CHAPTER ONE INTRODUCTION

1.0 Introduction

The purpose of this chapter is to provide an overview of this study and its organization. It begins with introduction about research topic, followed by the problem statement, research questions, the objectives of the research, and the importance of the study. In addition, the chapter contains a section on definitions and descriptions of the key terminologies used, as well as an outline of the organization of the study.

1-1 Background of the study

In the last few decades, environment awareness of consumers has considerably increased throughout the world. Environmental problems such as global warming and pollutions have become global issues, which motivate both individuals and organizations to take necessary measures to preserve the environment (Alipour & Fashkhamy, 2013). A business world having a strong relation to the environment has held several international conferences attempting to realize environmental fairness such as Montreal Protocol (1987), a conference in Rio De Jeneiro (1992), Protocol Kyoto, and Great meeting in Copenhagen in 2009 (Arifin, 2012).

Many companies in the industrialized nations are into the environmental revolution since last three decades and have recognized that they can reduce pollution and increase profits at the same time. The fact is, that challenges posed by global warming or problems emerging from environmental uncertainties do not automatically create opportunities to grow or booking more profits (Saxena & Khandelwal, 2012).

Green marketing is a concept which attempts to minimize the harmful impact of the environment (Arifin, 2012). Today, green is used most often to refer to new technology and new products that have a sustainable impact on nature. As a result of which green marketing claims are on rise, which are not easy for a customer to understand (gosavi, 2013). The need for sustainable business practices by corporations around the world is identified to be a result of overall increase in the consumer awareness of lack of environmental protection (Cherian & Jacob, 2012).

Purchase intention for green environment product is conceptualized as the probability and willingness to prefer to purchase the product which has features of having eco-friendly features, thus marketers haven also shown their interest in the issue by employing the environmental advertisement in their promotion to appeal the products to the consumers (Yusof et al, 2013).

From an academic perspective, an area of inquiry referred to as "green marketing" has now been established (Mustafa, 2007). Marketers viewed this phenomenon as offering business opportunities, and a number of organizations developed and implemented long-term, proactive environmental strategies. At the same time companies launched environmentally friendly products many of which were clothed in confusing and misleading half-truths, made false and trivial promises, with some companies exaggerating or even fabricating the environmental qualities of their products (Stavros et al, 1999).

The green market sector in the United States is expanding and 75% of the consumers have mentioned a company's green image as an important criterion for making their purchase decisions (Shirsavar & Fashkhamy, 2013). Concern about the environment has increased steadily among the public of industrialized world and has become of primary concern. This concern has not been limited to industrialized nations such as Germany

and US but extended to other less industrialized nations such as India, Philippines, and Turkey. These less industrialized countries have experienced high levels of concern about environmental issues such as water and land pollution and have come to believe that deterioration of the environment would be detrimental to public health (Tantawi & O'Shaughnessy, 2009). From the beginning of 1970s, a significant amount of research has been conducted on consumer purchase behavior for environmentally friendly products. Many variables were shown across the globe to drive consumer choice in regards to purchasing environmentally friendly products (Anki & Mayur, 2013).

For consumers, the 1960s may be described as a time of "awakening", the 1970s as a "take action" period, the 1980s as an "accountable" time, and the 1990s as a "power in the marketplace". During this period consumers appear to have become aware of the fact that the environment is more fragile than they once believed, and that there are limits to the use of natural resources. This, in turn, stimulated a widespread feeling that the time for corrective action has arrived.

By the end of the 1980s, increasing numbers of consumers described themselves as environmentalists and a number of opinion polls indicating an expressed desire to protect the environment emerged. Despite the obvious limitations of such publications there is clear evidence of an upward trend in consumers' environmental concern, with the period between 1972 and 1991 exhibiting an accelerating pattern. In more recent years there is evidence to suggest that a plateau has been reached (Stavros et al, 1999).

Consumers have started to show more interest in green products and the tendency to spend on products with green features has increased. Since then, research programs have been conducted to study the interest of people towards the environment and green products (*Rakhsha* &

Majidazar, 2011). Since majority of environmental problems evolve from human consumption, the problem of conservation has been brought down to the consumer level. Accordingly consumers are also coming forward to take some responsibility to reduce environmental damage through the consumption, by the way of using environmentally friendly products (khan & khan, 2012). There has been a rapid growth in the world's pollution, especially in developing countries. Currently, the environment is threatened in a wide variety of ways such as global warming, ozone depletion, shortage of drinking water, loss of biodiversity, and land degradation. according to the united national environment program (UNEP), one quarter of the earth's land is threatened by desertification, which is a process of land degradation in arid, semi-arid, and dry sub humid areas resulting from various factors including human actions (United National Chronicle ,2000) (Hai & Mai, 2012). Pollution is another important environmental problem owing to the economic growth. Industrial waste from manufacturing plants and untreated sewage, the coal fired power plants', gas diesel power vehicles, etc. Are some examples of the primary causes of this pollution (Shahnael, 2012). Sudanese manufactures is one causes of this pollution Table 1.1 shows below:

Table 1.1
Sudanese Manufacturer Pollution

Environmental	N.	N. factories	N.	N. state	Per%
problem	factories	Omdurman	factories	factories	
	Khartoum		Buhre		
lack of commitment	35	20	25	80	27%
to workers' safety					
tools					
Low internal and	19	12	15	46	15%

external					
environment					
Lack of ventilation	30	20	20	70	23%
and exhaust fans					
Lack of proper	13	15	16	44	15%
waste disposal					
Emissions from the	10	25	15	50	17%
flue					
other	2	5	3	10	3%
Total	109	97	94	300	

Source: Supreme Council for the Environment, 2015

1-2 Statement of the Problem

In spite of increasing interest of green marketing concept and its implication in western countries and researches interest and thoughts that serve this fields, this concept did not find sufficient concern in Arab countries, where some organizations did not play a serious role to solve environmental problems properly (Hashem & Al-Rifai, 2011).

Green marketing has been an important academic research topic for at least three decades, green consumers have become a driving force behind how companies do business, and these ecological customers are creating a new economy around the globe (juwaheer et al, 2012). Environmental issues are now a crucial topic in the societies. Once again this has large consequences on how companies do business but also on the market system with which companies are making business. Until recently, the external environment being taken into account by companies was coming down to the social, political, cultural, technological, economic or legislative environments (Platel, 2009).

Given the environmental problems that plague the world (e.g. global warming, air and water pollution and resources depletion), customers

are considering green options to integrate in their behavior that can do good to the planet. The consequence of this attitude is that an increasing number of organizations are admitting their environmental responsibility. To respond to these environmental demands, companies should develop new corporate strategies that can guarantee fulfillment with these green alternatives, such as green marketing (Tantawi, 2009).

Consumers have started to show more interest in green products and the tendency to spend on products with green features has increased. Since then, research programs have been conducted to study the interest of people towards the environment and green products (Rakhsha & Majidazar, 2011). One of the biggest problems with the green marketing area is that there has been little attempt to academically examine environmental or green marketing (Kumar et al, 2011; Mohanaundaram, 2012).

The story about the environment is not new, as indeed, destructing the environment has always been a part of human life, which has influenced human life at both individual and community level (Khwaja, 2008). Activities such as production, logistic, sourcing, marketing and branding has shown a huge negative impact on the environment; even to be known as the major source of environmental problems (Saleki & Seyedsaleki, 2012).

Despite the increasing awareness of consumers regarding environmental issues, there is still gap between attitude toward green product and their intention to purchase. For consumers with a high degree of greenness, price is not the main concern since they do expect and are willing to spend more for green products (Weisstein et al, 2014). Starting from 1980s, a green concept started to emerge in the world as people are becoming more and more green conscious (saad & Abdullah, 2013).

In recent times, the environment has emerged as a hot issue for societies, governments, in addition to business organizations. Its significance originates from escalating environmental degradation such as solid wastes, ozone depletion, global warming, and air pollution. It is observed that different activities of business organizations like sourcing, manufacturing, logistics, and marketing have a negative impact on the environment and also considered to be the source of most of the environmental problems (Ali et al, 2011).

Green marketing is very essential for the sustainability of an organization these days. As is revealed from the literature review there is a lot of gap in research on this topic (Bukhari, 2011). Also in Sudan not much work is done as far as the influence of green marketing on consumer behavior is concerned.

Researches in green marketing focused mainly on green marketing strategies as (Song-Turner; khan & khan; Juwaheer & Pudaruth, 2012; Awan; Fan & Zeng; Merdin, 2011; Solvalier; Ramerez, 2010; Rivera-Camino, 2006; Kärnä, 2003). Also many authors studies relationship between green products and intention like (laroche et al, 2001; Budiman, Paul & Rana, 2012; lam & Mukherjee, 2005; Saad & Abdullah, 2013; Cherian & Jacob, 2012; Christopher Gan, 2008; Maletic et al, 2010). Martin & Simintiras, (1995) tested impact of green product lines on the environment. (Tias, 2013; Zhu, 2013; Gandhi & Rao, 2013) analyzed of influence Green Advertising and Green product to Consumer Purchasing / intention decision. Another study (Ali & Ahmad, 2012) suggests Factors that Influence the Green Purchase Intentions of Pakistani Consumers (namely: Organization Green Image, Environmental Concern and Environmental knowledge). Ling (2013) proposed drivers that influencing consumer purchase intention in buying green products which include environmental attitudes, social influence, self-efficacy, store image and roles of salesperson and moderating variable (willingness to pay more). Furthermore, a lot of research has been done on the Consumers' purchase intention of organic food Shijiu Yin, (2010), Kim & Chung (2011) Teng et al, (2011) Paul & Rana, (2012) Saleki & Seyedsaleki, (2012) Biao Xie et al, (2014) Perrea, et al, (2013) Tung et al, (2014) Teng & Wang, (2014) Shakeel, (2015). Salleh et al, (2010) suggests is Psychographic variables, environmental concerns and health consciousness effected consumer's perception and purchase intentions towards organic food products.

However, (Baroque et al, 2009) explore corporate social responsibility on customer loyalty and purchase intention. (Aminimoghadamfarooj, 2010) studied Green supply chain for spare parts distribution while (Bragd, 1998) presented in the marketing workshop Learning from the introduction of green products, (Budiman, 2012) analyzed consumer attitudes to purchase intentions of contenting Bag product in Indonesia. (Laroche et al, 2001) targeting consumers who are willing to pay more for environmentally friendly products, (Olson, 2013) the effects of attribute tradeoffs on green product preference and choice.

Very few studies have examined green marketing mix and purchase intention, for example (Ansar, 2013) investigated green marketing mix as (ecological price, environmental advertisement, ecological packaging). On the other hand, (Wanninayake & Randiwela, 2008) studied (green product, green package, green place, green promotion). (Kumar et al, 2011) Reported rethinking competitive Advantage become through green marketing mix. (Rakhsha & Majidazar, 2011) evaluated of effectiveness of green marketing mix on consumer satisfaction and loyalty, (Byrne, 2001) explained understanding consumer preferences across environmental marketing mix variations. Most previous studies have focused on the relationship between the independent variable and the

dependent variable, nevertheless this literature didn't consider sufficiently the mediator variable.

Exactly, this study attempted to examine the effect of green marketing mix dimensions (namely; green product, green price, green place, and green promotion) on customer' purchase intention.

as well as few studies have focused on green marketing mix and corporate image) Hashem & Al-Rifai, 2011) however, this study examines total image as two dimensions (namely; corporate image and brand image).

However, past research has focused predominantly on corporate strategy and attitude towards the Environment and green products (Chen & Chai, 2010; D'Souza et al, 2006; Tang et al, 2013; Papadopoulos, et al, 2014; Juwaheer & Pudaruth, 2012).

The present research contributes to the literature to relationship between green marketing mix (green product, green price, green place and green promotion) and purchase intention.

However, little research has been done on green advertising and price on Consumer Purchase Intention (Ankit & Mayur, 2013; Chen &lee, 2013; Weisstein, et al, 2014; Zhu, 2013; hvaziri et al, 2013; Asgari & Siew, 2014).

The main factors influencing purchase behavior of organic products in Malaysia, Teng et al, (2012) proposed Factors (Consumers' referents, Knowledge towards green foods, Green food Attribute, Motivation of consumption, Product price) influencing public intention towards purchasing green food in Malaysia.

Many researches examine the relationship between the corporate image or brand image with purchase intention (as uni dimension) such as, (Ya-Hui & Cing-Fen, 2014; Bian & Moutinho, 2009; Karaosmanogʻlu et al, 2010; Ko et al, 2013; Diallo, 2012; Simonian et al, 2012; Jalilvand & Samiei,

2012; Lin & lu, 2010; Erdil, 2015; Kakkos et al, 2015; Sharifi, 2014; Ko et al, 2013; Wu, 2014; Huang et al, 2014; Punyatoya, 2015) therefore, this study used tow dimension for total image (*namely*: corporate image and brand image).

In addition, many researches studies corporate image as mediator such as (Abd-El-Salam et al, 2013; Eman et al, 2013; Shukla, 2011). Or brand image as mediator such as (Wang, 2015; Lu et al, 2015; Suki, 2015) to the best of my knowledge no research has explored the mediating role of total image as tow dimension.

The corporate image in many studies used as mediator such as Shukla; Paul C.S. Wua et al; Yongchuan Bao; Shukla , (2011) Eunju Ko et al, (2013), Hung-Bin; Chen; Gioia et al; Chew and Jahari ; Stylidis et al; Murto et al, (2014) Chi Tseng et al; Lu Lu et al; Suki; Wang, (2015) Meenaghan, (1995) Gautam, (2011) Wu,et al, (2011) Arslan & Zaman, (2014) , Suki, (2015).

Wang & Tsai, (2014) tested the relationship between brand image and purchase intention. (Abd-El-Salam,et al, 2013) The impact of corporate image and reputation on service quality, customer satisfaction and customer loyalty. In this research total image to consider as mediator.

The psychological variables used in a lot of studies as dependent variables with intention such as Newton, Leske et al; Sharma et al; unior et al, (2015), Hill & Howell; Eric S.W; Chan et al; Lee et al, (2014), Knopp et al, (2013) Aman et al; Hai & Mai, (2012) Brannan & Petrie; Merdin, (2011) Hartmann & Apaolaza, (2010), Gupta & Shallu, (2014), Hartmann & Apaolaza, (2012) Barber et al, (2009), Aman et al, (2012), Bertrandias & Gambier, (2014).

Researcher has studied psychological variables as moderator (environmental knowledge, environmental concern, environmental belief, and environmental awareness) such as: Peng & Chen (2015), studied the

diners 'product knowledge moderate the relationships between restaurant stimuli and diners 'emotion. (Murat Ar, 2012) explored managerial environmental concern only moderates the relationship between green product innovation and firm performance. While environmental belief the moderating effect between green place and brand image. Teah et al, (2014). Arminda (2010) studied the level of environmental awareness, moderate between (green price & green place) and brand image. However little is known no research studied the influence of psychological variables (four dimension) as moderator between green marketing mix and total image. In addition some researches studies this psychological variables as moderator like Nelly, (2014), Feldner et al, (2006), Sachdev & Bello, (2014) Murat, (2012), Cheah, (2014), Suki, (2015), Chen, (2015). In this research psychological variables as moderator.

All previous researches are done ignored green marketing mix and affected on purchase intention. As a result of environmental damage caused by products, production processes and environmental disasters, environmentalism have, over the past three decades, become an important issue (Stavros et al, 1999).

This study to examine the effect of relationship total image as mediator variables between relationship green marketing mix (namely; green product, green price, green place and green promotion), and psychological variables as moderator variable (namely; environmental knowledge, environmental concern, environmental belief, environmental awareness) on purchase intention as overall outcome (in order to fill this research gap).

1-3 Research Questions

This research seeks to answer the following research questions:

Q1: To what extent do the green marketing mix variables influence purchase intention?

- What is the impact of green product on purchase intention?
- What is the impact of green price on purchase intention?
- What is the impact of green place on purchase intention?
- What is the impact of green promotion on purchase intention?

Q2: To what extent do total image (namely; corporate image, brand image) Influence purchase intention?

- What is the impact of corporate image on purchase intention?
- What is the impact of brand image on purchase intention?

Q3: To what extent do the green marketing mix variables influence on total image?

- What is the impact of green product on corporate image?
- What is the impact of green price on corporate image?
- What is the impact of green place on corporate image?
- What is the impact of green promotion on corporate image?
- What is the impact of green product on brand image?
- What is the impact of green price on brand image?
- What is the impact of green place on brand image?
- What is the impact of green promotion on brand image

Q4: Does the total image mediate the relationship between green marketing mix variables and purchase intention?

- Does the total image mediate the relationship between relationship green product and purchase intention?
- Does the total image mediate the relationship between relationship green price and purchase intention?
- Does the total image mediate the relationship between relationship green place and purchase intention?

• Does the total image mediate the relationship between relationship green promotion and purchase intention?

Q5: To what extent do psychological variables moderate the relationship between green marketing mix variables, and total image as overall outcome?

- Does the environmental knowledge moderate the relationship between green marketing mix variables and total image?
- Does the environmental concern moderate the relationship between green marketing mix variables and total image?
- Does the environmental belief moderate the relationship between green marketing mix variables and total image?

1-4 Objectives of the Research

The primary objective of the research is to investigate the extent to which green marketing mix influence the purchase intention of green food products in Sudan.

The main objectives of the study are outlined below:

- **1-** To determine the relationship between green marketing mix variables and total image.
- **2-** To find out the effect the relationship total image on purchase intention of food product.
- **3-** To assess the effect of total image (*namely*; corporate image, brand image) as mediating variable between green marketing mix variables (*namely*; *green product*, *green price*, *green place and green promotion*) and purchase intention.
- **4-** To show the possibility of psychological variables as moderator variable (namely; environmental knowledge, environmental concern, environmental belief) between green marketing mix variables and total image.

5- Suggesting applicable solutions to deal with expect of purchase intention to green food product.

Finally, all the above objectives are explore impact of green marketing underpinnings and moderator and mediator variables (psychological variables and total image) respectively, on purchase intention.

1-5 Significance of the Study

1-5-1 Theoretical Significance

Tremendous increase in use of natural recourses and inconsiderateness towards environment, human health risks and irreversible severe ecosystem damages make human being more cautious about environment and related health problems.

So far, a lot of research has been done on the management of customer communications, satisfaction and loyalty and also on the subject of green marketing strategies however, very little research has been done on green marketing and its relationship with customer purchase and behavioral response (Rakhsha & Majidazar, 2011). This research has a potential to make significant theoretical and practical contributions. The following two sub-sections present some of the possible contribution expected out of the current research endeavor. The importance of research can be summarized by the following points.

1- The importance of this research through scientific contribution in identifying the nature of the relationship between the green marketing image mix and the total and purchase intention. 2- also derives its importance from this study will help in further understanding on the customer's intention towards the gaining element of green marketing in their daily lives.

