrap					
Variable	Effect	Boot SE	Boot	Boot	
			LLCI	ULCI	
INT	-0.1437	0.0461	0.0608	0.2414	

N=307, unstandardized coefficient of regression reported. The sample size for Bootstrap is 5000, LL=lower level, CI=Confidence Interval. UL=upper Limit, CI=confidence Interval. X represents Attitude towards usage of green products, Y represents Green Consumption Behavior, M represents Intention to use Green Products.

Model 1 from Preacher and Hayes process was used to test mediation and results for direct effect given in the **Table: 4.3** B=.0657, t =.0459 at $p > 0.05$ shows that the relationship between X (attitude towards using green products) and Y (green consumption behavior) was not significant. Hence, the results were not in the support for hypothesis 1 of this study, whereas the proposed hypothesis was, the attitude to use green products significantly influences on Green consumption behavior.

The results showing relation between X and M where X is used to represent attitude towards using green products and M is used to represent Intention to use green products with the value showing coefficient = 0.2245, $t = 4.5556$ at $p < 0.05$, therefore these values were in the support of our hypothesis 2 which is proposed in the study as the attitude significantly influences on the intentions to use green products. And the values for lower level and upper level confidence intervals (LLCI = .1275, ULCI = .3214) showing that there is a positive association between these variables.

However, the results for indirect effect of X (attitude to use green products) on Y (green consumption behavior) through M (intention to use green products) showing $B = .6403$, $t = 12.4093$, at $p < 0.05$ shows that the results were in support of proposed hypothesis 4 which was proposed as Intention to use green products significantly mediates in between Attitude towards usage of green products and green consumption behavior, therefore, the hypothesis 4 was accepted according to the above mentioned results.

TABLE 4.4: Moderating Effect of Green Product Quality on the relationship between Intentions to use Green Products and Green Consumption Behavior Mediated Moderation

Direct and the Total effects						
Paths	Coefficient	SE	t	P	LLCI	ULCI
IV to Med	0.2245	0.0493	4.5556	0	0.1275	0.3214
IV to DV	0.0193	0.0435	0.444	0.6573	-0.066	0.1049
Med to DV	0.8934	0.1736	5.1455	0	0.5517	1.2351
(Int-term)	-0.1109	0.0471	-2.3538	0.0192	-0.204	-0.018
Med x Mod						
Index of Moderated Mediation						
	Index	BSE	Boot	Boot		
			LLCI	ULCI		
Mod	-0.0249	0.0145	-0.0539	0.0022		

N=307. Unstructured Regression Coefficient are reported. The sample size for Bootstrap is 5,000. LL = Lower Limit, CI = Confidence Interval. UL = Upper Limit, CI = Confidence Interval. X/IV represents Attitude towards usage of green products, Y/ DV represents Green consumption behavior, M/Med represents Intention to use green products and W/Mod represents the Quality of green products.

Model 14 from Preacher and Hayes process was used for examining the moderating role of quality of green products on the relationship between intention to use green and green consumption behavior.

Table: 4.4, represents the results for moderated mediation the value whereas coefficient = -0.1109, $t = .0471$ at $p > 0.05$ and the given values shows insignificant results and the quality of green product has insignificant moderation on the relationship between intention to use green products and green consumption behavior. Whereas the proposed hypothesis of this study was that there is a significant moderation on the relationship of intention and green consumption behavior. Thus the values were not in the support of our proposed hypothesis H5.

4.4 Summary of Supported and Not-Supported Hypothesis

From total five proposed hypothesis of this study, three hypothesis were accepted on the basis of above mentioned values.

The first accepted hypothesis was the path from attitude towards intentions to use, the other hypothesis which was accepted was the path from intention to use towards green consumption and last one was indirect path of attitude towards usage of green products to green consumption behavior through the mediating role of Intention to use green products.

And two proposed hypothesis which were rejected in this study includes, the hypothesis 1 that was proposed as: the attitude has a significant effect on green consumption behavior and the other one was hypothesis 5 which was proposed as: the moderating role of green product quality has a significant moderation on the relationship between intention to use green products and green consumption

behavior. Thus, the given results of only two path were not in the support of hypothesis 1 and hypothesis 5 for this study.

TABLE 4.5: Summarized Results

Hypothesis	Statement	Support
H1	The attitude towards using green products significantly influences on green consumption behavior.	No
H2	The attitude towards using green products significantly influences on intentions to use green products.	Yes
H3	The intentions to use green products significantly influences the green consumption behavior.	Yes
H4	Intentions to use green products significantly mediates between attitude towards usage and green consumption behavior.	Yes
H5	Green product quality has a significant moderation on the relationship between intentions to use green products and green consumption behavior.	No

Chapter 5

Conclusion, Discussion and Limitations

Chapter five includes all details about the existing relationships between hypothesis and the reasons behind the supported and not supported hypothesis of this study. Also the theoretical and practical implications, weaknesses and the strengths of this study also discussed here in this portion.

5.1 Discussion

By utilizing the Theory of Planned Behavior (TPB) presented by (Ajen, 1991). Specifically, the reason for conducting this research work is to get the answers for some basic questions which were unsettled or might not be answered in the context of Pakistan about the existing relationships between main and other variables of this study which includes the relation between attitude and green consumption behavior, intention to use green products which plays a role of mediator in this study and the green product quality which is determined as a moderator on the existing relationship between intentions to use green products and green consumption behavior.

For conducting this study, the data was collected from the consumers who were the customers of banks. The findings were identical with the hypothesized model.

The first proposed hypothesis was the attitude towards using green has significant influence on green consumption behavior but the results suggests that there was not significant direct effect of attitude on green consumption which means that the results were not in the support of our first hypothesis /H1. However, the intention to use has a significant impact on green consumption behavior and it plays a significant mediation in between attitude to use green products and green consumption behaviors. Hence, H2, H3 and H4 were accepted and all the results were in the support of these three hypotheses of this study.

Moreover, quality of green product was presented as a moderator on the relation of intentions and green consumption behavior in this study but the findings revealed another picture and the results were not supported our hypothesis that means the moderator (quality of green product) does not influence on the relationship between intentions and actual behavior, which was proposed as H5 in this study. Further discussion on all the hypothesis of study in detail is given as following:

5.1.1 Hypothesis 1: The Attitude towards use of Green Products Significantly Influences on Green Consumption Behavior

Summary for results of H1

The findings shows that there was no any significant influence of attitude to use green products directly on green consumption behavior with the value of $p > 0.05$, thus the proposed hypothesis was rejected.

Discussion on Hypothesis 1

Results were not in the support of this hypothesis and not shown significant direct effect of attitude to use green on green consumption behavior with the coefficient 0.0657, t is 1.4311 at the $p > 0.05$ it means results were not significant. The value of t is less than 2 whereas the value of p is greater than 0.05 it means the results are not significant statistically. The results of hypothesis 1 shows that the attitude to use green product has some relation with green consumption behavior but not directly influence on green consumption, so the findings were against our proposed

hypothesis which was presented as the attitude to use green products significantly influences on green consumption behavior as it was previously suggested by other authors as well (Cherian, & Jacob, 2012).

Although the relationship of attitude with the help of intentions on green consumption behavior is as hypothesis based on previous literature (Tarkiainen & Sundqvist, 2005). Many behaviorist believed that the action of a person can be anticipated by the attitude of person and a lot of studies are there in order to surpass the capacity to anticipate the behavior of individual and also different factors were suggested to required factors that can categorized either as situational or dispositional. The effects of attitude on the buying behavior of consumers has comprehensively studied (Fazio, & Zanna 1981; Ajzen 1989). the prediction of behaviors are dependent directly on the attitude of individual that is found to be connected or linked with experience or knowledge any person have (Davidson, 1985).

Moreover, the studies in this particular area pointed out that if the attitude is used in anticipating the behavior of consumer then there must be a lot of methodological issues that must be resolved. Ajzen and Fishbein (1977) suggest that the behavior of a person and their attitudes must be measured at the same level of compatibility. Consequently, our this study further proposed another hypothesis to understand the relationship between attitude to use green products and green consumption behavior with the help of an important variable which is intention to use green products and then its effects on green consumption behavior. Thus, this study explore the effects of mediator (intention to use green product) on green behavior. Further the details related to the role of mediator given below in the next sections.