- 3 -This research focuses on the manufacture of the most important industries. Relying on them in supplying the Sudanese economy is the food industry.
- 4- The marketing departments play a strategic role in the implementation of policies and strategies for organizations in general.
- 5-The study also attempting to test the theory planned behavior Based View on Sudanese food product.
- 6- This study attempts to green marketing practice and relationship total image and purchase intention deriving the theoretical framework.
- 7- Finally, this study also contributes to the growing body of literature on green marketing. While this construct has been utilized in many studies in future research, its continued testing serves to provide additional supporting documentation for its role in the success of business companies.

1.5.2 Practical Significance

Several practical contributions are expected to emerge from the current research.

These practical contributions are as follows:

- 1- The study discloses the concept, significance and outcomes of green marketing practice, thus it can advance managers in marketing management in food industry in Sudan.
- 2- The issue of green marketing is characterized by modernity 'where you see the researcher that there are limitations in the prevalence of a culture of green marketing because there is knowledge gap in the important and the adoption of this endeavor administrative talk' and the creation of requirements applied and used goodly by administrators and decision-makers, especially in Sudan.
- 3- This study will provide better information as input to government policy makers, who responsible for business development, to

- encourage the manufacturing farm's use of green marketing to benefit key stakeholder interests.
- 4- These researches are that previous studies are done in other countries .i.e. Taiwan- USA china -Italy- India- Malaysia. So there are no studies adopted in developing country and particularly in Sudan.

1-6 Scope of the Study

This study limits itself to universities and used hard4s .It focused on the green marketing mix variables and the impact of purchase intention.

1-7 Terminologies used in the Research

Green marketing: the specific development, pricing, promotion and distribution of product that do not harm the environment (*pride & ferrel*, 1991).

Green product: are products that respond to environment needs and requirements (Al-Bakry, 2007).

Green pricing: refers to the price specified in the light of company's policies with regard to environmental consideration (*Al-Bakry*, 2007).

Green distribution: is related to distribution gates use that deal with green products, which are appropriate for consumers (*Al-Bakry*, 2007).

Green promotion: refers to providing real information about the products (*Al-Bakry*, 2007).

Purchase intention: as the likelihood of a consumer's purchase decision to buy a product (*Dodds et al.*, 1998).

Total image: in this study total image namely; corporate image and brand image.

Corporate image: as perception of an organization held in consumer memory and works as a filter which influences the perception of the operation of the company (*Gautam*, 2011).

Brand image: as a series of brand association stored in a consumer's memory (*Aaker*, 1991).

Environmental knowledge: as the sets of ecological knowledge that an individuals have of environmental topics (*Koellner & Tovar*, 2009).

Environmental concern: as a belief, stance and the degree of concern an individual holds towards the environment (*Mat & Masud*, 2003).

Environmental belief: as ethical-normative cognitions concerning the relationship between humans and nature (*Catton & Dunlap*, 1980).

Environmental awareness: as knowing the impact of human behavior on the environment (*Kaufmann et al*, 2012).

1.8 Organization of the Study

The remainder of the study includes chapters that position the research within existing knowledge, provide arguments for proposed relationships between construct based on theory, describe the chosen research design, present the analytical result, and discuss the implications. Chapter Two presents the theoretical perspectives of green marketing mix, purchase intention, total image and psychological variables through a detail literature review. Chapter Three introduces the conceptual framework depicting how a green marketing mix create value through total image, followed by the arguments for a series of hypotheses. Chapter Four describes the research design and methodology for empirically testing the hypotheses stated in chapter three. The methodology includes the unit of analysis, data collection, and statistical techniques. Results are provided in chapter five, with a analysis of the collected data from the survey and the presentations of the results. The study ends with Chapter Six that provides discussion of research implications, managerial insights, and directions for future research. The literature review is the focus of next chapter.

CHAPTER TWO LITERATURE REVIEW

2-0 Introduction

This chapter comprises five main parts. The first part covers the Concept of green marketing and its theoretical perspective, part two covers green marketing mix literature, part three covers purchase intention, part four covers total image, and part five covers psychological variables. The summary of the chapter is as follows.

2-1 Green marketing

This section permanently reviews the first concept, green marketing definitions, components and the benefits of the green marketing.

2.1.1 Concept of Green Marketing

The green marketing concept emerged in the late 1980s. "Green marketing" refers to an organization's efforts to design, promote, price and distribute products that have no bad effect on the environment (Chen, 2013).

Nowadays the environmental problems seem to concern all active people, enterprises and institutions all over the globe, a concern much more than 30 years ago (Papadopoulos, 2010). The first attempts made to decide the relationship between marketing and the environment goes back to the early 1970s. Authors such as Kassarjain (1971), Fisk (1973) and Kinnear et al (1974) published the first articles related to this topic in the marketing magazine of the time (Shirsavar & Fashkhamy, 2013). Green marketing has been viewed as one of the most important academic research subjects since its conception. The issue gained more emphasis in the late 1970s; when the American Marketing Association held its first

seminar or educational workshop on Ecological Marketing in 1975 in the United States of America, by Henion and Kinner (Gupta et al, 2014; Eric, 2007; Singh, 2013; Merdin, 2011; Fan & Zeng, 2011; Rakhsha & Majidazar, 2011; Shil, 2012; khan, 2012; Polonsky, 1994; Shrikanth & Raju, 2012; Mishra & Sharma, 2010; Ahmad, 2009; Akehurst et al, 2010; Shirsavar & Fashkhamy, 2013). Which led to the publication of a book entitled Environmental Marketing (Wanninayake & Randiwela, 2008; Shil, 2012). In 1980, it was the first time green marketing came into existence (Yazdanifard & Mercy, 2011). It began in Europe when specific products were identified as being damaging to the earth's atmosphere. As a consequence, new "green" products were introduced that were less harmful to the environment (Shil, 2012). After a period of intense academic activity centered upon environmental questions, discussion of such matters declined considerably in the second half of the 1970s, continuing in this same vein until the mid-1980s. This period also seems to have coincided with an augment in legislation and greater intervention on the part of governments with the aim of protecting the environment (Finisterra et al, 2010).

In the last few decades, environment consciousness of consumers has considerably increased throughout the world. As a result, this group asks for goods that are so-called 'Nature-friendly'. The reasons for such awareness are known to be factors like increased activities of green groups, legislation at national and international levels and also, the effect of industrial disasters on public opinions (Shirsavar & Fashkhamy, 2013). Green marketing has not lived up to the hopes and dreams of many managers and activists. Although public opinion polls consistently show that consumers would prefer to choose a green product over one that is fewer friendly to the environment when all other things are equal, those

"other things" are rarely equivalent in the minds of consumers (Fall, 2004).

The green awareness began in between of the 1960s and early 1970s with growing worry about the negative impact of consumption pattern, impact of economic and population increase on the environment. But, a serious concern of green marketing appeared in the late 1980s with a rapid increase in the consumer awareness for the green products. The growing awareness in environment friendly products, their readiness to pay for these products, increased concern for these products which encouraged companies to show interest in the green marketing (Kumar et al,2011; Chahal et al, 2014). Statistics indicate that it is a lot of environmental issues and environmental protection is one of the most significant criteria are that customers believe when buying it. The result of these issues has led to environmental issues which are essential concepts in marketing and green marketing approach to appear (Asadollahi & Fallahhosseini, 2011). Although environmental issues influence all human activities, few academic disciplines have integrated green issues into their literature. This is especially accurate of marketing. As society becomes more concerned with the natural environment, businesses have begun to modify their behavior in a try to speak to society's "new" concerns. Some businesses have been fast to accept concepts like environmental management systems and waste minimization, and have integrated environmental issues into all organizational activities (Polonsky, 1994). Green marketing concept emerges from societal marketing. Green marketing is an attempt to characterize a product as being environmental friendly (eco-friendly). It holds the view that marketing which is a part of business not only has to satisfy consumers in particular, but also has to obtain into account the wellbeing of society in common. (P. Saxena & Khandelwal, 2008). It's used for the promotion and distribution of products, development and improvement of pricing which do not damage the environment. It is a much extended concept that can be applied to customer, industry and even service goods (Shirsavar & Fashkhamy, 2013). Thus, green marketing incorporates a wide range of activities (Singh, 2010).

Green marketing is one of the business fields being greatly discussed in the newspapers with relevance to environmental issues. This type of marketing, which has also been called 'Stable Marketing', is a newly-emerged trend that even the developing countries have started to follow nowadays (Shirsavar & Fashkhamy, 2013). In addition, it is considered as one of the main trends in current business (Gura´u & Ranchhod, 2005) dates back to the early 1970s. Yet it was not until 1990 that green marketing "arrived in earnest" (Rex & Baumann, 2007).

The basic idea of green marketing is to transport out all regular marketing activities that contain and enable the switch of products and services without damaging effects on the environment or activities that reduce one's own effects on the environment. The main purpose of green marketing is filling company objectives and company consumers with simultaneous minimizing of effects on the environment (khan & khan, 2012). Therefore it refers to the procedure of selling products based on their environmental benefits. Such a product may be environmentally friendly in it or produced and/or packaged in an environmentally friendly method (Bukhari, 2011). A majority of people consider that green marketing refers exclusively to the promotion or advertising of products with environmental characteristics (Polonsky, 1994; Singh, 2010; Shirsavar & Fashkhamy, 2013; Wanninayake & Randiwela, 2008). Terms like Phosphate Free, Recyclable, Refillable, Ozone Friendly, and Environmentally Friendly are some of the things customers most often associate with green marketing (Singh, 2010). Green or Environmental Marketing consists of all activities designed to generate and ease any exchanges intended to satisfy human being needs, such a satisfaction of these needs and wants happens, with minimal harmful impact on the natural environment (Shil, 2012).

Green marketing is a global phenomenon and a significant part of present day company's management function. The method a company deals with regarding this subject directly influences its image. Numerous companies lately have claimed their products, services, or working environment, meet green environment standards - such as ISO 14000 (khan & khan, 2012). Green marketing that has been previously and primarily focused on the ecological context has been shifted to more sustainability issues in the marketing labors and main focus now is in socio-economic and environmental context academic and popular literature (Mohanasundaram, 2012).

Indicates that "green" as a concept has often been talked about and discussed in today's business and building industry. The problem is that no one actually knows what "green" is. "Green" may mean different standards and practices in different industries (Turne, 2012). According to (Kumar et al, 2011) green marketing mainly focuses on four issues. These issues are: first, importance of green marketing; second, impact of green marketing on firms" competitiveness and performance; third, recognition by consumer; and fourth, improving effectiveness of green marketing. During 1990s, the concern for environment increased and resulted in to increasing challenges for the companies.

Green marketing is considered as one of the main trends in modern business (Shil, 2012, Ishaswini, 2011; Chen & Chain, 2010). This has happened owing to a pointed increase in consumer consciousness about environmental issues and severe regulations introduced by national

governments, especially in industrially developed countries that brought the order for ecological products into sharp focus (Chowdhury & Samuel, 2013) Green marketing activities contain initiation and promoting green products and services that satisfy customers' environmental wants and needs without a damaging impact on the environment (Chen & Chang, 2013).

The first idea of green marketing or commonly called environmental marketing in 1989 was in fact the previously enhanced concept called ecological marketing. Ecological marketing is defined as: The studies of the positive and negative aspects of marketing activities on pollution, energy depletion and no energy depletion (Arifin, 2012). The whole globe is identifying the requirement of the Green Marketing, Environmental Marketing and Ecological marketing which gives the same meaning to the research area (Wanninayake & Randiwela, 2008). Thus greener marketing or eco-marketing and sustainable marketing (Merdin, 2011). Therefore have often been used interchangeably to describe companies, products, and production processes that use fewer energy, that recycle materials, that reduce waste and pollution and that preserve natural resources (Simula, 2009).

The 1990s have been identified as the 'decade of the environment' or as the 'the Earth decade'. Through this decade, social and environmental concerns assumed great importance for consumer purchasing decisions. Firms seeking to remain competitive and to survive in the market began to incorporate these recently emerging concerns in their management and marketing decision making. Newly, increasing attention has been paid to the relationship between consumer behavior, marketing and the environment (Paço & Raposo, 2010).

In the past decade, terms like green products, sustainable, environmentally friendly, pro-environmental, eco-friendly and ecological have often been used interchangeably by marketers to notify and lure the consumers as part of green Marketing (gosavi, 2013). However used the word green marketing to explain the relationship between the marketing discipline, the public policy process and the natural environment is very importance (Fan & Zeng, 2011).

Most of the scientists state that green marketing is different than general social marketing (Peattie, 1995). Green marketing has the following advantages in the contrast with general social marketing (Peattie, 1995):

- Company's strategy is more focused on environmental issues
- Nature and environmental are the subject having an important value by itself, as well as society needs and society values.
- Concentration on the global issues instead of the local issues (Solvalier, 2010).

Peattie (2001) identifies three distinct stages of green marketing differentiated by their domain, aim, approach and emphasizes the fact that each of these stages has diverse implications for marketing. Rooted within the social and environmental concerns of the 1960s and early 70s, first stage is "ecological marketing", which is a narrowly focused attempt to reduce dependence on particularly damaging products (Merdin, 2011). "environmentally "Sustainable", friendly", "green", "proenvironmental", and "ecological" have often been used interchangeably to describe firms, products, and production processes that use less energy, that recycle materials, that reduce waste and pollution and that preserve natural resources. Today, "green" is used most often to refer to new technology and new products that have a sustainable impact on nature and the environment (Simula et al, 2009).

According to Kangis (1992), green marketing must be more than either a green method of marketing, or the marketing of so-called green products. Green has to refer both to the way and to the product. This is why the very idea of green marketing is considerable requirements, development and analysis, with rules and honesty in economic, scientific, academic and ethical terms (Papadopoulos et al, n.d).

In spite of the increasing popularity of green marketing, not everybody believes in it. Some feel that customers are more interested in factors like price, functionality, and packaging than if a product is green or not, meaning that green marketing does not really affect consumer purchasing intention. This may noise confusing since green marketing has become such a main issue, but a gap exists among what people see as a problem and what they are willing to do in response (Coleman et al, 2011).

Green revolution, going green, environmental protection, sustainable life style, sustainable development, protecting our earth and many more has become a natural phenomenon in our each day life. Green marketing is a tool used by many companies in different industries to follow this tendency. There have been a lot of literature review on green marketing over the years (yazdanifard & Mercy, 2011).

2-1-2 Definition of Green Marketing

Green marketing cannot be easily defined. Numerous authors define it in a number of ways (khan, 2012). Indeed the terminology used in this area has varied, it includes: Green Marketing, Environmental Marketing, sustainable marketing and Ecological Marketing (Singh, 2010, Polonsky, 1994). Table 2.2 presents the definitions that have been widely discussed in the literature.

Table 2.2

Definition of Green Marketing

Authors	Definition of green marketing	Dimensions
Rashad	Business Dictionary defines green marketing as	Advertisement, public
Yazdanif	promotional activities aimed at taking advantage	relations and publicity, sales
ard	of changing consumer attitude towards a brand.	promotion, direct marketing,
(2011)		personal selling, sponsorship
(Polonsk	The effort by a company to design, promote,	design, promote, price,
y, 2011)	price and distribute products in a manner which	distribute products
	promotes environmental protection.	
Grundey	The sum of activities to generate, facilitate and	Products, price, distribution,
and	to satisfy human needs or wants in such a way	promotion
Zaharia	that it happens with minimal detrimental impact	
(2008)	on the natural environment.`	
Soonthon	Process and activities taken by firms by	design, price, distribution
smai	delivering Environmentally sound goods or	products, promotion,
(2007)	services to create consumers satisfaction.	
Kotler,	As the movement which is directed towards	Products, price, distribution,
Keller	organizations production of products responsible	promotion and environment.
(2006)	environmentally.	
(Amorro	A way of understanding exchange relationships	Planning, of product, price,
&	consisting of planning, a policy of product,	promotion and distribution.
Tomas,	price, promotion and distribution that	
2006)	simultaneously satisfy customer needs and the	
	objectives of the organization.	
Fuller	as a planning, implementing, monitoring,	planning, implementing,
(2003)	promoting and distributing process of products,	monitoring, promoting and
	with regard to three criteria of meeting consumer	distributing process

	need, paying attention to organizational goals	
	and processes compatibility with the	
	environment.	
Peattie	Marketing activities which attempt to reduce the	Products, price, distribution,
(2001)	negative social and environmental impacts of	promotion
	existing products and production systems, and	
	which promote less damaging products and	
	services'.	
(Banerje	The implementation of marketing programmes	Marketing programmes, the
e,1999)	directed at the environmentally conscious	environmentally conscious,
	market segment.	market segment.
Charter	The marketing or promotion of a product based	promotion of a product,
and	on its environmental performance or an	environmental performance
Polonsky	improvement thereof.	
(1999)		
Fuller's	The process of planning, implementing, and	Pricing, promotion, and
(1999)	controlling the development, pricing, promotion,	distribution of products.
	and distribution of products in a manner that	
	customer, organizational goal.	
Walker	Green marketing practices generally promoted	Products, price, place,
and	the nature of inputs as well as outputs waste	promotion and environment
Hanson (reduction and the impact of these upon the	
1998)	environment and society.	
Kilbourn	Green marketing includes a wide range of	Activities, product design,
e, (1998)	activities related to: product design, the	manufacturing process,

	manufacturing process, service delivery	service delivery processes,
	processes, packaging, construction and	packaging, construction.
	renovation of buildings, recycling, and other	
	areas such as marketing communications	
Stanton	Green marketing is any marketing activity,	Product, price, promotion and
et al,	related to a certain organization, aims at creating	distribution.
(1997)	negative influence or removing negative	
	influence for certain product on environment.	
Ottman(1	Argued that green marketing is a combination of	Product, price, promotion and
996)	both improved environmental quality and	distribution.
	customer satisfaction.	
(Rowell,	"Development that meets the needs of the	Development Product, price,
1996)	present without compromising the ability of	promotion and distribution.
	future generations to meet their own needs.	
(Stanton	All activities designed to generate and facilitate	Product, price, promotion and
and	any exchanges intended to satisfy human needs	distribution.
Futrell,	or wants, with minimal detrimental impact on	
1987,	the natural environment.	
(Polonsk	Green marketing is concerned with all the	Product, price, promotion,
y, 1995).	activities of an organization that may have	distribution and environment.
	influence on the environment, both in short and	
	long-term and products that do not harm the	
	natural environment.	
(Kilbour	Consists of all activities designed to generate	
ne, 1998;	and facilitate any exchanges intended to satisfy	Product, price, promotion and
Polonsky	human needs or wants, such that the satisfaction	distribution.
, 1994).	of these needs and wants occurs, with minimal	
	detrimental impact on the natural environment.	