5.1.2 Hypothesis 2: The Attitude towards using Green Products Significantly Influences on Intention to use Green Products

Summary for Results of H2

This hypothesis was accepted on the basis of statistically acceptable figures. The findings shows that there was a significant influence of attitude to use green products on intention to use green products with the positive coefficient = .2245, $t = 4.5556$ at $p = .0000$, thus the proposed hypothesis got acceptance.

Discussion for Hypothesis 2

It was proposed, in the second Hypothesis of this study that attitude towards usage of green products significantly influences on intention to use green products and then the results also in the support of this hypothesis where the value for coefficient is .2245, $t = 4.5556$ at $p = 0.00$, these given values proves that there is a significant relation in between these two variables. Whereas the value of t is 4.5556 also shows the level of significance between the relation of attitude to use green products and the mediator of this study. The value of t is greater than two which means that the value is statistically acceptable.

The hypothesis was proposed on the basis of previously available literature on the relationship that attitude of a person significantly influences the intentions of a person to purchase green items (Yadav, & Pathak, 2016). The applicability of intention is confirmed by Theory of reason action (Fishbein, 1979) by explaining social behaviors intended at the purchase of green items. Attitude is considered as one of the best indicators for intentions to purchase green items (Doszhanov, & Ahmad, 2015). Having a positive attitude towards use of green products and also the perceived green values defines the consumer intentions to purchase green products in actual (Vazifedoust, 2013). Thus, this study explore that how the intention to use green products plays a role of mediator in between attitude to use green products and green consumption behavior.

5.1.3 Hypothesis 3: The Intention to use Green Products Significantly Influences the Green Consumption Behavior

Summary for results of H3

This hypothesis was also got acceptance on the basis of statistically acceptable figures. The results shows that there was a significant influence of intentions to use green products on green consumption behavior with the positive coefficient = .6403, $t = 12.4093$ at $p = .0000$, thus the proposed hypothesis got acceptance.

Discussion for Hypothesis 3

In the third hypothesis of this study, it was proposed that the intentions to use green products significantly influences on green consumption behavior and also the results were in the support of this hypothesis whereas the value for coefficient is .6403, $t = 12.4093$ at $p = 0.00$, these mentioned values are the prove of a significant relation in between intention to use green products and green consumption behavior. And the value of t is 12.4093 shows the level of significance between the relation of intentions to use green products and the main variable which was presented as a dependent variable of this study. The value of t is greater than two which means that the value is significant and statistically acceptable. The proposed hypothesis was based actually on the past literature, as many divisions are there in the outcomes of previous studies regarding the important factors that have some impacts on the intentions to use green and also the relation among the intentions and the behaviors. However, it is very important to understand and to conduct different studies so to explore relationships among intention to use green products and green consumption behavior (Hua, & Yong, 2019).

Generally many studies gives a demonstration that intentions have a significant influence on behavior of a person. These are some major findings of various researchers who support and proposed that the intentions are the major and an immediate predictor of individual's behavior (Ajzen & Fishbein, 1980). The positive relation which is reported in the given tables presented in this study among the intention of a person and behavior in both the environmental and the studies

related to general behavior (Ajzen&Fishbein, 1980; Chan & Yam, 1995) inclusion of the conative constructs considered as mediator in between the attitude and behavior additionally, it makes the expository power of the model more better.

5.1.4 Hypothesis 4: The Intention to use Green Products Significantly Mediates between Attitude towards usage of Green Products and Green Consumption Behavior

Summary for Results of H4

This hypothesis was also accepted on the basis of statistically acceptable figures. The results shows that there was a significant influence of intentions to use green products on green consumption behavior with the positive upper limit confidence interval=.2414 and positive lower limit confidence interval =.0608, thus the proposed hypothesis got acceptance.

Discussion for Hypothesis 4

In the forth hypothesis of this study it was stated that the intention to use green products significantly mediated in between attitude towards use of green products and green consumption behavior and our proposed hypothesis statement has been accepted. All the figures were statistically acceptable hence the results were in support of this hypothesis and intention plays a significant role of mediator in between attitude and green consumption behavior. Both the values for upper and lower limit confidence interval is positive whereas upper limit = .2414 and lower limit = .0608 shows the significance of indirect relationship between attitude to use green product and the main variable of this study which is green consumption behavior. Fishbein & Ajzen ,(1975) defined the well built relation among the intentions and behavior and theory of reasoned action has been applied in order to analyze the relationship among these variables.