Mintu &	as "the application of marketing tools to	Product, price, promotion,
Lozada	facilitate exchanges that satisfy organizational	distribution, preservation,
(1993)	and individual goals in such a way that the	Protection, and conservation
	preservation, protection, and conservation of the	The environment.
	physical environment is upheld"	
Pride and	Organizations efforts at designing, promoting,	Designing, promoting,
Ferrell	pricing and distributing products that will harm	pricing, distributing products.
(1993)	the environment.	
Coddingt	As "marketing activities that recognize	Product, price, promotion
on	environmental stewardship as a business	and distribution
(1993)	development responsibility and a business	
	growth opportunity."	
Pride and	Green marketing, also alternatively known as	designing, promoting, pricing
Ferrell	environmental marketing and sustainable	and distributing products t
(1993)	marketing, refers to an organization's efforts at	
	designing, promoting, pricing and distributing	
	products that will not harm the environment.	
Charter	Green marketing focuses on the promotion of	Promotion, products, their
&	products based on their environmental	environmental performance
Polonsky	performance or improvement.	or improvement.
(1992)		
Peattie	"The management process responsible for	Product, price, promotion and
(1992).	identifying, anticipating and satisfying the	distribution.
	requirements of consumers and society, in a	
	profitable and sustainable way.	
Pride &	the specific development, pricing, promotion	Product, price, promotion and
Ferrel	and distribution of products that do not harm the	distribution.
(1991)	environment.	

Prothero	Management extends societal marketing to	Product, price, promotion and
(1990)	embrace society's concern about the natural	distribution.
	environment.	
Attenbor	All its activities of environment damage,	Product, price, promotion and
ough	physical and cultural pollution and of the	distribution.
(1984)	demands it makes upon finite natural recourses.	
Henion	That green marketing involves marketing	Product, price, promotion and
1979	programs and activities which focus on the	distribution.
	environment-friendly sectors or the same green	
	market approach.	
(Henion	At the AMA workshop ecological marketing	Product, price, promotion and
and	was defined as: The study of the positive and	distribution
Kinnear	negative aspects of marketing activities on	
1976)	pollution, energy depletion and non-energy	
	resource depletion.	
America	The green marketing is the marketing of	Products, environmentally
n	products that are presumed to be	safe.
Marketin	environmentally safe.	
g		
Associati		
on		
(1975)		

Table 2.2 shows that prior researches have not developed a widely-held consensus regarding how to define green marketing mix. However, by comparing the conceptual elements underpinning these definitions, it is possible to find points of convergence. These conceptual similarities can be summed up in the following points:

- 1. Green marketing is tasking of marketing function, processes, and all organization departments (Kotler & Keller, 2006, Henion & Kinnear 1976; Kilbourne, 1998; Polonsky, 1994; Ottman, 1996; Peattie, 1992).
- 2. Green marketing concept is an extension of the marketing concept, starts with a well-defined market, focuses on customer needs, coordinates all the marketing activities affecting customers, environmental protection and makes profits by creating customer satisfaction (Kilbourne, 1998; Polonsky, 1994; Polonsky, 2011; Ottman (1996). For this reason, green marketing has become a significant approach for the firms' to survive in the market, enhance their brand name, organisational performance (.Chahal et al, 2014).
- 3- Green marketing involves marketing programs and activities which focus on the environment-friendly sectors Henion (1979).
- 4- Green marketing orientation focus on long-term objectives besides superior performance achieved above those of its competitors ((Henion & Kinnear 1976; Attenborough (1984; Peattie, 1992; (Polonsky, 1995).

These studies depend on Polonsky, (1994) definition because many scholars build their conceptualization according to this definition (e.g., Grundey and Zaharia, 2008; Soonthonsmai, 2007; Kotler, Keller, 2006; Amorro & Tomas, 2006). In addition to that, close inspection to the definition in Table 2.1 shows that it covers all the points of convergent discussed above.

2-1-3 Benefits of Green Marketing

According to Bansal & Roth (2000), there are three primary reasons for a Company "go green": legitimation, competitiveness and ecological responsibility (Simula et al, 2009). Green marketing is a concept which

attempts to reduce the damaging impact of the environment. Green marketing is necessary because it successfully emerges a competitive strength affecting a business competition plan in both present time and the future time (Arifin, 2012). Companies that develop new and enhanced products and services with environment inputs in mind give themselves access to new markets, increase their profit sustainability, and enjoy a competitive advantage over the companies which are not concerned for the environment (Bukhari, 2011).

Also, becoming green during improving the efficiency of resources and wounding expenses can guide to the improvement of the competitive position of a company compared with its competitors. Moreover, being green enables a company to distinguish itself from competitors by offering new products in new markets or by presenting additional advantages for the currently present products. This measure increases the company's value in customers' eyes, enhances consumer loyalty and of course, the company's profitability (Shirsavar & Fashkhamy, 2013). Moreover, Green marketing has become an important approach for the firms' to stay alive in the market, improve their brand name, organizational performance (Chahal et al, 2014) can decrease their energy consumption, enhance corporate social responsibility and brand image, attain sustainability in the competitive market and increase corporate profits (Weisstein et al, 2014). Environmental excellence as a good management practice, Increasing goodwill by doing more than legislation requires, A firm can response to social and environmental responsibility requirements (Simula et al, 2009).

When looking through the literature there are several suggested reasons for firms increased use of Green Marketing. Five probable reasons are as follows:

1. Organizations perceives environmental marketing to be an opportunity

that can be used to achieve its objectives (Polonsky, 1994).

- 2. Organizations believe they have a moral obligation to be more socially responsible. Governmental bodies are forcing firms to become more responsible.
- 3. Competitors' environmental activities pressure firms to change their environmental marketing activities. (Gupta et al, 2014; Singh, 2010).
- 4. Governmental bodies are forcing firms to become more responsible.
- 5. Cost factors associated with waste disposal, or reductions in material usage forces firms to modify their behavior (Sharma, 2011).

According to Bansal & Roth (2000), there are three primary reasons for a firm go green: competitiveness, legitimating and ecological responsibility. The benefits of green products and green marketing are led by the assumption that consumers and industrial customers are environmentally aware, are cognizant of ethical and environmental factors between their purchase criteria, and are also willing to pay more for greener products.

Polonsky (1994) listed five of the majority important reasons cited by organizations for pursing green marketing: help in achieving their objectives; a moral obligation to be socially responsible; governmental regulation; competitors' environmental activities, and cost factors associated with waste disposal or reductions in material usage (Simula et al, 2009).

2-2 Green Marketing Mix

Bradley introduced the concept of green marketing mix in 1989 arguing about manipulating the 4Ps of the traditional marketing mix in a more sustainable way (Singh, 2010). This is the decision making process for defining the actual plans a company utilizes. Optimizing the marketing mix is the main responsibility of marketing. By offering the product with the right mixture of the marketing mix variables, marketers can improve

their outcome and marketing effectiveness (Aric, 2010). When companies come up with new innovations like eco-friendly products, they can access new markets, enhance their market shares, and increase profits (Mohanasundaram, 2012). Environmental (or green) marketing adapts conventional marketing functions to believe environmental advantages in the development, promotion, distribution and/or pricing of products and services (Thomas et al, 2014).

Every company has its own favorite marketing mix. Some have 4 P's and some have 7 P's of marketing mix. The 4 P's of green marketing are that of a conventional marketing but the challenge before marketers is to use 4 P's in an innovative manner. The first concept of 4Ps (product, price, place and promotion) was presented by Rasmussen, A. later further enhanced by Kotler, P. Marketing Mix concept was based on the some defined set of models, after 1960s when new 4Ps concept was introduced; it converted into a research field and established a theoretical ground. Marketing mix is develop for successful marketing penetration of a product to fit according to the customer's needs and wants and competitiveness position can be achieved through offering a successful component mix.

2-2-1 Green Product

In the past decade, words like green products, sustainable, environmentally friendly, pro-environmental, eco - friendly and ecological have often been used interchangeably by marketers to inform and lure the customers as part of Green Marketing (Gosavi, 2013). Environmentally friendly" refers to products or services that are not injurious to the outside environment or its inhabitants. However, for more than a decade, the U.S. Federal Trade Commission (FTC) has issued

warnings about products or services marketed as environmentally friendly, environmentally safe (Atlanta, 2010). Mainieri et al., (1997) define eco-friendly products as ecologically safe products that can ease the long term goal of protecting and preserving our natural habitat (Ishaswini, 2011) it namely, environmentally friendly products or environmentally aware products, are referred to as products designed to lower the consumption of natural resources required and reduce the unfavorably environmental impacts throughout the whole life-cycles of these products (Tseng & Hung, 2013). A green product is defined as "a product that was manufactured using toxic-free ingredients and environmentally-friendly procedures, and which is certified as such by a recognized organization" (Ghodeswar, 2015). In addition to that green products define as the products that will not intimidate the environment, deplore the natural resources, can be recycle, reduced packaging or using less toxic materials (Teng et al, 2012).

Product is the center of green marketing mix and the most significant part whole green marketing strategy. However, it should be reserved in brain that green product is not limited to the final object only but involves all the elements of the product, such as the materials it used, the production process, the package of the product, etc (Fan & Zeng, 2011) green product can be considered one that fulfills the same functions as the equal conformist product causing fewer harm to the environment during its life cycle and its composition does not injury or assaults unless the environment as well as use or no packaging (Junior, 2015).

Green products are known as environmental friendly products or ecological products. In fact, green products are products that will not cause any health danger to human being and animal; will not include materials derived from the endangered species or in danger environments; will not contribute to extreme waste in its use or packaging; will not

damage animals and the products are efficient in its use of resource through firms, use and disposal (Teng et al, 2012).

The ecological objectives in planning products are to reduce resource consumption and pollution and to increase conservation of scarce resources (Sharma, 2011) green products refer to those products that will not pollute the globe or deplore natural resources, and they can be recycled or conserved (Tan, 2010).

According to Eric (2007) product defines the characteristics of a company's product or service that meets the needs of its customers while (Hashem & Al-Rifai, 2011) defined Green products are products that respond to environment needs and requirements. In addition green products define as the products that will not threaten the environment, deplore the natural resources, can be recycle, reduced packaging or using less toxic materials (Teng et al, 2012). Identify customers' environmental desires and expand products to speak to these wants. Develop environmentally responsible products that have fewer adverse impact on the environment compared to the products offered by competitors (Singh, 2013).

Green products are begun from the demand-pull of consumers with new attitudes toward environmental values (Chen, 2013). Green products are typically durable, non-toxic, made of recycled materials or minimally packaged. Of course, there are no completely green products, for they all use up energy and resources and create by-products and emissions during their manufacture, transport to warehouses and stores, usage and eventual disposal (Chowdhury and Samuel, 2013) According to Heslop & Papadopoulos: "good products are seen to be produced by people who have refined taste, and are likeable, trustworthy and admirable for their role in world politics" (Knight et al, 2007).

The products those are manufactured through green technology and that no environmental hazards are caused called green products (Mohanasundaram, 2012). It have to be developed depending on the desires of the consumers who prefer environment friendly products. Products can be made from recycled materials or from used goods (Mohanasundaram, 2012; Shil, 2012). A green product is the one that is "green" if it carries out the needs of the consumer, along with having no or least impact on the environment. And this does not only consist of the use or disposal of product but also the corporation which is involved in producing it (khan, 2012). While considering the concept of green marketing the producers offer ecological products, which not only save the environment but should also, protect (Shrama & Goyal, n.d). As the customer's needs are essential to improve and develop products, the consumer needs in an environment more safe and healthy are also significant and should be considered (Hashem & Al-Rifai, 2011).

Green product attributes may be environmentally sound production processes, responsible product uses, or product elimination, which customers compare with those obsessed by competing conventional products. However, the literature does not yet offer a purpose meaning of what makes a product "environmentally friendly". In some product categories, this has led to the introduction of environmental labeling (Hartmann & Apaolaza, 2006).

Green product can be categorized as a product that will not pollute the earth or deplore natural resources and can be recycled or preserved. Some examples of these products are "household items manufactured with post-consumer plastics or paper, recyclable or reusable packaging, energy-efficient light bulbs and detergent containing ingredients that are biodegradable, non-polluting and free of synthetic dyes or perfumes"

(Mostafa, 2007). Ordinary terms normally used by companies promoting green products are "eco-friendly", "environmentally safe", "recyclable", "and biodegradable" and "ozone friendly" (Tan & |Lau, 2011).

A green product helps the preservation and improvement of the natural surroundings along with preserving energy and other resources and reducing or eliminating the use of venomous substances, pollutants and wastes, simultaneously. In other words, a green product is a product that does less harm to the environment and is obtained from repairing, remaking, reproducing, re-using, recycling and reducing processes (Shirsavar & Fashkhamy, 2013).

The attributes of a product some time carrying opportunities, constraint and nervousness, product will always exposed and suggest some benefits for the customer. Renewable power products are generally located as a bundle of packaging is offered by the electric supplier renewable power products can successful in market as they positioned themselves supporting environmental issues (Awan, 2011). In the market for green products, it is essential to understand to what degree customers tend to be green and protect the environment by committing to purchase green products (Weisstein et al, 2014).

In business, the terms "green product" and "environmental product" are used commonly to describe those that strive to protect or improve the natural environment by conserving energy and/or resources and reducing or eliminating use of toxic agents, pollution, and waste (Singh & Pandey, 2012). Green product attributes may be environmentally sound production processes, accountable product uses, or product removal, which clients contrast with those possessed by competing conventional products (Maletic et al, 2010).

Marketers wanting to utilize emerging green market either Identify consumers 'environmental needs and develop products to address these needs; or develop environmentally responsible products to have fewer impact than competitors or the increasingly wide varieties of products on the market that support sustainable development and are good (Shrikanth & Raju, 2012).

Health and safety attributes may also be one of the primary drivers of the demand for green products. While some argue that the marketing of green products has missing its effectiveness, innovative companies have found methods to capture market share and increase profits during environmental marketing (Dean& Pacheco, 2014).

The function of the Green Product according to Zulkifli in Zaharia, (2008) includes:

- a. Remedy: extend the life of the product by fixing some parts,
- b. Customize back: adding age products by adding the charge,
- c. Manufacture back: new products based on old products,
- d. Using return: designing products that can be used over and over,
- e. Recycle: the product may be reprocessed and converted into raw materials to be used to manufacture the same product.
- f. Reduce: using fewer raw materials or emit less waste (Tias, 2013).

Only for the sake of it, in most cases, green products want to be broadly situated in the marketplace so they have a wider appeal and do not cater to only a niche segment (Merdin, 2011). Hopes for green products also have been hurt by the perception that such products are of lower quality or don't really deliver on their environmental promises (Wanninayake & Pradeep, 2008).

2-2-2 Green Price

The price is the amount paid for a product. It is a critical element of the marketing mix. The majority of customers will only be prepared to pay a premium if there is a perception on additional product value (Eric, 2007). This value may be enhanced performance, function, design, visual appeal,

or taste (Sharma, 2011). Environmental benefits are usually an extra bonus but will often be the deciding factor between products of equal value and quality (Singh, 2013). Environmentally responsible products, however, are often fewer expensive when product life cycle costs are taken into consideration (Shrikanth & Raju, 2012).

Green marketing should obtain all these facts into consideration while charging a premium price (Bukhari, 2011). The price of green product has to be affordable for the customer to encourage purchase. Industrial demarcation works only when products reduce client's cost (Yazdanifard & Mercy, 2011). In the current economic recession, because of higher prices of green products compared with traditional products, consumers become more price-sensitive when purchasing green products (Yazdanifard & Mercy, 2011).

Green pricing takes into deliberation the people, planet and revenue in a method that takes care of the health of employees and communities and ensures efficient productivity. Value can be added to it by changing its appearance, functionality and through customization, etc (Mohanasundaram, 2012; Shil, 2012). The price of environmental friendly products is in some cases upper than the prices of the normal alternatives. A higher price compared to the normal option can be formative factor for some customers, verifying the accurateness of the products green features. Others do not believe the price at all but choose the environmental friendly alternative (Solvalier, 2010).

The customers are also conscious of the benefits upheld by green products so even they are willing to pay higher prices for the benefits connected with the green products (Shrama & Goyal, n.d).

The price that businesses accuse should reflect the most reasonable one. There is also a requirement for a corporation to decide on a pricing strategy. Companies working Green Marketing have to accuse a fair price

for their products and consumers should not be made to pay a premium for environmental practices that are before now requisite by the law (Eric, 2007).

In the book by Ottman (1997), it is pointed out that customers are really not concerned in paying more for a product affirmed "green". It is for this reason the marketers want to pay emphasis on the pricing of the product (khan, 2012). Price is the only element that can create an ideal mix between the revenue and profit, rest other elements create costs (Awan, 2011).

Pricing of green marketing is important and considering the fact that they support environmental friendliness so the Value can be additional to the product for changing its appearance, functionality and through customization, etc Shrama & Goyal (n.d). According to (Hashem & Al-Rifai, 2011) the green pricing refers to the price specified in the light of company's policies with regard to environmental consideration imposed by rules and company instructions or its initiatives in this regard. However green product often requires higher initial cost but in a long-run, it will be economy (Zeng, 2011).

Pricing is as critical in green marketing as in conventional marketing. Environmental benefits alone may not be a justification for higher prices. However, there is a case for communicating the possible hidden savings in green products. Environmentally responsible products may be comparatively less expensive when whole life costs are taken into consideration (Singh & Pandey, 2012). Willingness to pay is the maximum price that individuals would like to pay for a good or to avoid something bad, such as pollution. It can reflect consumers' attitude, evaluation and purchase intention towards sure products (Li, 2012).

2-2-3 Green Place

Green place is about administration logistics to cut down on transportation emissions, thereby in effect aiming at reducing the carbon footprint (Shil, 2012), This is related to distribution gates use that deal with green products, which are suitable for customers, in terms of facilitating their delivery, and to secure cycling procedures conducting within environmental conditions and requirements (Hashem & Al-Rifai, 2011). Place represents the setting where a product can be purchased. It can contain physical as well as virtual stores. Product distribution should be of the acceptable channels, and clearly and properly placed at environmentally safe place where there is no contamination whatsoever. For green businesses to be established and become competitively priced, firms have to make certain that their distributors are concerned of the environment and discover that they establish a green distribution strategy (Eric, 2007).

Place is not a cost generator factor, it has many features that can create revenue and certain outcome. This element of the marketing mix is dealt 'how-to-handle-distanc (Awan, 2011). This P of marketing mix provides a choice to create a product obtainable to consumers. The logistics are very important in marketing, while talking of green marketing the management of logistic becomes very important and vital since correct management of logistics can cut down transportation emissions, which would result in reduced carbon footprint Shrama & Goyal (n.d).

Logistics is one more part of the correlation, since it approaches procurement, material handling, distribution, storage, material recovery and disposition (Aminimoghadamfarooj & Shcherbakova, 2010). The choice of where and when to make a product available by a company, will have important impact on the customers. Very a small number of customers will go out of their way to buy green products (Sharma, 2011)

just for the sake of it. Marketers looking to successfully introduce new green products should, in most cases, position them broadly in the market place so they are not just tempting to a small green niche market (Shrikanth & Raju, 2012).

Green distribution is a very fragile operation. Consumers must be guaranteed of the 'Ecological nature' of the product. The green environment is a continually regulated environment and as such high level of fulfillment is essential when carrying out distribution of green products (Yazdanifard & Mercy, 2011). Few paying attention consumers will go out of their way to buy green products (Singh, 2013).

Ease of understanding (place) is the third determinant factor when considering purchasing green products or not. Many persons view the effort to actively look for environmental friendly products as an obstacle (Solvalier, 2010). Distribution of products is one function which when turned green has the highest effect on the environment. Distribution includes shipping which is probable only with the help of vehicles, which have a direct bearing on the environment. Adopting environmentally friendly vehicles whose alteration may minimize not needed effect on the environment can be a main contribution in the way of greening (khan & khan, 2012).

Referred to distribution in Green marketing requires the company provides customers he access to their products in a greener way in the delivery process. This process includes transportation ways, distribution channels, locations and every link for transporting the products out of the company to delivering them to customers (Zeng, 2011). The choice of where and when to create a product obtainable, will have major impact on the customers being attracted. Very few consumers will go out of their way to buy green products (Bukhari, 2011). Food distribution channel

members, in deciding where to source imported food products, are likely to reflect the concerns of end-consumers (Knight et al, 2007).

2-2-4 Green Promotion

This factor refers to providing genuine information about the products in a way that does not hurt the materialistic and moral consumers' interests (Hashem & Al-Rifai, 2011). Green promotion involves configuring the tools of promotion, such as advertising, marketing materials, signage, white papers, web sites, public relations, sales promotions, direct marketing and on-site promotions, videos and presentations by keeping people, planet and profits in mind (Shil, 2012). Significant promotion tools green advertising as promotional messages that may appeal to the needs and desires of environmentally concerned consumers (Ankit & Mayur, 2013). The purpose of green advertisements is to influence consumers' purchase behavior by encouraging them to buy products that do not damage the environment and to direct their concentration to the positive consequences of their purchase behavior, for themselves as well as the environment (Rahbar & Abdul Wahid, 2011). Marketing communication is defined as a cross-functional activity (Platel, 2009). Engaging in green promotion, may impact the probability that firm's claims are exactly monitored (Lao, 2014). Companies need to enhance their communication with the customer's ongoing green, and that attributes like price and quality are more important than "environmental responsibility" (Bukhari, 2011).

Green advertising is defined as every advertising that explicitly or implicitly addresses the relationship between a product/service and the biophysical environment, promotes a green lifestyle with or without highlighting a products/service and presents a corporate image of environmental responsibility (Samarasinghe, 2012). Zinkhan & Carlson (1995) defined green advertising as the appeals that try to fulfill

consumers" needs and aspiration regarding to environmental concern and from different perspectives health issues including ecology, sustainability, and pollution-free messages (Zhu, 2013). Stokes, (2007) he also defined green advertising as "promotional messages" that may appeal to the needs and desires of environmentally concerned customers. Vlieger, (n.d) is defined as advertising that suggests either a positive relationship between a product and the environment, promotes a green lifestyle, or presents a positive corporate environmental image (Banerjee, Gulas & Iyer, 1995). The American marketing Association has defined advertising as "any paid form of non-personal presentation and promotion of goods, services or ideas by an identified sponsor (M.Phil, n.d). Green marketers will be able to make stronger environmental reliability by using sustainable marketing and communications tools and practices (Singh, 2013).

In the context of the green marketing mix, promotion represents the various aspects of marketing communication. That is, the communication of information about the product with the aim of generating a positive customer response. Marketing communication decisions contain promotional strategy (push, or pull), advertising, sales promotions, public relations & publicity, personal selling and sales force. This includes all the weapons in the marketing arsenal (Eric, 2007). Green advertising are effective tools to promote products, services, ideas and organizations' efforts to show worry and their initiatives to protect and preserve the environment. It is also a tool used by the companies to share and inform the role that the companies also directly impact with the global issues, parallel with awareness displayed by the societies (Lee & Yun, 2015).

(Platel, 2009). Promotion represents all of the communications that a marketer may insert into the Marketplace. This can contain television, radio, and print advertising as well as coupons, direct mail, billboards, and online advertising. One of the less well-defined areas in promotion is the role of a human sales force (Eric, 2007).

Green promotion would include all forms of marketing communiqué; advertising comprises all forms of marketing communication, that is to say advertising, sales, publicity, personal sales and public relations. The job of green promotion would essentially be to introduce green products in the market, make a consumer demand for such products, and provide extra information and to promote the corporation as a green corporation and also to create awareness regarding the ecological problems (khan, 2012). According to (Håkansson et al., 2005) this element of marketing mix creates interaction with the consumers and makes the product position distinguished in the market (Awan, 2011).

Green promotion involves communicating information on the environmental commitments and the efforts made by companies to consumers. This element in the green marketing mix includes different activities like paid advertising, public relations, sales promotions, direct marketing and on-site promotions (Zeng, 2011). Promoting products and services to target markets includes paid advertising, public relations, sales promotions, direct marketing and on-site promotions (Singh, 2010). Green promotion means transferring real environmental information to those consumers who are involved in a company's activities. Also, companies' commitment to preserve natural resources is for the purpose of attracting the target market (Shirsavar & Fashkhamy, 2013).

Davis (1994) describes that environmental advertising by corporations usually contains three elements. Firstly, the advertisement begins with a statement of corporate concern for the environment. Secondly, the

advertisement describes the way the corporation has changed its procedures in order to demonstrate its concern and dedication into improving the environment. Thirdly, the advertisement describes specific environmental actions in which the corporation is involved and/or results for which the corporation takes credit (Rahbar & Abdul Wahid, 2011).

There are three types of green advertising: (Sharma, 2011).

- i) Ads that address a relationship between a product/service and the environment
- ii) Ads that promote a green lifestyle by highlighting either a product or service.
- iii) Ads that present a corporate image of environmental responsibility fulfilled by them.

The key to successful green marketing is credibility. Never overstate environmental claims or establish impractical expectations, and communicate simply and during sources that people trust (Shrikanth & Raju, 2012) As a result, a most important concern about green advertising is that many of the environmental claims being made are either unclear to consumers, entirely unsubstantiated, (Gephart, 2008). Consumers' feelings and judgments are formed when they are exposed to an advertisement which will influence consumers' attitudes towards the ad itself and their beliefs regarding the brand or the product (Zhu, 2013).

2-2 Consumer Behavior

2-2-1 Green Consumer

Consumers who are aware of and interested in environmental issues are called green consumers (Chen & Chai, 2010). Green consumer behavior has recently captured the attention of academic (Wang, 2013). GC indicates consumers' endeavor to protect eco-environment during purchase, use and disposal and minimize the negative effects exerted on the environment. It is of great significance to the practice of enterprises'

green marketing (Lao, 2014). Consumer behavior is a comprehensive subject of which the structure and meaning covers many discipline fields, like sociology, psychology, economics and marketing. The conception of consumer behavior originates since the inception of marketing (Dolcemascolo & Martina, 2010) it is argued that consumer behavior is the key to the impact that society has on the environment. One green behavior that consumers encounter on nearly a daily basis is the choice to purchase environmentally-friendly consumable products or eco-products. Consumers are also showing their increasing intention to green purchasing (Hai & Mai, 2010).

Webster (1975) defined a socially conscious consumer (green consumer) as a consumer who takes into account the public consequences of his/her private consumption or who attempts to use his/her purchasing power to bring about social changes, i.e., consumers incorporate social/environmental issues (e.g.; an individual concerned about the amount of garbage generated) into their purchase decisions by evaluating the environmental consequences (e.g., could consider the recyclable packaging) associated with the purchase of a product. Basically, these products are not only satisfy a consumer's instant needs and wants, but also serve to benefit to the environment in the long run. This is basically people whose behavior reflects a relatively consistent and conscious concern for the environmentally friendly purchase, use or disposal of particular products (Rohini, 2012).

Walters & Paul (1970) stated that "consumer behavior is the process whereby individuals decide whether, what, when, where, how and from whom to purchase goods and services." Engel, Blackwell & Kollat (1978) defined consumer behavior as "those acts of individuals directly involved in obtaining and using economic goods and services, including the

decision processes that precede and determine these acts." (Dolcemascolo & Martina, 2010). Wu et al (2011) defines purchase intention as the probability of consumer's readiness to purchase a product in near future. It is generally linked with the consumer's attitude, perception and buying behavior. It is observed that purchase intention is a very important factor for consumers when they are making decisions about buying any product (Bilal & Ali, 2013).

For every try at changing consumer activities and lifestyles there is a want to better understand the determinants of consumer behavior. Until now, most attempts to modify consumer behavior in an environment-friendly direction have focused on remote habits or groups of habits. (Thogersen & Folke, 2003) the intention of consumers' to purchase or consume green foods is made up of their belief and consciousness towards the concept of green foods which they accrue from their lifetime (Teng et al , 2012).

Customers are ever more conscious of the gravity of the environmental degradation, resulting more ecologically awareness and want to purchase eco-friendly products and services, favoring businesses that prefer environmental practice. (Kaufmann et al, 2012) explained Purchase intention means the possibility that consumers have the intention to purchase the products (Wu & Tsai, 2013). Green consumers' demonstrate an interest in product's characteristics such as recyclability and chemical content, favorably discriminating consumption towards products that are organic, energy efficient or have biodegradable packaging (Luzio & Lemke, 2013).

Elkington (1994:) defines green consumer as one who avoids products that are likely to cause danger to the health of the consumer or others; cause significant damage to the environment during manufacture, use or

disposal; consume a disproportionate amount of energy; cause redundant waste; use materials derived from threatened species or environments (Tias, 2013) Thus green consumer can be defined as those who actively or voluntarily consume products that have minimal detrimental impact on the environment to satisfy their wants (Fan & Zeng, 2011). A green consumer is often defined as a person who shows a form of "pro-social" consumer behavior (Tias, 2013) and is those who are aware of and interested in the environmental issues (Tan & Lau, 2011). Ottman (1993) described green consumer as "people who look for and support products that fulfill their requirements, and that have fewer influence on the environment" (Saleki & Maryam, 2012).

According to Nyborg et al (2006) moral motivation can play an important role in the publicity of the green consumer phenomenon as it affects the consumers. This can be explained further by "warm glow" effect that if an person prefers to public goods he or she will enjoy some kind of confidential advantage provided to the consumer will depend on his or her individual belief that to what extent his or her action will be helpful for the other people in his or her environs and to what extent his or her action gets a precious importance in the community (Iqbal, 2011).

Green consumers are "those who avoid products that are likely to endanger the fitness of the consumers or others. In late 1980s, increasing number of consumers described themselves as environmentalists and similarly consumers started to become more environmentally concerned consumers (Tias, 2013). Sustainable consumption is referred to as environmentally friendly consumption, ecological consumption or green consumerism. Green consumerism is defined as 'individuals looking to protect themselves and their world through the power of their purchasing

decisions. In their efforts to protect themselves and world, they are scrutinizing products for environmental safety' (Mehmetoglu, 2009).

Peattie (1992) defined green consumption as "consuming in a more sustainable and socially responsible way. Green consumers can also be separated into market segments according to their "greenness" based on environmental consumers' concerns which the multi-dimensional construct, including knowledge, attitude and purchasing behavior. Consumers' environmental knowledge, green values, beliefs and attitude are the source of the formation of actual green purchasing behavior (Fan & Zeng, 2011).

During the recent three decades, consumers appear to have become conscious of the detail that environment is more than they once believed, and that there are confines to utilize of natural resources. To respond to consumers' varying degrees of environmental concern, marketers can segment the market into different shades of green. The Roper survey divides consumers into the following groups (Sauza, 2004):

- True Blue Greens (9%): True Blues have strong environmental values and take it upon themselves to try to effect positive change. They are over four times more likely to avoid products made by companies that are not environmentally conscious.
- **Greenback Greens (6%):** Greenbacks differ from True Blues in that they do not take the time to be politically active. But they are more willing than the average consumer to purchase environmentally friendly products.
- **Sprouts** (31%): Sprouts believe in environmental causes in theory but not in practice. Sprouts will rarely buy a green product if it means spending more, but they are capable of going either way and can be persuaded to buy green if appealed to appropriately.

- Grousers (19%): Grousers tend to be uneducated about environmental issues and cynical about their ability to effect change. They believe that green products cost too much and do not perform as well as the competition.
- Basic Browns (33%): Basic Browns are caught up with day-to-day concerns and do not care about environmental and social issues.

According to Polonsky (1995), there are dark-green, semi-green or light-green, and non-green consumers. The dark-green consumers are a definite group of consumers who know what they desire and search for actively for the information about green products and services (Polonsky, 1995). Their intention to look for the green companies and green products are aggravated by their internal intention to purchase these products. There are such semi-green consumers that choose green products sometimes, not incessantly, and do not seek for green information as actively as dark-green consumers. Not-green consumers are not interested in green consumption and do not buy green products or if purchase such products, then buy them unintentionally (Solvalier, 2010).

Simply, the green consumer is a individual who seeks out environmentally friendly products to buy (Tias, 2013) "green" consumer point of view cannot be unnoticed. In a survey conducted in the United States of 400 Midwestern consumers, 36 percent of the respondents were found to be "very likely" to change from one food brand to another competitive label which used a recycled carton; only 2.8 percent stated that they would be "somewhat unlikely" to make brand changes because of recycled packaging (Ishaswini, 2011). Theoretically, GC is viewed as actualization of the low-carbon lifestyle, a fundamental representation of sustainable development, and a modern, scientific, and healthy consumption pattern. Specific GC objectives are outlined, including

adoption of green products that meet certain environmental standards, and reduction in total consumption and total waste (Tang et al, 2013).

Over the years, green behavior has happen to an ordinary trend in dissimilar areas that can be mainly separated into two principal domains, namely, usage and disposal. Disposal behavior refers to some type of recycling behavior as well as participation in newspaper recycling, bottle recycling and can recycling. Usage, on the other hand, includes home insulation, energy curtailment, returnable products, economical driving and so on. Sustainable consumption certainly belongs to the usage form of green behavior (Mehmetoglu, 2009).

2-2-2 Purchase Intention

Purchase intention can be defined as the likelihood; a consumer will purchase a product or service in future. A positive purchase intention propels to customer for real purchase action or a negative purchase intention restrain to customer not to purchase that (Arslan & Zaman, 2014). An increase in purchase intention means an increase in the probability of purchasing. Researchers can also use purchase intention as an important pointer for estimating customer behavior. When customers have a positive purchase intention, this forms a positive brand commitment which propels customers to take an real purchase action (Wu, 2011). The cost of retaining a present consumer is less luxurious than prospecting for a new customer (Ihtiyar & Ahmad, 2014). Purchase intention for green environment product is conceptualized as the probability and willingness to prefer to purchase the product which has features of having eco-friendly features (Yusofet al, 2013).

Purchase intention can be defined as the likelihood of a consumer's purchase decision to buy a product or to visit a store offering services, a decision that came from the value and benefits perceived by customers

(Chen & Lee, 2013). Also can be defined as "the person's motivation in the sense of his or her conscious plan to exert effort to carry out a behaviour" (Hassan, 2014). In another view, Chan (2001) defines purchase intention for green environment product as customer behavior for a specific type of eco-friendly product to state their concern for the environment.

Intention is defined as a course of action that one intends to follow. in general, before really purchasing an environmentally friendly product, the customer must have the intention to buy environmentally friendly products. Purchase intentions are very significant in marketing term or functions (Shakeel, 2015). Purchase intention is a consumer's object intention toward a product. Define purchase intention as a consumer's aware plan or intention to create an effort to purchase a product (Lu, 2014).

Purchase intention can be defined as the probability of a consumer's purchase decision to buy a product or to visit a store offering services, a decision that came from the value and benefits perceived by consumers. Purchase intention has always been treated as a significant variable, and is lengthily used in marketing academic literature for the reason that it is a good substitute of consumers' actual purchase behavior. The evaluations of consumers' purchase intention can assist practitioners both know better the trend of the market and regulate the location of products or services. "Green purchase intention," purchase intention applies to the domain of environmental issues, means the possibility of a consumer's purchase decision to buy an eco-friendly product which has a low impact on the environment. Consumers know that he/she is causative to the environmental cause (Chen & Lee, 2014).

Purchase intention has always been treated as an important variable, and is extensively used in marketing academic literature because it is a good proxy of consumers' actual purchase behavior. The evaluations of consumers' purchase intention can help practitioners both know better the trend of the market and adjust the position of products or services. "Green purchase intention," purchase intention applies (Chen & Lee, 2013). It is essential to know customers' purchase intentions since customers' behavior can usually be predicted by their intention (Bai et al, 2008). Purchase intention refers to customer tendency to purchase a product. Consumers purchase a brand when they consider the brand offers the right product quality or features. Purchase intention is a combination of consumers' interest in buying a product and the possibility of buying (Wu et al, 2015).

Consumer purchase intention refers to the attempt to buy a product or service (Diallo, 2012). Consumers' positive feelings and attitude toward a product/service or private label store will influence his/her purchase intention. Purchase intention from a retail store is affected by some external factors like brands sold in the store, physical location and timing (Das, 2014) and some inherent factors like fulfilling a need, satisfying a preference and placing the consumer in a better position (Luo et al, 2011).

Purchase intention has been broadly used as a forecaster of subsequent purchase and linkages had been found between store image and purchase intention (Grewal at al., 1998). In the study conducted by Granot et al, (2010), three themes have been found to be drivers in retail purchase decision-making of female consumers. These drivers are emotional (brand), service (retail environment) and lastly experiential (shopping). They further suggest that retailers should consider all three issues to attract and satisfy customers, and specifically the retail brand constitutes emotional satisfaction and loyalty for repetitive purchases. Purchase

intention is also used as an indicator of estimating consumer bahavior (Wu et al., 2011).

Customers' repurchase intent depends on the value obtained in their previous transactions such as: appropriate performance criteria (benefits), competition, and cost considerations. Future purchase intentions also have a relationship with customer satisfaction. In general consumers evaluate future purchase intentions based on the value obtained from previous contacts, with relationship benefits being a substitute for expectations of future benefits (Calfas & Taylor, 1994).

Behavioral intention is an important mediating variable in the TPB. It refers to the subjective appraisal of an individual's readiness to perform a given behavior (Wu & Chen Wu, 2013). Purchase intention is that concept which has crucial importance in the marketing literature. It is one of the major concepts which are studied in the marketing (Arslan & Zaman, 2014).