In the previous studies mostly the results were found that those consumers who show readiness for any particular item then the probability of purchasing items gets higher. It means that the buying behavior is associated positively with the

intention to purchase (Westaby ,2005). In short Planned Behavior Theory predicate that the behavior of individual is determined by the intentions to perform any specific behavior. The intentions of a person is considered as a major factor which converts the attitude into the actual behavior (Ajzen, 1985). Most of the past studies investigates the impact of attitudes on the intentions towards green purchase and their findings were positive and providing support to the statement that intentions plays an important part in between attitude to use green products and actual behavior towards green (Chan, & Lau,2002).

5.1.5 Hypothesis 5: Green Product Quality has a Significantly Moderation on the relationship between Intention to use Green Products and Green Consumption Behavior

Summary for Results of H5

The findings show that there was no any significant effect of moderation on the relationship between intention to use green products and green consumption behavior, where the value for $p > 0.05$, thus the proposed hypothesis got no support and the values were statistically not acceptable.

Discussion for Hypothesis 5

In the hypothesis 5 of this study it is proposed that Quality of Green Products has a moderating effect on the relation between mediator and the dependent variable of this study. And the moderating effects has been studied in this particular study. The findings were not in the support of our hypothesis. Thus, the results of this last hypothesis showed insignificant values which are not acceptable statistically. The value of $p > 0.05$ which is = 0.192 which means that this relationship is nit significant statistically. Thus our proposed hypothesis got rejection in this sense. And as the findings of hypothesis claimed that the quality of green product does not have any significant impact on the relationship of Intention to use green products and green consumption behavior.

Generally, in this study the moderating impacts of quality of green products has

been explored on the relation of intention to use green and green consumption behavior. Moreover, this study was conducted to prove the role of moderation on defined relationship which was explain previously by many researchers (Ajzen, 1985). But the results shown different picture, The proposed hypothesis was based on past literature as a lot of studies describes the issues related to the environment friendly products and their consumption as this gained much attention then before (Ramayah, Lee, &, Mohamad, 2010). By thinking that the concept of green is now at the foreground on the minds of consumers and still they are struggling with their functions in growth of items for the benefits of environment (Strizhakova, &, Coulter, 2013).

Many studies have explored the effects of quality of green on purchase intention and their findings shows the positive impact of the quality of green products on the purchase intentions of consumer. And the findings were as similar as earlier studies (Chi, Yeh, and Yang, & 2009). It was suggested and recommended that perception for quality of products increases the intentions of consumers which then results in the increase in buying of green products. It is concluded that the quality of green products have some impacts on intention of a person and then increase the buying of green products but according to the results of this study our hypothesis got rejection but still the thing is it may be not supported in the context of this population and area but might if this study will conducted in other context with different culture or people living in different areas may give different results. However, in this study the quality of green products does not play a role of moderator on the relationship between intention to use green products and green consumption behavior.

5.2 Study Limitations

When the study was conducting an effort was made so to get rid of and to get better results but there are some limitations like other studies just as it is not within the reach of everyone to enfold all the points in just one particular study. By putting well enlightened confirmations from past literature, very few gaps has

been filled up by our study and just because of limited resources as we have short of time and finance there are many other limitations connected with our research study. This study only administer to the green category of products which in results limited the generalizability of this study as it might not generalizable to any specific industry or particular sectors of Pakistan. Another flaw for this study is with its research model because our model only includes one mediator and only one moderator which plays a role of moderated mediation in our study.

Another limitation associated with our study is the size of our sample and it is just due to the data which were collected for this study was very limited and in a very short period of time the data was collected. Collected data was only from those consumers who were shopping from malls and it was collected only from the malls of Pakistan included only the data from two cities of this country namely Islamabad and Rawalpindi so as it not include the whole population of Pakistan here is the possibility that it may not be the best representation for entire Pakistani culture. Because people living in different areas may have different personalities and different buying behaviors due to the changes in cultures and other geographical gaps. Thus, this flaw may limits the generalizability of this study.

And in the last, the sampling techniques which were used in this study to select the sample was convenience sampling technique just because of time constraint this technique was applied as it was feasible to reach with in short time. Because of the convenient sampling technique the data was collected from few malls located in Rawalpindi, Islamabad so the findings of our study may not gives the better results. The results of study are distinct due to the presence of some industrial laws and other situational factors as well as the culture of Pakistan has very strong effects due to all these reasons it limits the generalizability of our research work.

5.3 Directions for Future Research

Always some gaps are available in studies, various limitations are there in our study and that space gives some directions for further studies and that may be

work as an opportunity for other researchers in future studies. There are some recommendations for future researchers to conduct different studies on the basis of this particular study they wanted to be conducted in near future. The first thing is the respondents for our study were only those who were the consumers who shop from the malls of Pakistan but we suggest here that other researchers must try to explore more industries or any specific industry and then we did not target consumers on the basis of income, other studies must investigate things by targeting consumers with different income levels in order to intensify the study generalization.

Secondly, we target those respondents who are living in the twin cities of Pakistan and this thing limits the generalizability of this study. Further studies should pivot more and other cities of Pakistan or might focus on different cultures. Moreover, this study has not inspected the impacts of price of green products on the relationship present in between intentions to use green products and green consumption behavior. By using different and other research methodologies and latest software, future researchers may explore the impact of price of green products on the relationship between intentions to use green and green consumption behavior by targeting different the consumers with contrasting income levels.

Moreover, this study has not inspected the impacts of price of green products on the relationship present in between intentions to use green products and green consumption behavior. The result of this study may only be applicable to a particular product category but here we suggest that future studies should define some categories which might include food industry, cosmetic products or products for household usage so that to enhance the generalizability of study and that gives better results for various industries.

In addition to these, one more thing is that our research project only includes limited data because the purpose of conducting this study is for academic objectives and due to limited resources we target few shopping malls and limited data size limits the research generalizability so here we suggest that in future other researchers should include other malls, shops and analyze the model for larger sample size by including the population of different cities and might go for the

whole population of Pakistan for better results. And finally as stated in limitations that our model includes only one mediator and one moderator which played a role of moderated mediation in between intention to use green and green consumption behavior due to limited time. Even so, the others may expand this research model and try different moderators or two or more moderators for same study in order to enhance generalizability and to get better results.

5.4 Theoretical and Practical Implication

Some significant contributions has been done by this study in the literature available previously in the field of green not only theoretically but in practical as well. This study has contributed in literature of some important variables of this study including attitude to use green, intentions to use green and green consumption behavior and by adding quality of green products as a new variable which plays a role of moderator on the existing relationship between intention to use green and green consumption behavior. The findings of our study shows that major changes can be seen when a person has intentions to buy green he or she will actually make their attitude confirm and start buying green products, as it is available in past literature that intention has major role in between attitude and buying behavior of consumers thus same results are found that intentions to use green products also plays a significant mediation in between attitude to use green and green consumption behavior as we took data from the consumer who shop from the malls of Pakistan so this contributes for the industrial sector of Pakistan in domain of green management systems.

To add in this theoretical contribution our study also worked on quality of green product as anew moderator on the relationship between intention to use green and green consumption but the findings through different research methodologies does not support our proposed hypothesis. As the past literature is very limited on green product quality with green consumption behavior and is not tested on the relationship in between intention and green consumption. Though, our study does not show better results for moderation on this relationship but this variable

contributes as it was not studied before on the relationship between intention to use green product and green consumption behavior and has not been introduced as a moderator.

Our study not only contributes in literature but equally in the corporate sector of Pakistan as the world is now growing rapidly and the actual markets are expanding by using different and new technologies but not only this the organizations are now focusing on environmental issues just because the consumers are the reason who is the cause of environmental pollution so to make changes in their buying behavior our model contributes here and helps the industrial sectors to improve their green management systems by understanding the attitude and intentions to use green and by making people aware so to translate their intentions to use green into green consumption behavior. This model presents a picture that green intentions helps to make green consumption behavior and in this way the organizations can make a foundation and develop strategies to enhance green behaviors so that those strategies must be beneficial for environment.