Purchase intention cans be conceptualized as individual's intention to buy products, therefore can eventually result in real purchase behavior. In the hand the superior the purchase intention is, the better a consumer's want to purchase a product or service. The intention to purchase a particular brand, product or service requires assessment of all brands, product so services offered by competitor's .Intentions to purchase products arise while they provide the features that meet the consumers' need. Studies argued that purchase intention is affected by both recognized value and excellent offer so far product (Das, 2014).

Purchase intention refers to the attempt to purchase a product or service. Consumer purchase intention from a retail store is influenced by several external factors like product, brand, retailer, and timing. As shopping is often a he donic (i.e., *pleasure*) shopping experience, the intentions might be directed towards real purchasing products from the retailers.

Consumers' purchase intentions occur after customers perceive usefulness and value of a product. Purchase intentions influences purchase behavior in terms of end result, i.e., actual purchase (Das, 2014). Intention is a determination to act in a certain way. For example, intention to purchase a specific product has been found to be a good predictor of real behaviour in purchasing the product (Ramayah, 2010).

Behavioral intention has been defined by Azjen (2002) as human actions that are guided by three kinds of considerations; beliefs about the likely outcomes of the behavior and the evaluation of these outcomes(behavioral beliefs), beliefs about the normative expectations of others and motivation to comply with these expectations (normative beliefs), and beliefs about the presence of factors that may make possible or impede performance of the behavior and the perceived power of these factors(control beliefs) (Qader, 2011). Notwithstanding the enveloping view that stated intentions are possibly the best predictors of actual behavior, it has long been recognized that answers to stated intention questions are not perfectly correlated with actual purchases. Purchase intention has been measured in several ways, such as measuring the expressed intention to purchase using a scale composed of several positively worded statements of environmentally accountable behaviors (Barber et al, 2012).

widespread research over the years recognize that heightened consciousness of green issues; increased level of information availability on environmental sustenance; green advertising by corporations; increased concern for the environment; increase in popularity of green products by social and environmental charities as some factors (Cox, 2008).

Purchase intention represents "the likelihood that customers will plan or be willing to purchase a sure product or service in the future" and it is considered as the accurately precedent step from indulging in the real buying behavior. Purchase intention measurements really reflect future buying behavior, they are inexpensive, easily unspoken and interpreted and thus, used in sales forecasting. Such data are extensively used to forecast demand for new products influencing at an operational level, production agenda regulation, advertising, distribution and pricing policy. To study what drives intentions to purchase PL brands, one needs to acknowledge first, that buying decisions can be influenced by various needs including physiological and/or socio-psychological (e.g. prestige, recognition, comfort) in order to then, focus on factors likely to form customer attitudes towards PL branded products (Kakkos et al, 2015).

2-3 Total Image

Total image and its importance have been discussed by many writers (e.g. Aaker, 1992; Kapferer, 1992; Keller, 1993; Nebenzahl & Jaffe, 1996; Meenaghan, 1995). Some problems are evident in this body of work. One problem is that research into image often implies a clear distinction between functional qualities of a product and its image qualities, and furthermore in relation to brand image, a distinction between the product and the more ephemeral brand. These distinctions, however, break down from a semiotic perspective, because the functional and symbolic are inter-related. Another problem is that of trying to conceptualize the image concept.

Such definitions of image may be in part responsible for a bias in the direction of research into the image concept. The image concept has received much attention through the study of information processing within consumer behaviour, but is typically only linked to memory or visual phenomenon rather than imagination (Combe et al, 2003).

In this study total image mainly two dimension corporate image and brand image. Many researcher studied corporate image for example, Hashem & Al-Rifai, (2011) investigated applying of green marketing mix on mental image. Allison & Philip (2004) studied the Effect of Corporate Image in the Formation of Customer Loyalty. In addition Eman et al, (2013) explored the impact of corporate image and reputation on service quality, customer satisfaction and customer loyalty. Karaosmanogʻlu et al, (2010) stated the role of other customer effect in corporate marketing its impact on corporate image and consumer-company identification. Ko et al, (2013) Green marketing functions in building corporate image in the retail setting. Fall Diallo, (2012) concerns effects of store image and store

brand price-image on store brand purchase intention: Application to an emerging market.

On the other hand, Bian & Moutinho, (2009) indicated the role of brand image, product involvement, and knowledge in explaining consumer purchase behaviour of counterfeits. Arslan & Altuna, (2010) tested the effect of brand extensions on product brand image. Brand extensions affect the product brand image negatively. Huang et al, (2014) explain effects of green brand on green purchase intention. Simonian et al, (2012) suggested there are role of product brand image and online store image on perceived risks and online purchase intentions for apparel. Jalilvand & Samiei, (2012) argued the effect of electronic word of mouth on brand image and purchase intention. Porral & Lang, (2015) examines the role of manufacturer identification, brand loyalty and image on purchase intention.

2-3-1 Corporate Image

The concept of corporate image initially started to be explored in the beginning of the 1950s. Since then, various definitions of it have been offered by marketing, and organizational behavior scholars (Karaosmano et al, 2011). Very few within the marketing literature consider internal organizational aspects when dealing with the concept of organizational image (Hatch and Schultz, 1997). The corporate image is based on what people associate with the company or all the information (perceptions, inferences, and beliefs) about it that people hold. Whereas, some researchers use image and reputation as substitutes, others such as Martenson, (2007) see reputation as the esteem in a long-term perspective that the company has, as opposed to image that can be more short-term in nature. (Martenson, 2007).

The specialist marketing literature has emphasized that corporate image is not the only image to be perceived by the consumer. In this respect, researchers have suggested that there are different types of image depending on the specific group of consumers and the kind of experiences and contacts they have had with the business and/or its brand. Similarly, Gray & Smeltzer (1985) point out that image is a set of impressions that different kinds of public have of a certain company. For LeBlanc & Nguyen (1996), corporate image "is the result of an aggregate process by which consumers compare and difference various attributes of companies" (Flavia'n & Guinali'u, 2005).

Numerous definitions of image are found in the psychological and marketing literature. Image has been described as subjective knowledge (Boulding, 1956), as an attitude (Hirschman *et al.*, 1978), and as a combination of product characteristics that are different from the physical product but are nevertheless identified with the product (Erickson *et al.*, 1984). Examples include tradition, ideology, company name, reputation, price levels, variety of services, and the quality communicated by each person interacting with the service firm (Nguyen & Leblanc, 1998).

The concept of corporate image is well established in the academic literature. As Riel & Fombrun (2007) stated "corporate image involves the features of the company that stakeholders come to perceive", and this image is the general impression that a firm can generate in the mind of its stakeholders. Thus, with a more short-term focus than other related organizational constructs, such as corporate reputation or firm legitimation (Chen, 2008), corporate image can be understood as the desired current general impressions of the firm in the minds of its key stakeholders (Amores-Salvado et al, 2014).

The corporate image is based on what people connect with the corporation or all the information (perceptions, inferences, and beliefs)

about it that people hold. while, some researchers use image and reputation as substitutes, others such as Fombrun (1996) see reputation as the esteem in a long-term viewpoint that the corporation has, as opposed to image that can be more short-term in nature (Martenson, 2007).

Dutton & Dukerich (1991) defined image as the way organization members believe others see their organization. Another approach to defining image as product of processes internal to the organization was offered by Whetten, Lewis & Mischel, (1992), who defined image as the way that "organizational elites" would like outsiders to see their organization (similar to the marketing concept of ideal corporate image). Balmer (1998) as associations and meanings connected with an organisation".

(Gautam, 2011) defined image as perception of an organization held in consumer memory and works as a filter which influences the perception of the operation of the company. Dobni & Zinkha n (1990) defined corporate image as the representation of a brand in the consumer's mind that is linked to an offering. (Fatt et al, 2000) defines corporate image as of stakeholders' perception the actions. activities, the and accomplishments of an organization. Keller, (1993) argued that corporate image can be seen as a set of percept ions about a brand the consumer for as reflected by brand relations.

A company's image can be defined as "a function of how constituencies perceive the organization based upon all the messages it sends out during names and logos and through self-presentation, including expressions of its company vision "(Mayer et al, 2012) Image is not what the corporation believes it to be, but the feelings and beliefs about the corporation that exist in the minds of its audiences (Hatch & Schultz, 1997). Grunig (2003) asserts that corporate image has been used as a

synonym for concepts such as message, reputation, perception, cognition, attitude, credibility, belief, communication and relationship" (Minkiewicz et al, 2009). However, in the marketing field the vagueness about the concepts of corporate image and corporate reputation has remained longer (Karaosmano et al, 2011). It is argued that corporate image is what comes to brain when travelers hear the name of a place, a hotel or a restaurant .consumers tend to contract with organizations that have images reliable with their own self-images .Also, it is defined as the way the community perceives the corporation or its products. Corporate image considered "a function of the accumulation of as may be purchasing/consumption experience over time (Hashem & Al-Rifai, 2011). The majority scholars define image as the perception organizational members have about how others view the organization. In other words, image refers to what I believe you imagine about me (Langer et al, 2006). The corporate image may be defined as a compound of knowledge, feelings, ideals and beliefs connected with a corporation as a result of the entirety of its activities". While it is believed that "every person of the community with which your corporation comes into contact has a mind picture of your company" (Mbanaso et al, 2009).

The image is created by the perceptions that citizens have of a particularly corporation. Perceptions of a corporation are influenced by a variety of dissimilar factors (Mayer et al, 2012). Corporate image can be understood as the desired present general impressions of the firm in the minds of its key stakeholders (Salvado et al, 2014). In spite some firms it is believed image play a critical role in customers' decision-making processes. Emphasizing the import of understanding image growth (Han et al, 2009).

One last note on image; it is significant to keep in mind that it exists at more than a few levels. Knecht (1986) defines seven: product class, brand, company, sector, shop, country and user. It can be argued that for an organization these levels are not mutually exclusive. An organization may experience each single one of these levels in that they often overlap. Dowling (2001) contends that if a person's beliefs and feelings about a corporation (its image) fit their individual values concerning correct corporate behavior, then the individual will characteristic a good reputation to that association. There have to be a "fit" between the image of the corporation and what he refers to as the person's "free-standing" value system. (Brønn, 2002). It is more provisory and fewer necessary than identity. An organization can have many images because every person can have his own idea about the organization and can continually modify these ideas. A good image presents a specific capital and the benefit of the organization in the marketplace. Image is also created by the employees, especially those who communicate with the public. According to Dowling (1994), an image is a compilation of all impersonation that a certain whole creates in the perception of citizens. Image contains the convictions, values, stereotypes, standpoints and impression someone has about a sure objective (Biloslavo & Anita, 2009).

According to Ngyun a & Lelanc (2001) corporate image is related to the different physical and behavioral characteristic of the corporation, like; business name, architecture, variety of goods or services, tradition, ideology, and to the feeling of quality communicated by every individual interacting with the clients of the corporation (Gautam, 2011). Creating positive images is at the vanguard of companies' market communication strategies. Such positive images have a positive impact on consumers' behaviour and on their likelihood of purchasing a good or service (Mayer

et al, 2012). Barich & Kotler (1991) define corporate image as the sum of individuals' beliefs, attitudes and impressions toward an organization. Corporate image is related to consumer retention probability (Ball et al., 2006; Nguyen & Leblanc, 2001).

2-3-2 Brand Image

Brand image is the reasoned or emotional perceptions customers attach to a specific brand. It consists of functional and symbolic brand beliefs. Brand image is made up of brand associations (Koubaa, 2008). Brand image is variously defined as "the set of beliefs held about a particular brand" or "a set of relations, generally organized in some meaningful way". (Meenaghan, 1995) Brand image is defined by Aaker (1996) that image is series of brand participation stored in a consumer's remembrance while brand image is "how a brand is perceived by consumers". The reasons in consumers' brain connected with brand specifications. Brand image is the perception of brand that created in recollection of customer owing to brand participation. Brand image is similar to self-image of customers as customers connect themselves with brands (Arslan & Zaman, 2014). (Keller, 1993) defined brand-image as the sum of brand associations detained in customer recollection that guide to perceptions about the brand. Also there are one more meaning for Keller (1993) defines brand image as dissimilar types of brand relations as well as the favorability, power and uniqueness of these associations. Brand relatives are urbanized based on product-related and non-productrelated attributes (Liu et al, 2012).

Since it was first introduced formally into the marketing discipline by Gardner and Levy (1955), communication of a brand image to a target section has been regarded as a significant marketing activity. Particularly, it became ordinary in customer behavior research from the 1980s. The

tendency has never faded ever since. Nevertheless, brand image has been assigned dissimilar meanings from the day it was introduced into the marketing discipline. Unadventurously, brand image was defined in a different way according to diverse research focus, due to be short of a firm base or basis on which the concept can be built (Bian & Moutinho, 2009). This study adopts Aaker's (1996) brand image definition.

Brand image in conditions of green products can be defined as "a whole range of impersonation, conceptions and apprehensions towards a brand in the customers' recollection which is correlated to the sustainability and eco-friendly concerns" (Chen, 2010). Customers normally have individual favourite brands and they prefer them over green brands (Young et al., 2010). Also, customer trust in a green brand is a significant purchase criterion which positively influences their purchase of green products (Rahbar & Wahid, 2011). Only a few studies were found to have investigated the influence of brand image on consumers' green purchase behaviour, as a result, more research is wanted in this area to get conclusive results (Joshi & Rahman, 2015).

Brand image is variously defined as "the set of beliefs held about a particular brand" (Kotler, 1988) or "a set of associations, usually organized in some significant way" (Aaker, 1992). Kotler and Keller (2006) define that brand can be 'a name, term, sign, symbol or design, or a combination of them' that can be useful to recognize the goods or services from suppliers in view of differentiating those suppliers from their competitors. The "brand" is often regarded as divide from the functional product, with the brand being grafted on by advertising, thereby implementation the transformation procedure from functional product to immortal brand (Meenaghan, 1995). A strong brand image offers an organization several important strategic advantages. Therefore, a brand acts as a signal to customers concerning the source of the product

and protects consumers and manufacturers from "me-too" products that may emerge indistinguishable. Brand image consists of customer knowledge and beliefs, stored in recollection as associations, about brand attributes and the penalty of brand use (Porter & Claycomb, 1997). The corporate brand is intangible in nature and invaluable for the organization (Gautam, 2011). Aaker (1991) conceptualizes brand image as the set of evaluations and associations in consumers' minds connected to a brand or product. Favorable brand image has been exposed to guide to upper purchase intentions normally and specifically in the case of confidential label products (Porrl & Lang, 2015).

Brand image is related to the consumers' utilize of the brand to reflect their symbolic meaning of utilization and identity in self-expression. Customers ascribe high quality to respected brands. Brand image that is recognizable to customer eye can help the companies to host new brands and choose up the sales of present brands. Consumer's consciousness of brand image with green marketing elements influences consumer's purchasing decision of green product where they used the product brand image with green elements as the primary sources of information about green products. They are improbable to purchase green products if they unknown with the brand image (Sasmita & Suki, 2015).

Customers' emotions to brand based on their recognition with a brand image. Brand image is the sum and overall individuality in the customers' brain. Brand image depends upon the real image of the firm in consumers' brain. A unique set of connection in the brain of customers communicates expectations (Arslan & Zaman, 2014). Brand image includes emblematic meanings that connect with the exact attributes of the brand. It can be defined as a subjective, perceptual phenomenon of a brand that is connected by a network of associations in the recollection of

customers (Chen & Lee, 2013). Likewise, green brand image is more significant for companies particularly under the increase of prevalent environmental awareness of customers and strict international regulations of environmental protection (Chen, 2010).

Brand images are significant since they make value for manufacturers in at least five ways. First, brand images help customers recover and process information. Second, brand images provide an origin for differentiation and positioning of a product. Third, brand images involve product attributes and customer benefits that give customers a cause to buy and use the brand. Fourth, brand images make associations that produce positive attitudes and feelings that are transferred to the brands. Finally, brand images provide the foundation for product extensions, by creating a sense of fit between the brand and the new product, or by giving consumers a reason to buy the new product (Porter & Claycomb, 1997).

According to Gordon (1993), brand image is made up of five dissimilar facets, which are user image, occasion image, product image, brand personality and salience. An important concept for brand differentiation, which significantly influences consumers' purchase decision-making, is brand personality (Aaker, 1997) cited in (Toldos-Romero & Orozco-Gomez, 2014).

Marketers attempt to make images for their brands so that they are positioned to fit a distinct market section engaged by no other brand. They strive to make a brand image that is comparable to (congruent with) the self-image of the target customers (Graeff, 1996). The significance of a brand name (or image) in customer assessment of a product is well recognized. Customers who do not have any specific ideas about the product generally rely on a brand name to deduce the quality of a product (Lee and Ganesh, 1999). Communication of a brand image to a target

section has been regarded as an important marketing activity. Particularly, it became commonplace in consumer behaviour research from the 1980s (Bian & Moutinho, 2009).

Robert & Dowling (2002) argued that the corporate brand is a precious intangible asset, that is hard to impersonate, and which may assist corporation in achieving continued better financial performance. Good brand image not only indicates that the brand has a positive image but also exhibits a higher level of brand image power in contrast to other brands (Gautam, 2011).

In the last two decades, however, it has become increasingly apparent to scholars of customer behavior that the notion of a highly concerned problem-solving customer, as explain by this paradigm, rarely matches the general condition of brain in most customer decision-making processes (Hatch & Schultz, 1997).

The product is seen as providing center functional benefits whereas the brand is responsible for creating the magnetic human-like aura around the real product. As stated, brand image derives from the variety of components of individuality, with advertising being central to the process by informing customers of intrinsic product benefits and positioning the brand in the brain of the customer (Meenaghan, 1995). Also the product image contains dissimilar relations including product's physical properties and attributes as well as the benefits and feelings that come from product consumption (Hashem & Al-Rifai, 2011).Brand image is related to the consumers' use of the brand to reflect their symbolic meaning of consumption and identity in self-expression (Suki, 2015) Product brand image is often defined as "perceptions about a brand as reflected by the brand associations held in consumer memory" (Simonian et al, 2012).

Conservatively, brand image was defined differently according to different research focus, due to lack of a firm base or foundation on which the concept can be built. Researchers tend to use brand image and other brand related constructs interchangeably, study adopts Aaker's (1996) brand image definition.

2.4 Relationship between Green Marketing Mix and Purchase Intention

Schiffman & Kanuk (1991) claimed consumer behavior is what displayed by consumers in searching for, purchasing, using, evaluating, and disposing products and services that they expect will satisfy their needs (Dolcemascolo & Martina, 2010). The actions that people take and choices they make to consume certain products and services or to live in sure ways quite than others all have direct and indirect impacts on the environment (Hai & Mai, 2010).

Therefore, green marketing does not powerfully influence all customers, thus it is essential to identify and target environmentally concerned market segments (Lampe & Gazdat, 1995). Like in Europe and the United states where the prices of green products have typically been higher to reflect the additional costs of reengineering the production process, the disposal process or the packaging. Because, a high price of green product is an indicator of environmental performance, since fewer polluting products are more expensive to produce. Most of the customers say that they make your mind up a product because of its environmentally friendly nature, but they do not make real allocations of dollars in purchases (Ali et al, 2011). Furthermore, the modern customer is more than ever oriented toward products value, paying at the same time more attention to the price of a product, without neglecting quality. Consumers today are better informed and demanding (Papadopoulos et al, 2013).

More and more customers are inclined to purchasing green products and even willingly pay comparatively higher prices for these products (Tseng & Hung, 2013).

Environmental friendly products or green products are becoming more popular among the consumers in the present decade. Even consumers are ready to pay a private cost for the green products to make the environment better rather that the non-environmental products which also known as brown products (Iqbal, 2011). Therefore, consumers are becoming more sensitive in their environmental attitudes, preferences and purchases (Kaufmann et al, 2012).

Therefore, environmental concerns are not the only reason for the customers to purchase environmentally friendly products, and also they do not agree to trade-off other product attributes for a better environment. This reveals that conventional product characteristics such as brand name, its price and quality are still the most significant ones that consumers considered when making purchasing decision (Ali et al, 2011).

Ottman (1992) reported that consumers were willing to accept green products when their primary need for performance, quality, convenience and affordability were met. Furthermore their level of acceptance would also increase when they understood how a green product could help to solve environmental problems (Tan & Lau, 2011). The caused unfair price named three customers' response behaviors roommates are exit, voice, and un-loyalty. The assessment of unfair prices could trigger consumers' three responses: leaving the company's products, making complaints, and being unloyal to the products (Semuel & Chandra, 2014).

There have been a number of dissimilar factors which are instrumental in promoting green consumers to purchase green products (Cox, 2008). Customers are highly fragmented in conditions of their level of

environmental consciousness and willingness to choose higher-priced environmentally oriented products. Price premiums, the surplus prices paid over and above the "fair" price that is justified by the "true" value of the product may be indicators of consumers' demand for that product (Nassivera, 2014).

In deciding what to purchase customers deal off the financial value offered by different brand. Significance of price that customer becomes aware about price while choosing and purchasing a brand. Price customer needs to purchase a product by keeping in brain price of the product. A customer is willing to pay high prices if the features of the brand justify the high price (Arslan & Zaman, 2014).

Numerous customers choose products that do not harm the environment over less environmentally friendly products, even if they cost more. With green marketing, advertisers focus on environmental benefits to sell products. Green marketing encourages consumers to use eco-friendly products and manufacturers to develop more environmentally beneficial products (Ishaswini, 2011). Consumers possess a sincere desire to purchase products that are less damaging to the environment the growth of environmentally aware customers has created a tendency in the market called environmental consumerism (Stokes, 2007).

There have been a number of diverse factors which are instrumental in promoting green customers to purchase green products (Cherian & Jacob, 2012) green attitude cannot always guide to green purchasing behavior, for example, not all consumers with environmental scruples and attitude are willing to pay the price premium of green product (Fan & Zeng, 2011).

Consumers" feelings are formed when they are exposed to an advertisement which will influence consumers" attitudes towards the ad itself and their beliefs concerning the brand or the product. It is essential

to examine the differences between consumers" affective response which is consumers" feelings from ad exposure) and cognitive response which is consumers" judgments towards the ad (Zhu, 2013).

If the consumer was to purchase a green product then the purchase decision here is made not only on the green product itself, which provides the primary core benefit to the customer but also the other social benefits that the consumer perceives it would have such as being environmentally safe. The problem here lies in addressing dual benefits for green brands, firstly, its functional performance and secondly its environmental safety aspect (Dsouza et al, 2006).

In general, green product is known as an ecological product or environmental friendly product. Shamdasami et al., (1993) defined green product as the product that will not pollute the earth or deplore natural resources, and can be recycled or conserved. Krause (1993), in his research found that consumers were becoming more concerned about their each day habits and the impact on the environment. The result of this is that some of the customers translated their environmental anxiety into actively purchasing green products commitment.

Ottman (1992) reported that consumers accepted green products when their primary need for performance, quality, convenience, and affordability were met, and when they understood how a green product could help to solve environmental problems (Chen & Chai, 2010).

The main aim of presenting green advertisements is to present to the consumer that the company is eco centric while at the same time making an effort to influence the purchase behaviour of the customers by presenting them with choices of availability of products which do not cause harm to the environment and directing their attention to positive consequences of purchase behaviour. Along with the process of labeling their products, arriving at measures which promote manufacturing of eco-

friendly products and reduction of environmental pollution there is a growing trend among corporations across the world to present environmental advertisements.

It may go away customers with appositive feeling that they have done their part for environmental protection by purchasing .it is significant to get a picture of the amount of green advertising consumers are encountering (Gephart et al, 2011). Ottman (1992) reported that consumers were willing to accept green products when their primary need for performance, quality, convenience and affordability were met. Furthermore their level of acceptance would also increase when they understood how a green product could help to solve environmental problems (Tan & Lau, 2011).

2.5 Relationship between Green Marketing Mix and Total Image

In the early 1950s, scholars introduced the notion of corporate image. Boulding (1956) acknowledged corporate image as an organizational build with "functional" and "emotional" meanings. Martineau (1958) established, in the context of retail stores, that consumers who could relate with their retailers' projected image were more possible to purchase. Bernstein (1993) noted that a corporate image should not be separated from the reality of the experience. A review of the research of corporate image shows that it has gained much attention, and it is touching toward a common and holistic definition. Corporate image is described as the associations created from individual experience, word-of-mouth, advertising and promotion. Researchers suggest that corporate image is a make that is supple and altering, influenced by receivers'

knowledge, attitude and behavior toward an organization at a given point. (Huang & Yang, 2013).

Green marketing is a worldwide phenomenon and a significant part of present day company's management function. The way a corporation deals with this issue directly influences its image (khan, 2012). Some firms believed that green communication is a necessary tool to communicate ecological and are attempting to give a green identity and/or image to their products (Levent & Tuna, 2011).

Marketers and advertisers identify that products (and services) have symbolic images that are often more important to a product's achievement than are its real physical attributes and characteristics. Marketers attempt to make images for their brands so that they are located to fit a distinct market segment engaged by no other brand. They strive to make a brand image that is alike to (congruent with) the self-image of the target customers. The brand image essentially describes the way of belief by a customer about the brand and the feelings the brand arouses when the customer thinks about it (roy & Banerjee, 2007).

Customers ascribe high quality to respected brands. Brand image that is recognizable to customer eye can assist the companies to host new brands and choose up the sales of present brands Consumer's consciousness of brand image with green marketing elements influences consumer's purchasing decision of green product where they used the product brand image with green elements as the primary sources of information about green products (Suki, 2015). the green consumerism drives the companies to promote an environment-friendly image of their brands. Since 1970s, consumers have started presentation favourable behavior towards environment friendly products. This is due to increasing ecological

consciousness. These EF brands provide huge benefits to today's ecoconscious customers. (Newton et al, 2015).

An individual's readiness to purchase ecological attributes in products may also be driven by the want for social status or image. Marketing to status and image aware customers has been helpful in selling a wide variety of goods (Dean & Pacheco, 2013) Brand image can be developed by using media, as advertising. Consumers' perceptions about the value affect the prices which they are willing to pay for selective brands. Consumers always desire to equilibrium the price of products and services with their benefits (Arslan & Zaman, 2014). From important benefits of green marketing better brand image and reputation among targeted consumer segment (Simula et al, 2009).

The corporate image is inherently a compound product of various factors which reflect and communicate the identity of an organization. It's often interchangeably with "corporate reputation" and "corporate identity" as consumers perceive all aspects of a business. Corporate image is relevant to corporate association, in which socially accountable programs strongly affect consumers' attributions of corporate image, and in turn corporate result. Therefore, a significant assignment of green business is to establish a favorable corporate image build determined by customers (Ko, 2013).

The "brand" is often regarded as divide from the functional product, with the brand being grafted on by advertising, thereby implementation the transformation process from functional product to immortal brand (Mbanaso et al, 2009) a brand is an significant means which helps creating a positive image on customers and being dissimilar from contestant products (Ercis et al, 2012) Organizational image consist of (1) the stability of the organization's reputation in the society, (2) the client's perception of the quality of the products/services, (3) the organization's

position referent to competitors, and (4) the willingness of people to engage in the organization (Kim & Trail, 2010).

2.6 Relationship between Total Image and Purchase Intention

Brand image is significant because it contributes to the consumer's deciding whether or not the brand is the one for him/her (Dolich, 1969) and it influences consumers' succeeding buying behaviour (bian & moutinho, 2011). Brand with strong image has higher purchase intention. Image formation is considered necessary for consumer attraction and retention. A customer purchase decision most often depends on brand image quite than physical characteristics of brand (Arslan & Zaman, 2014). Brand image is important because it contributes to the consumer's deciding whether or not the brand is the one for him/her and it influences consumers' subsequent buying behaviour (Bian & Moutinho, 2009). A consumer's attitude toward a company is closely linked to corporate image, as corporate image is the net result of the interaction of a person's beliefs, ideas, feelings and impressions about a corporation (Chattananon et al, 2008).

Brand image gives the highest value to connected organizations. Customers gain emotional benefits on the use of brands. Positive purchase intention is attached with a strong brand image. So positive brand image creates the purchase intention and a negative image creates no purchase intention. So the decision of purchase entirely depends on brand image (Arslan & Zaman, 2014) whereas corporate image has been shown to play a key role in decisions such as employment and investment, it also plays a key role in influencing customer behavior (Chattananon et al, 2008). Organizational image influences general

organizational attractiveness, decisions and consumers' product choice (Kim & Trail, 2010).

Corporate image is a connection that exist between the individual image of the organization and the customer response toward it. Corporate image positively related to the consumers perceived value but there is also a possibility that satisfaction may be negatively influenced by the corporate image. This position is faced when corporation assure to the consumer unrealistic expectations by the corporate image. When these expectation are not fulfill by the firm in the actual life, the consumer become dissatisfied. (zameer et al, 2015).

Image boards and early consumer involvement an image board is a basic design tool in shaping the appearance of products (Murto et al, 2014). Product brand image impacts consumers' perceptions of product attributes. A strong and favorable brand image can positively bias consumers' impression of product attributes (Simonian et al, 2012).

2-7 Psychological Variables

2-7-1 Environmental knowledge

Most researchers studied psychological variables with purchase intention (for. Eg. Aman, et al 2012; Hoang & Nguyen, 2012; Chan et al, 2014; Mostafa, 2009; Lingyun, 2013; Newton et al, 2015). Few of littlie researchers deal with psychological variables as moderator such as (Chen, 2015; Murat Ar, 2012; Teah et al, 2014; Arminda, 2010). In this study used psychological variables as moderate.

The knowledge that contributes best to ecological enhancement is "knowledge" that supports what we have called "environmental knowledge". There are numerous diverse definitions of environmental knowledge, although approximately all of the most broadly accepted ones are similar and define it as comprising the store of data, information and knowledge (i.e. environmental memories) that have been accumulated about environmental issues by an organization right through its history Another more simple way of looking at environmental knowledge is to view it as a type of general knowledge, which includes the concepts of ecological protection, the natural environment and ecosystems. (cegarra – navarro et al, 2013).

In customer research, knowledge is considered in that it influences all phases in the decision procedure and how customers assess products and services (Yang & Youngtae, 2014). As for environmental knowledge, Laroche et al. (2001) defined it as the respondent's ability to identify or define a number of ecologically-related symbols, concepts and behaviors.). Another define as the state of an individual's knowledge about an issue impacts considerably upon his or her decision making process (Ling & Piew, 2012). Laroche et al. (2001) defined the environmental knowledge

as one's ability to identify or define a number of ecologically-related symbols, concepts and behaviour. Also can be defined as "a general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems (Kaufmann & Panni, 2012). Fryxell & Lo (2003) defined environmental knowledge as "a general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystem".). It is conceptualized as the understanding of the public about the environment. However, knowledge has been an important element in current years in formative customer behavior. (Yusof et al, 2013).

Environmental knowledge can be defined as "a general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems. Thus, environmental knowledge involves what people know about the surroundings, key relationships most important to ecological aspects or impacts, an appreciation of 'whole systems', and collective responsibilities essential for sustainable development (Mostafa, 2009).

A key element of ecological aware consumption is a want by customers for more information about the connection between products and the environment, with greater exposure to "green" information sources influencing customer purchasing decisions (Barber et al, 2009). Environmental knowledge refers to one's capability to understand and assess the impact of ecosystem on the society, and the amount of knowledge he or she has about environmental issues (Tan, 2011). And refers to "how much" an individual knows about ecological issues (Paco & Raposo, 2008). In other words, environmental knowledge involves what people know about the environment, key relations leading to environmental aspects or impacts, an admiration of "whole systems", and collective responsibilities necessary for sustainable development

(Kaufmann & Panni, 2012). Environmental knowledge influences green consumer's behaviour (Luzio & Lemke, 2013). It has frequently been assumed to be the main motivator of green consumer behavior (Zhao et al, 2014).

Environmental knowledge is related to "a general knowledge of facts, concept, and relationships concerning the natural environment and ecosystems". It involves what people know about the environment in terms of how the environment, and how collective responsibility is essential for sustainable development.

Consumer knowledge of the environment includes the greenhouse effect, waste management, hazardous waste and recycled materials. There was a significant relationship between environmental knowledge and green consumer behaviour (Mostafa, 2009). If a consumer has knowledge about the causes and impacts on the environment, their consciousness level will raise and will potentially promote a favorable attitude towards green products (Cox, 2008; D'Souza et al., 2006). There is a possibility that the higher level of environmental knowledge might produce much better consumer ecological behavior (Suki, 2013).

Generally, people tend to keep away from, situations where there is not sufficient knowledge to lead their behaviour, and situations where the likelihood of uncertainty is greater (Chana et al, 2014). There are significant gaps in knowledge about their persuasiveness. For example, while consumers' environmental knowledge and worry has grown in current years. It also appears that prevention appeals may prompt greater care with respect to the eco-seal and its implications for thinking about the brand. As such, message appeals and Eco seals may hold promise for not just changing attitudes and intentions but also more granular aspects of the brand and its image (Bickart & Ruth, 2012).

Environmental knowledge evolves in two forms, one being that customers have to be educated to understand the common impact of the product on the environment and the other is consumer knowledge in the product itself being produced in an environmentally friendly way. As long as there is consumption there will be pollution, zero pollution is not possible, but pollution is allowed within permissible limits. If a customer has knowledge about the environment and pollution promulgation, the causes and impact on the environment, then their consciousness levels would increase and thus would, potentially, promote a favourable attitude towards green products. It is the duty of the marketer to disseminate that information either through symbols or claims on labels as to the type of environmental benefits the product has to offer (Tarkiainen & Sundqvist, 2005).

2-6-2 Environmental Concern

Consumers are becoming more concerned about the environment. This concern may guide to a higher level of environmental awareness and green product purchasing behavior. It is probable that if a person has greater concern towards the environment in general he/she would most possible purchase green products. It is therefore expected that customers who are environmentally aware are more probable to purchase products and services which they perceive to have a positive (or less negative) impact on the environment (Gan et al, 2008).

Environmental concerns have progressed through various stages in as much as when the movement started with the greening concept in the 1960s, it concentrated on pollution and energy protection (Hassan, 2014). Studies of environmental concern in marketing began in the early 1970s with a series of studies relating to a variety of dimensions of the problem (Kilbourne & Pickett, 2008). Environmental concern is an evaluation of,

or an attitude towards facts, one's own behaviour, or others' behaviour with penalty for the environment. Environmentally concerned people would be conscious of problems concerning the environment and hold up efforts to solve them and/or indicate a willingness to contribute personally to a solution (Yang & Youngtae, 2014). Environmental concern is a strong attitude towards preserving the environment. Environmental concern is also sometime known as "ecological concern" (Chen, 2013). Environmental concern refers to an affective characteristic that can represent a person's worries, compassion, likes and dislikes about the environment (Lee, 2009). It has become a significant area of attention for multi-national corporations, government, academics and other stakeholders over the past decades (Ansar, 2013). One of the majority necessary factors for marketers as they can easily target environmentally aware customers is ecological concern.it can be known as affective traits that can signify an person worries, consideration, likings and dislikes about the environment (Irawan & Darmayanti, 2012).

Environmental concern may be defined as an attitude that is related to environmental consequences (Paco & Raposo, 2008). Based on Chen's research (2013), environmental concern is also defined as a global attitude with indirect effects on behavior through behavioral intention. Environmental concern has been defined as a general or global attitude connected with an individual's behavioural intentions (Chan et al, 2014). Environmental concern is defined as a global attitude with indirect effects on behavior through behavioral intention. Mentioned that environmental concern is a strong attitude towards preserving the environment (Chen, 2013). According to EC is accepted as an invidual's consciousness of environmental problems and that individual's attempts to solve either them or willingness to contribute to such attempts (Albayrak et al, 2011).

Environmental concern (EC) is commonly defined as the individual's awareness of the environmental problems and their willingness to be part of the problem solution (Akehurst et al, 2012).

Environmental concern denotes the general orientation of persons toward the surroundings and their level of concern toward ecological issues. Attitude is a good forecaster of intentions to act in environmentally concerned ways (Lin & Huang, 2012) in other hand Environmental concern has been conventionally viewed as a uni dimensional construct ranging from unconcerned about the environment at the low end to concerned at the high end, as measured by the new environmental paradigm (Mostafa, 2009). Environmental concerns may be a function of an individual's surrounding socio-economic context, including social characteristics and personal, formative experiences (Pyatt, 2012).

Environmental concern is often used interchangeably with the term "environmental attitude", defined as "the collection of beliefs, affect, and behavioral intentions an individual holds regarding environmentally related activities or issues" (Chan et al, 2014). Even if environmental concern could be integrated as a cornerstone of the consumer psyche, the problem may still not be solved. Consumers will act in an environmentally-responsible fashion only if they think such actions are in their best interest (Polonsky, 2011).

Polonsky (1994) expressed that manufacturers shifted their manufacturing production, service and advertising to address customers' wants for better environmentally safe products and services. For this reason, there are numerous mythology surrounding environmental-protection among customers. First, most consumers are conscious of the importance of protecting the environment but they still usually talk about their worry for the natural environment without taking actions. Secondly, consumers tend to hunt the latest, fastest delivery and/or lowest price

products and services that are often produced by enterprises using the lowest cost methods with high pollution in manufacturing, delivery and advertisements (Hsieh, 2011). Customer ecological concern is seen to increase when consumption behaviour becomes more geared towards environmentally-sensitive goods and services, and customers change their purchasing behaviour to become greener (Suki, 2015).

The relationship between environmental concern and environmental purchase intentions is complex, with environmental concern having significant indirect effects on environmental purchase intentions. From a marketing and advertising perspective, there may consequently be some value in integrating broader appeals aimed at enhancing consumers' environmental concern within promotional strategies encouraging specific environmental purchase intentions (Newton, 2015).