5.5 Conclusion

Most of the consumers are involved in creating pollution in the environment as there are many buying patterns exists that cause environmental damage. This research work also attempts and took a step forward for understanding more comprehensively the buying behaviors of consumers and to analyze how attitude of a person towards green leads to their intentions to use green that in result cause green consumption behavior. By keeping in view this present study we analyze and explore an authentic and real issue of today's environment named as green consumption and defined this concept in the light of industrial sector of Pakistan. For better understanding of this concept the Theory of Planned Behavior was used in order to examine the attitude and intention of a person towards green products that how they can use their intentions so to create green buying behaviors. The findings of study shows that large number of consumers had intentions to use green products and attitude of a person has a strong impact on green intentions

of person to buy green products. Therefore, to understand the attitudes of consumers and their intentions to use green products are considered important for industrial sector of Pakistan. Though a concern towards green products is growing rapidly among consumers are now give a rise to green products industry and also highlight the green products importance although the practical implications and different strategies are still not developed by different industries of Pakistan. Generally, the concept of green is still very new for the markets of Pakistan. Thus, the organizations must understand the behaviors of consumers and explore how their buying patterns towards green products are affected by the attitude of using green and intentions to use green products.

The Theory of Planned Behavior was used in this study almost 380 questionnaires were distributed out of which only 307 questionnaires were accurately and completely filled by respondents so data analyzed by using these questionnaires. Through some statistical authentic tests the validity and the reliability of all the variables of research model has been checked and model fitness shows the good model fit. The hypothesis proposed in this study got acceptance as well as rejection by analyzing through different statistical techniques and the values obtained by analyzing the data were some in the support of our three hypothesis while some values were not significant statistically and hence two proposed hypothesis got rejection in our study. Anyhow, our this research work contributes in literature as our model includes green product quality as a moderator between intention to use green and green consumption behavior. This model gives a complete view of consumer buying behavior towards green products with the help of mediator as intentions to use green plays significant mediation in between attitude to use green items and green behavior. Our study gives various practical as well as theoretical implications and also provide new ways to other researchers for future studies.

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Chapter 6

Appendix-A

Marketing Research Questionnaire

Dear Participant, I am student of MS Management Sciences at Capital University of Science and Technology. Conducting a research on Green Consumption Behavior. We ask your kind cooperation in answering these following questions as truthfully and completely as possible. You can help us by completing the attached questionnaire, you will find it quite interesting. This questionnaire will take you around 10-13 minutes. We appreciate your participation and value your responses in this study. Be assured that all your provided answers will be kept in the confidentiality.

Thank you for your assistance.

Yours Sincerely,

A Questionnaire Survey about Green Consumption Behavior

This study is intended for educational purpose only. (Please indicate your level of agreement with each of these statements using the given scale: 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5=Strongly Agree) Please answer all questions to enhance the objectivity of this research.

PART I: Attitude towards purchasing green products

Sr.No	Description of Scale	1	2	3	4	5
1	I like the idea of purchasing green.					
2	Purchasing green is a good idea.					
3	I have a favorable attitude towards purchasing green version of a product.					

PART II: Statement of Intention to Green Purchase

Sr.No	Description of Scale	1	2	3	4	5
1	I avoid buying products which are potentially harmful to the environment.					
2	I have changed my principal products for ecological reasons.					
3	When I have to choose between two similar products, I choose the one that is less harmful to the environment.					
4	I make a special effort to buy paper and plastic products that are made from recycled materials.					
5	I will not consider the environmental issues when making a purchase.					

PART III: Green Consumption Behavior

Sr.No	Description of Scale	1	2	3	4	5
1	I often buy organic products.					
2	I often buy products that are labelled as environmentally safe.					
3	I often buy products that are against animal testing.					
4	I often buy products that contain no or fewer chemical ingredients.					
5	When I consider buying a product, I will look for a certified environmentally-safe or organic stamp.					
6	I often buy products that support fair community trades.					
7	I often buy products that used recycled/recyclable packaging.					

PART IV: Green Product Quality

Sr.No	Description of Scale	1	2	3	4	5
1	Product of the company meet or exceed the requirements of environmental regulations.					
2	Products of the company consume the least amount of resources and energy.					
3	Products of the company are easy to recycle, disassemble, decompose, and reuse.					
4	Products of the company result in minimum environmental damage.					

Please provide following information

	1	2
Gender	Male	Female

	1	2	3	4	5
Age	18-25	26-33	34-41	42-49	50 and above

	1	2	3	4	5
Qualification	Metric	Intermediate	Bachelor	Master/M.Phil	Phd