2-6-3 Environmental Belief

In the last two decades there has been a growing research focus on the need to know more about the impact of customer ecological beliefs on consumption (Gration et al, 2015). Epistemological beliefs are discussed as ranging on a continuum from less sophisticated to more sophisticated. Sophisticated beliefs are connected with higher level learning objectives, counting self-regulated learning and utilization of better cognitive strategies. A theme that persists all through discussions of epistemologies is that of one's belief regarding the effort involved in the process of learning and causative to knowledge (Weinberg et al, 2015).

Environmental beliefs, of the relationship between humans and their natural surroundings have been mentioned as possible predictors of protection behavior (Verdug et al, 2003). Gray (1985) posits environmental beliefs as underlying a system of attitudes and beliefs that determine behavior toward the environment. However, it is possible that

consumers are fewer aware about the impact of the production and distribution of food and of their own food choices than they are about reasonably popular issues such as industrial pollution and natural world protection (Lea & Worsley, 2008). Environmental belief defined as ethical-normative cognitions concerning the relationship between humans and nature (Catton & Dunlap, 1980).

General beliefs are about the human environmental relationship and refer to folk wisdom about the environment. Exact beliefs are beliefs about the existence of environmental problems such as water shortages, ozone depletion, and global warming (Kilbourne & Pickett, 2008). Beliefs, personal values influence food choice. Personal values are the main evaluative or guiding principles in people's lives (Worsley, 2005).

Expectations refer to beliefs that one holds about the future as well as subjective estimates of the probability of future events. Consequently Bell et al, (2004) suggested that, to a certain extent, all expectations citizens form about their future may be influenced by existing beliefs. However, justice expectations may be guided by general beliefs people hold about fairness (Geenen et al, 2011). Belief refers to the cognitive dimension and is dissimilar from attitude. The influence of individual beliefs that connection human being activity to the environment have been found to explain environmental behavior in a range of contexts, counting customer behavior, environmental citizenship, and willingness to reduce car use. However, in contrast to general belief about the environment, specific beliefs are connected to environmental behaviors (Molla et al, 2013).

Consumer's green/environmental beliefs have become effective contributor to recognize target markets and inspire customers to connect in green purchasing behaviour. According to the Stern (2000), beliefs have been conceptualized as individual's consciousness of the environmental consequences (AC) of a certain behaviour and ascription

of responsibility (AR) to themselves for taking prevention actions, develop a pro-environmental norms which have a high possible to affect real behaviour. Research indicates that the environment has had an explicit impact on consumer behaviour according to their environmental beliefs environmental consequences and attribution of accountability were positively linked with green consumer behaviour, e.g., recycling behaviour, willingness to reduce car use (Samarasinghe, n.d).

(Arvai, 2015) states of food-related environmental beliefs, most students were in strong agreement that recycling (food and drink containers) and reuse (food containers and drink bottles) can best help the environment.

Since self-efficacy has been shown to be associated to a variety of types of behavior, there may be a correlation between students' self-efficacy beliefs and environmental literacy. "Self-efficacy is people's judgments of their capabilities to organize and execute courses of action required to attain types of performances" (Saribas et al, 2014). Self-efficacy beliefs can affect the level of performance positively or negatively owing to their impact on the affective, cognitive and motivational regulation processes. People with high level of self-efficacy beliefs can imagine achievement scenarios that produce positive alternatives for better performance, and determine the best solutions for probable problems (Çimen et al, 2011).

Nevertheless some studies suggest that environmental behaviors are not appreciably influenced by ecological beliefs unpaid to the fact that common viewpoints are not precise enough to prompt pro-environmental action (Gadenne et al, 2011). The focus in this study is on specific beliefs. Logically, worry would not arise unless preceded by the belief that ecological problems exist. However, an person may consider in a human being environmental relationship characterized by ecological folk

wisdom without ever being concerned that problems actually do exist (Kilbourne & Pickett, 2008).

2.7 Summary of the Chapter

The above chapter illustrates the theoretical foundation of aspects related to the current research these concepts and analyzes the empirical studies related to them.

The earlier part presents the concept and benefit of green marketing. Furthermore, the chapter illustrates the mix of green marketing that enables a companies to sustain a purchase intention. Has also been present to reflect the purchase intention in long term. Review of give rise also to two key total image: corporate image, and brand image. The chapter illustrates the relationship between constructs of the current research. In the final part, the chapter illustrates the role of psychological variables: environmental knowledge, environmental concern, and environmental belief as moderator between green marketing mix and total image. The proposed research framework designed is the focus of next chapter.

CHPTER THREE

RESEARCH FRAMEWORK AND HYPOTHESIS DEVELOPMENT

3-0 Introduction

This chapter presents the research framework and hypotheses to be test; the section on methodology highlights the sampling procedure; the measurement of the variables; the development of the research instrument; the administration of data collection; and the statistical techniques used to test the hypotheses are discuss.

3.1 Theoretical Base of the Study

Based on the literature review, the integrative framework of the study is concentrated on the Theory of Planned Behaviour – TPB (Ajzen, 1991), Theory of Planned Behaviour, as advancement to the theory of reasoned Action, indicates that intentions towards an act are determined not only by attitudes and subjective norms but also perceived control, trust and self-identity (Rohini, 2012). The intention construct is central to the TPB. Intentions are assumed to capture the motivational factors that influence a behaviour and to indicate how hard people are willing to try or how much effort they would exert to perform the behavior (Armitage & Conner, 2001). Attitudes, in the TPB, include evaluative beliefs regarding certain behavioural outcomes and an estimation of the likelihood that these outcomes will occur. Subjective norms represent normative behavioural beliefs and the motivation to comply with these beliefs. Perceived behavioural control, which is people's confidence in their ability to engage in certain behaviour, together with the perception of the expectations of relevant others (e.g., subjective norms) and with

the attitudes toward performing a particular act determine people's intention to perform that behavior (Rohini, 2012).

Throughout the years there have been different suggested theories explaining consumer behaviors. Some originate from social sciences: Psychology, economics, and sociology. Others focus on the influences of variables in marketing, and emphasize the influences of external elements, like advertisement, physical product differentiation, promotion, packaging, and retail, availability, direct selling, point of sale display, etc. The significances are greatly extensive, and consider personal as well as environmental variables (saleki & seyedsaleki, 2012).

According to the theory of planned behavior, perceived behavioral control, together with behavioral intention, can be used directly to predict behavioral achievement (ajzen, 1991). The TPB proposes that a person's intention to perform a behavior is the major determinant of that behavior (Blanchard, 2003).

The TPB suggests that a person's behavior is determined by his intention to perform the behavior; in turn, this intention is a function of his attitude towards the behavior, his subjective norm, and his perceived behavioral control. The construct of behavioral intention represents a person's motivation or decision to enact a behavior. Thus, the theory views a person's intention to perform a behavior as the immediate determinant of action (Holst & Iversen, 2011). The TPB proposes that one's intention to perform a behavior is predicted by attitudes, subjective norms, and perceived behavioral control (Bierman, 2012).

The usefulness of the theory of planned behaviour in predicting behavioural intention, and behaviour generally, and health-related intention, and behaviour more specifically, A number of studies have also pointed out that the theory of planned behaviour is superior to the theory of reasoned action in predicting and explaining social behaviour (Alselaimi, 2010). Some theorists have been criticized that the TPB is neglecting moral consideration (Rohini, 2012). Ajzen (1988) considers that the influences of other factors (e.g., age, gender, education) are modeled through the TPB theoretical constructs (Blue, 1995).

The theory of planned behavior (TPB) was developed by Ajzen in 1988. The theory proposes a model which can measure how human actions are guided. It predicts the occurrence of a particular behaviour, provided that behaviour is intentional.

Behavioral intentions can be used as an indicator for actual future behaviors (Azjan & Fishbein, 1980). However, Azjan & Fishbein (1980) state that a measure of intention cannot always be used as a good predictor. Intentions often change overtime and a measure of intention taken prior to an observation of the behavior may differ from the intention at the time the behavior is observed. Generally speaking, the longer the time interval, the less accurate the prediction of behavior from intention, that is, the lower the observed relation is between intention and behavior (Agazan & Fishbein, 1980).

The framework designed in this proposal suggests exercise of control on availability, perceived consumer effectiveness and perception of green product price. Researcher use Ajzen's (1991) theory of planned behavior (TPB) to provide an insight into the determinants of intention within the green marketing domain. Behavioral intention is the perceived likelihood one will engage in purchase green product. It reflects a person's readiness to engage in purchase and is influenced by behavioral beliefs, attitude, normative beliefs, subjective norm, control beliefs, and perceived behavioral control. Intention suggests a readiness to devote the required energy to purchase. Therefore, one's intention is the most critical factor and predictor of smoking cessation.

Behavioral beliefs (BB) derive from an individual's perception and prediction that by performing a specific behavior, such as purchase, a positive or negative outcome will occur. Attitude is the degree to which an individual has a favorable or unfavorable evaluation of products and determines one's intention to purchase. Attitudes form from an individual's belief system and measuring those beliefs the attitude toward the behavior in question can be calculated.

Normative beliefs (NB) are the smoker's beliefs significant others will approve or disapprove of smoking cessation and whether one is willing to comply with others perceived wishes. NB influence the formation of subjective norm. Subjective norm (SN) is one's perception of social pressure to purchase or no purchase green product and the motivation to conform to these social pressures.

Control beliefs (CB) are an individual's beliefs about the presence of factors that can facilitate or impede willingness to change their buying behavior in favor of EF products and the power of those factors to influence behavior change. Control beliefs are indirect measures of perceived behavioral control. Perceived behavioral control (PBC) is the perceived ease or difficulty of one's ability to purchase and takes into account past experiences as well as purchase.

The integrative model presented in Figure (3.1) considers the influence of the green marketing mix variables on purchase intention through mediating variables and moderator variables. So, in this study, the study develops an integrative model that combines green marketing mix variables, Psychological variables, and total image and specifies how they may influence the important relational outcomes of purchase intention Thus, the variables of this study are:

Independent variable is the green marketing mix which is consisting from four elements (namely; product, price, place and promotion).

Mediating variable is the total image (namely; corporate image and brand image) Moderator variables are the psychological variables (namely, environmental knowledge, environmental concern, and environmental belief).

Dependent variable is the purchase intention. The succeeding section discusses the hypotheses development that is backed by the theoretical justifications.

Green marketing Total Image Purchase mix H3 intention Green product Corporate Image H2 Purchase Green price Intention **Brand Image** H4 Green place Green promotion Psychological variables -Environmental knowledge - Environmental concern H1- Environmental belief

Figure 3.1
Theoretical Framework of the Study

Source: Theoretical Framework of the Study

3-2 Research Hypothesis

In this study, five main hypotheses were develop to test the relationship between green marketing mix variables (product, price, place, promotion), with the total image (corporate image and brand image), as mediator variables. Lastly, to test the relationship between the mediator variables: (total image), and outcomes variable (purchase intention),

within an existence of moderator psychological variables (namely; environmental knowledge, environmental concern, , and environmental belief).

3.2.1 Relationship between Green Marketing Mix green product, green price, green place, green promotion) and Purchase Intention.

Notwithstanding the enveloping view that stated intentions are possibly the best predictors of actual behavior (Ajzen & Fishbein, 1980), it has long been recognized that answers to stated intention questions are not perfectly correlated with actual purchases. Purchases intention has been measured in several ways, such as measuring the expressed intention to purchase using a scale composed of several positively worded statements of environmentally responsible behavior (Barber et al, 2012).

Lack of economic resources of consumers was found to magnify the effect of price and act as a barrier to purchase of green products (Connell, 2010). However, low price sensitivity of consumers was found to positively affect green purchase behavior (Aertsens et al, 2011; Eze & Ndubisi, 2013; Lea & Worsley, 2008). Conversely, high price sensitivity negatively affected (Ma et al, 2013). Green purchase behavior and intention of consumers it clear that high price (Joshi & Rahman, 2015). Pickett-Baker & Ozaki, (2008) found that, except for cleaning products, most consumers cannot identify greener products. This may be because messages labels are falling flat and not making an most green impression in the minds of shoppers (Staff, 2009). Hence, green communication is a major area of weakness for green marketers. Carlson et al, (1993) results shows affirmed a parallel rise environmental advertising accompanied by greater consumer interest in the environment. In fact, advertising terms such as "recyclable, environmentally friendly, ozone safe, biodegradable " can be see regularly in green advertisement's and consumers are often exposed to such message, whilst

some of these message also pertained to consumer resistance (D'Souza, 2005). Likewise, (Mathur & Mathur, 2000; Habib et al, 2010) argued that consumers were more positive towards environmental messages in advertisements are more are more credible. Besides, D'Souza et al, (2006) suggested outlined that marketers have the responsibility to publicize environmental information as customers seek more concrete and authenticated product information from these advertisements to guide them in their purchasing decision. Also (Chen, 2004) found that providing information environmental issues does not necessarily encourage positive environmental attitudes, but the emotional content in advertisements can also increase' attention towards these advertisements as pointed out by Pooly & O'Connor, (2000). (Hawkins et al, 1998) suggested that green branding communication strategies should be aimed at associating the brand with pleasant, emotional imagery of nature, while presenting information on environmentally sound product attributes. However, Rose (2002) has affirmed that although some manufacturing companies cannot influence consumer choice towards green products, yet they can shape green consumption patterns in the way the products are being offered and marketed. Similarly, marketers should emphasize the ecological knowledge in their organization, their products offerings and their advertising campaigns in order to achieve the goal of changing consumer purchasing behavior (Mendleson, 1994) cited in (Juwaheer et al, 2012).

Study by Patricia, (n,d) presented where the definition of green product is concerned, it has been difficult to arrive at well-accepted one because the word green is vague and can mean different things to different people. Choice, 2012 has defined green products as simply products that claim to offer an environmental benefit. The ecological objectives in planning products are to reduce consumption and

pollution and to increase conservation of scarce resources (Syda, 2011).

The product itself has to be made in such a way that it satisfies consumer and manufacture's needs. For ecologically sustainable products to be successful, green branding attributes have to be efficiently communicated. Most buyer decisions are influenced by the labeling, (green labeling) that states all that makes the product green compliant (Rashed, 2011).

Consumers are willing to buy eco-friendly products but not many are willing to pay a higher price for such products (Ishawini & Saroj, 2011), that consumers who are willing to pay a higher price for green products believe that firms do not act responsibly toward the environment (Matjaz, 2010).

Price is a key factor in the green marketing mix. Most consumers would be willing to willing to pay a higher prices only if they realize a product's added value. This value might be due to the improvement of performance, efficiency, design or even other characteristics of a green product such as longer lifecycle and its being not harmful. However, it should be not noted that a green price must be logical and competitive (Reza, 2013).

Distribution of products is one function which when turned green has the maximum effect on the environment. Distribution includes transportation which is possible only with the help of vehicles, which have a direct bearing on the environment. Adopting environmentally friendly vehicles modification may minimize effect whose unwanted on the environment can be a major contribution in the way of greening. Reverse logistics is one of the ways which can help reduce waste in big way. It is a system in which the consumers return the packaging, wrapping and used product to the producing company (since 2008, obligation of all companies with ISO 9001 standard). Green distribution has two dimensions: internal and external. By internal dimension, it refers to the internal environment of a company that besides observing environmental issues in a company's internal processes and the proportionality of the interior design and the good itself, it helps managers and the staff to feel comfortable in it and as a result, customers can also be attracted to it because of being well-treated by the staff and its desirable space. The external dimension refers to the supply locations that do the least damage to the environment (Reza, 2013).

According to Gurbuz, (2012) changing consumers behavior and prefer to consume the green-themed items make the marketers or companies try more creative in marketing its products. In green advertising marketers seek to change the habit of consumer was not so pay attention to health is becoming more health noting like we know green advertisement is one of the most important tools which green advertisers use to promote social awareness about eco-friendly products and assist their sales (Ties, 2013).

Higher price outweighed ethical consideration and widened the attitude behavior gap in case of purchase of green products (e.g., Connel, 2010; Gleim et al, 2013; Padel & Foster, 2005; Vermeir & Verbeke, 2006). (Wanninayake & Pradeep, 2008) shows the correlation of each of the concepts, namely product, package, price, place and promotion and how each of those variables correlates to the purchase decision. Tias (2013) suggest there is no any significant relationship between green advertising and green product to purchasing decision. (Ansar, 2013) explained environmental advertisement, price and Ecological packaging also have a positive relationship with the green purchase intention.

Afzaal et al (2011) found that a person with positive intentions to buy green product show higher actual buying rates than those people who have low or no intention of buying green products. Also that competitive

price and quality of a green product have positive impact on customers GPB, if they have high and positive intention to purchase them.

(Ying-Ching & Chiu-chi, 2012) state green product had increased usage levels among more environmentally conscious respondents. Also results indicate that there was a significant three way interaction, a marginally significant product type and endorsement interaction, and a marginally significant main effect of product type. Thus, indicate that consumers use more of a green product in comparison with its conventional counterpart to accomplish a given task. In addition, consumers exhibit differences in their usage of green and regular products. Young, (2008) found each micro-purchase process for a green consumer of consumer technology product in the UK. Show that each individual purchase was framed by situational factors such as moving house, and retailers with green product range within travelling distance.

According to Haofu & Lin (2011) suggests factors which influence consumer purchase green food are Price, Benefit for health, Facilitate the purchase, Brands' popularity, Conducive to environmental protection and features of products in addition to the concept of green.

Young et al (2008) state that consumers' 'purchase intention' through the food traceability system was significantly. That consumers may switch their consumption of food from non-traceable to traceable. Mitigated uncertainty had a larger impact on purchase intention than the price premium. These returned products can be a source of savings for the producer company as it can use these returned material in the production of new products (Khan & Khan, 2012).

(Zhu, 2013; Gandhi & Rao, 2013) findings reveal that the credibility of claim in green advertising plays the most important role in influencing consumer purchase intention of green products. Teng et al, (2012) state that price is an important factor that influences the consumers' purchasing

behaviour. Knowledge of green foods was also an important factor that influences consumers' perception and purchasing behavior. Thanika et al, (2012) suggested there is a fairly positive correlation between customers' level of preference towards green advertisements and their green purchase intentions. Elham & Nabsiah, (2011) argued respondents agree that environmental advertisements are effective techniques to enhance their information about environmentally friendly products and purchase green products. Tin Gura u,(2004) discovered the Romanian firms usually export ecological products using foreign agents, while the British firms sell internationally using their own brand name and attempting to control the foreign distribution channels.

Federico & Sandro, (2015) suggests that availability of an Eco-label affects the intention to purchase and the WTP for minimally processed food products with environmental benefits, derived by environmentally sustainable production process. Soomro et al, (2012) There is a significant impact of Ease of Online booking (Service Quality) on consumer preference of airline industry and it leads to purchase intension.

Zhu, (n.d) explore relative influence of predictor variables, in which consumer response to green advertising (CRA) significantly influence consumers" attitude toward green advertising followed by and consumer response to companies and their products. The credibility of claim in green advertising plays the most important role in influencing consumer purchase intention of green products. Consumer attitude toward green advertising also positively influence consumer purchase intention of green products.

(Zaman & Arslan, 2014) indicated that compatibility characteristic of new product preannouncement in relation to purchase intention. Saadeghvaziri et al, 2013; Weng & Run, 2013) findings suggest that sales promotion technique preferences will have an impact on consumers' behavioral intention and purchase satisfaction. Weisstein et al, (2014) found formats of price promotion presentations influence consumers' purchase perceptions differently. Consumers with a high degree of greenness are attracted to promotions emphasizing gain, while those with a low degree of greenness prefer promotions underlining reduced loss. In addition, medium-greenness consumers show similar reactions to both formats.

There are relationship between perception of an environmental advertisement and purchase intention (Yusof et al, 2013). While Hartmann et al, (2012) suggests that the nature experiences level evoked by the advertisements moderates the effects of the behavioral antecedents studied on brand attitude and purchase intention.

(Liu & Chou, 2015) reported package contains two different products, consumers in the free gift (bundle) condition assign a higher price to the focal (supplementary) product, perceive a smaller price increase, and exhibit higher repurchase intentions toward the focal (supplementary) product after the promotion ends.

A variety of events can produce changes in individuals" intentions (Azjen & Fishbein, 1980). Azjen & Fishbein (1980), state many reasons individuals intentions may vary including: sudden illness, a fortuitous inheritance, injury, natural disasters, loss of job, unexpected pregnancy, and economic reasons.

(Suki, 2014) empirical analysis via hierarchical regressions confirmed that returning tourists' intention to stay at a green hotel was influenced positively by perceived behavioural control and attitude. However, the subjective norm was found to be not significantly related to returning tourists' intention to stay at a green hotel.

Wang, (2013) results show that although an external locus of control exerted negative effect on consumers' green consumption intentions, collectivism values exerted a positive influence. In addition, both environmental visibility and subjective norms exerted a significant effect on green purchasing intentions. Lao, (2014) results showed direct influence of green consumers attitude on intention is not significant, but green consumers intention is indirectly influenced via SN by attitude.

Engel, Blackwell & Miniard (1990) suggested that purchase behavior is the psychological decision making. In order to satisfy the needs, consumer will search for the related information according to their experience and external environment. After the accumulated, consumers start the evaluation and consideration. Upon comparison and judgment, they make purchase decision. (Zeithaml, 1988; Dodds et al, 1991) suggested that after having perceived value, consumers would further intention. Moreover, Wang et al, (2002) state develop purchase consumer's purchase intention usually depends on the perceived benefits and value, on the other word purchase intention is the possibility that consumers had the intention to purchase products. Chao, 2013) suggested that purchase intention could be measured by intention to purchase the products advertised or consumption in the stores and even the efforts to search for the products.

According to the studies that mentioned above this study developed the first hypothesis to be as following:

Relationship between green marketing mix green product, green price, green place, green promotion) positively related to the purchase intention.

Developed sub hypotheses from first hypotheses as follows:

• H3.1 There is a positive relationship between green product and purchase intention.

- H3.2 There is a positive relationship between green price and purchase intention.
- H3.3 There is a positive relationship between green place and purchase intention.
- H3.4 There is a positive relationship between green promotion and purchase intention.

3-2-2 Relationship between Green Marketing Mix and Total Image (corporate image and brand image).

In today's highly competitive business environment, a well-positioned brand image is very important. This is evidenced by the recent \$25 billion purchase price for RJR Nabisco which was based in large part on the value and equity in the images that had been established for RJR's brands. Furthermore, research has shown that the ability of consumers to recognize and identify consumption symbolism (brand images) is almost fully developed by the sixth grade (Timothy, 1996).

It is argued that corporate image is what comes to mind when travelers hear the name of a place. Customers tend to deal with organizations that have images consistent with their own self-images. Also the product image contains different associations including product's physical properties and attributes as well as the benefits and feelings that come from product consumption. Meanwhile, corporate image may be considered as a function of the accumulation of purchasing/consumption experience over time (Hashem & Al-Rifai, 2011).

Paco & Reis, (2012) suggests that green manufacturing ought to focus more strongly on managing image, usefulness, and value. Therefore, usefulness and value levels increase, purchase intention also increases. Indeed, findings also suggest that purchase intention is a key determinant of image, risk, value, and perceived usefulness (paco&reis, 2012). Brand image in terms of green products can be defined as "a whole range of

impressions, conceptions and apprehensions towards a brand in the customers ,memory which is correlated to the sustainability and ecofriendly concerns ,, (chen,2010). Consumers generally have personal favorite's brands and they prefer them over green brands (young et al, 2010). Also consumer trust in a green brand is an important purchase criterion which positively influences their purchase of green products (rahbar & wahid, 2011). Only a few studies were found to have investigated the influence of brand image on consumers, green purchase behavior, therefore, more research is needed in this area to get conclusive results (joshi&rahman, 2015).

According to Hashem & Al-Rifai (2011) there is a statistical influence of applying green marketing mix elements (product, price, place, promotion) by chemical industries companies in three Arab States in West Asia on consumer's mental image.

Carlos, (2005) suggests that image perceived will have a positive influence on consumer trust for traditional banking, and distribution through traditional channels no significant differences exist in the intensity of the effect of the image on trust in terms of the relationship duration. Nevertheless, significant differences in the financial services distribution over the internet have been observed.

Study done by Yu-Shan, (2009) explored the positive relationships between green brand equity and its three drivers green brand image, green satisfaction, and green trust. And his found positive correlations among green brand image, green satisfaction, green trust, and green brand equity. Divesh et al, (2011) argued it is necessary to educate the consumer about the various initiatives taken by the companies to create a positive brand image.

Chan (2004) states main reasons for the low perceived credibility of environmental claims in environmental advertisement, the reasons are:

"The vague arguments to substantiate the environmental claim, the source country of the advertised product do not bear an eco-friendly image, the manufacturer (advertiser) of the advertised product does not bear an eco-friendly image and the alleged eco-friendliness of the advertised product does not match with the respondent's previous consumption experience.

(Chen & lee, 2015) found green claims can lead to consumers building up the same level of green brand image. (Gupta & Ogden, 2009) investigated voluntary recalls or improvement campaigns have a significant positive impact on the manufacturer's image, as well as consumers' loyalty and purchase intentions.

Green promotion refers to providing real information about the products in a way that does not hurt the materialistic and moral consumers' interests (Hashem & Al-Rifai, 2011). Consumer attitude toward green advertising also positively influence consumer purchase intention of green products. Chinese consumers" intentions to purchase green product are strong as their attitudes toward green advertising are positive (Zhu, 2013). Consequently a green advertising campaign should be associated with a clear, transparent and understandable environmental claim through which the firms will be able to grab the consumer's attention (Gandhi & Rao, 2013).

According to (Francesco et al, 2012) use of environmental information in advertising has increased quantitatively and qualitatively when compared with similar studies carried out in the past. (Ilona, 2010) explained customers, not only targeting green consumers by promoting the environmental friendly features of the product as one of the appeals of many. It could also be to engage more actively in the creation of the market and make strategic use of the traditional positioning strategies of price, place and promotion.

Green promotion involves configuring the tools of promotion, such as advertising, marketing materials, signage, white papers, web sites, videos and presentations by keeping people, planet and profits in mind. British petroleum (BP) displays gas station which its sunflower motif and boasts of putting money into solar power (Professor & Head, 2010). Most buyers are influenced by advertisement that reflects a company's commitment to environment. Companies that do green advertisement that tend to portray an image of environmental friendliness, influences their customer purchase decisions. Consumers love to associate themselves with companies that are environmental stewards. When a company communicates this through their advertisements, promotions, publicity and corporate social responsibilities, they are sure to get many loyal customers (Rashad, 2011). This study proposed the following hypothesis: **Hypothesis 2: green marketing mix** (green product, green price, green place, green promotion) variables Influence total image (corporate image and brand image).

Developed sub hypotheses from first hypotheses as follows:

- H1.1 There is a positive relationship between green product and corporate image.
- H1.2 There is a positive relationship between green price and corporate image.
- H1.3 There is a positive relationship between green place and corporate image.
 - H1.4 There is a positive relationship between green promotion and corporate image.
- H1.5 There is a positive relationship between green product and brand image.

- H1.6 There is a positive relationship between green price and brand image.
- H1.7 There is a positive relationship between green place and brand image.
- H1.8 There is a positive relationship between green promotion and brand image.

3.2.3 Relationship between Total Image (corporate image and brand image) **Influence Purchase Intention.**

The number of studies which measure the effect of brand image on purchase intention is limited .Wang & Yang (2010) investigated the impact of brand credibility on consumers, brand purchase intention focusing on china's automobile industry .They proposed that brand awareness and brand image play a moderating role in this relationship .Bian & Moutinho (2011) examined the impact of perceived brand image, direct and indirect effects (mediator and moderator effects) of product involvement and product knowledge on consumer purchase intention of counterfeits in the context of non-deceptive counterfeiting .

Brand image is important because it contributes to the consumer's deciding whether or not the brand is the one for him her (dolich, 1969) and it influences consumers, subsequent buying behavior (Bian & Moutinho, 2011). (Robertson & Gatignon, 1986) reported corporate image helps consumer obtain a better understanding of the products offered by specific corporations and further mitigate their uncertainty while making buying decisions. As a result, establishing the corporate image of a web site dealing with travel transactions becomes even more important. More than three-quarters on online buyers indicate that their buying decisions regarding tour packages depend on the information offered online (Lin & Lu, 2010).

To date, social influence has been found as the most important factors that affect green purchase behavior of adolescents, however there are several more factors which are: environmental attitude, environmental concern, perceived seriousness of environmental problems, perceived environmental responsibility, perceived effectiveness of environmental behavior, and concern of self-image in environmental protection (Ronnir & Dahlia, 2011).

Intentions often change overtime and a measure of intention taken prior to an observation of the behavior may differ from the intention at the time the behavior is observed (Azjen & Fishbein, 1980). Azjen & Fishbein (1980), state many reasons individuals intentions may vary including: sudden illness, a fortuitous inheritance, injury, natural disasters, loss of job, unexpected pregnancy and economic reasons.

Wu et al, (2015) argument that image, risk, value, and perceived usefulness are key determinants of purchase intention. Ya-Hui & Cing-Fen (2014) in them study there are positive and direct effects among brand image, perceived quality, and purchase intention. Study done by (Thanika al et, 2012) consumers feel that green products should bear an eco-image.

Elham & Nabsiah (2011) state each dimensions of green marketing tool shows eco-brand and trust in eco-label and eco-brand as the positively significant variable related to actual purchase behavior. Chen & lee, (2015) indicate that except for green brand image, seems to be a more effective green claim in increasing a company's green trust, green satisfaction, green brand equity, and purchase intention. Suki , (2015) confirmed brand association, brand loyalty, brand awareness, and brand image jointly influence brand equity among young consumers.

Lao, (2014) the direct influence of GC attitude on intention is not significant, but GC intention is indirectly influenced via SN by attitude. (Karaosmanogʻlu & Bas, 2010) found that consumers' favorable evaluations of organizations as a whole (i.e. corporate image) have an impact on marketing performance indicators (i.e. purchase/repurchase intention, behavioral loyalty and customer extra-role behavior).

Zaman, (2014) results showed brand image and service quality has positive or significant impact on purchase intention. But price has insignificant effect on purchase intention. Also (Latwal & Sharma, 2012) found brand association, brand loyalty, and perceived quality, in affecting purchase intention are accepted as their coefficient is significant and have appropriate sign.

When simultaneously examining these relationships, the store image directly affects the purchase intention also show that compared with store image, service quality is better able to positively influence the purchase intension (Wu et al, 2011). (Lin & Chen, 2006) studied the country-of-origin image has a significantly positive effect on consumer purchase decisions under different product involvement; and product knowledge has significantly positive effect on consumer purchase decisions under different product involvement.

The interaction effects highlighted the important role played by brand image as a moderator rather than a direct influencer. In that regard, brand image becomes a salient cue in social setting and an important currency in influencing luxury purchase intentions (Shukla, 2010). Diallo, (2012) results showed that store image perceptions and SB price-image influence significantly SB purchase intention directly or indirectly via the effect of perceived risk toward SBs (store brands).

According to Hwang, et al, (2011) brand attitudes had a positive effect on purchase intentions. Simonian et al, (2012) results reveal product brand

image influences consumers' online purchase intentions both directly and indirectly by reducing various risk perceptions, online store image impacts purchase intentions indirectly by decreasing risk perceptions. Ryu et al, (2008) state overall quick-casual restaurant image, perceived value, and customer satisfaction are significant predictors of customers' behavioral intentions. (Hartmann & Ibáñez, 2012) found significant positive influence of attitude toward the experimental green energy brand on participants' intention to purchase. According to the studies that mentioned above this study developed the hypothesis to be as following: **Hypothesis 3 Relationship between total image** (*corporate image and brand image*) **positively related to the purchase intention.**

Developed sub hypotheses from first hypotheses as follows:

- H3.1 There is a positive relationship between corporate image and purchase intention.
- H.3.2 There is a positive relationship between brand image and purchase intention.

3.2.4 Total Image Mediating the Relation between Green Marketing Mix and Purchase Intention.

Corporate images consist of three factors: social responsibility, product image, and corporate reputation. In an estimated model, the green marketing has a direct effect on the social responsibility and product image. In particular, the factor of social responsibility plays an important role as mediator in the effect of green marketing on product or corporate reputation. Of the three factors of corporate image, product image and corporate reputation have a direct effect on purchase intentions, whereas social responsibility has an indirect effect on purchase intentions in the retail setting (Ko et al, 2013).

According to Wang et al, (2013) the relationship between product image and purchase intention should be significant while the relationship

between country image and purchase intention should be less significant (partial) or non-significant (for full mediation). Environmental protection is a vital management function, it is perceived as being Instrumental in the development of a positive corporate image and an important element to the success of a business enterprise. Businesses have actively created and demonstrated an image of environmentally oriented organizations (D'Souza et al, 2006). Consumers considered brand image more important decision making factor than country of manufacture's specific product image (Lee & Ganesh, 1998).

Erdil, (2015) investigated mediating effect of store image on the relationship between price image and risk perception and purchase intention. tsiotsou & alexandris, (2009) results revealed sponsor image was to be a mediator of the relationship between sport attachment and word of mouth and purchase intentions. Diamantopoulos et al, (2011) in his study explain country of origin image (COI) impacts purchase intentions indirectly in that its influence is fully mediated by brand image. Bian & moutinho, (2009) explored Brand image is not a mediator of the effects of involvement knowledge on purchase intention.

(Meenaghan, 1995) found consumer images generated by relevant past experience are a direct and influential input into real-time corporate image formation. While (Chattananon et al, 2008) Findings indicated that a cause-related marketing program can create positive attitudes toward corporate image. (Hartmann et al, 2005) indicate an overall positive influence of green brand positioning on brand attitude. Jalilvand & Samiei, (2012) results indicated that brand image is not a mediator of the effects of involvement \ knowledge on purchase intention.

Gorton et al, (2013) comparing the perceived brand image of socialist era brands in domestic and foreign markets against those of transnational brands. Findings from a structural modeling comparison revealed that

(overall image) OI completely mediates the effect of (attitudes toward green behaviors) ATGB on components of behavioral intentions (Han et al, 2009). According to the studies that mentioned above this study developed the first hypothesis to be as following:

Hypothesis 4 Total image mediating the relation between green marketing mix and purchase intention.

- H.4.1 corporate image mediating the relation between green marketing mix and purchase intention.
- H.4.2 brand image mediating the relation between green marketing mix and purchase intention.

3.2.5 Psychological Variables Moderators the Relationship between Green Marketing Mix and Total Image.

Knowledge was found to be the most studied variable. Eighteen papers examined consumers, environmental knowledge. of the eighteen studies, fifteen found that knowledge of environmental issues positively influenced consumer intention and actual purchase of green products (e.g., Chan et al., 2000., Eze et al., 2013). Three studies did not find any relation between environmental knowledge of the consumer and green purchase intention (chan & lau, 2000; Ramayah & Rahbar ,2013;& Wolsink, 2007). Other than these eighteen studies, two other studies also found that lack of information negatively affected green purchase behavior (Connel, 2010, Padel & Foster, 2005). Numerous other studies have also reported that knowledge of organic food positively affected the formation of organic attitudes (e.g., Smith et al., 2010). Andres et al.(2007) gave a possible explanation of the effect of environmental knowledge on consumer ecological behavior and suggested that environmental knowledge moderated the relationship between ecological green behavior. However, a few studies found that attitude consumer knowledge did not influence the purchase of fuel efficient

vehicles (Bang et al., 2000). Also, knowledge of environmental benefits of wind power was not found to be associated with positive attitudes toward wind power projects (Bang et al, 2000; Wolsink, 2007). The above findings suggest that environmental knowledge may have a positive effect on consumer green purchase intention and behavior. However, further research in this area is encouraged to concretely establish the influence of environmental knowledge on green purchase intention and behavior (Joshi & Rahman, 2015).

According to (Merdin, 2011) psychological variables used as moderator to better profiling the green consumer segments. (Gaur et al, 2014) Studied the level of environmental consciousness, individual values, postuse perceptions, nature of purchase and socio-cultural norms are the major drivers of consumer purchase intentions. Sub-categories of these five drivers are personal and contextual factors. Personal factors include personal attitudes and beliefs, individual personality and environmental consciousness. Contextual factors are societal norms, price, promotion/advertisement, service quality and brand image.

Raghu & Radha (n.d) in their study explain Factors that influence a person intention in buying a sustainable product are the availability of the product information on packaging, availability of the product, awareness, belief about the friendliness if the product and the situational factors. (Feldne et al, 2006) found anxiety sensitivity—physical concerns as a moderator of the emotional consequences of emotion suppression during biological challenge.

Juwaheer et al, (2012) findings suggest that most consumers have expressed a great interest in the protection of the environment and they are strongly concerned about the environment and its degradation. Yusof et al, (2013) links between environmental knowledge and perception of environmental advertising, was non-significant in addition, there are

relationship between environmental knowledge and perception of ecoproduct.

Mostafa, (2009) pointed the major variables affecting green consumption are related to altruistic values, environmental concern, environmental knowledge, skepticism towards environmental claims, attitudes toward green consumption, and intention to buy green products. Chan et al, (2014) results showed often led by environmental knowledge, environmental awareness and environmental concern, is a significant factor in predicting hotel employees' intentions. Main Environmental knowledge, environmental awareness and environmental concern were positively related to ecological behaviour, whereas ecological behaviour was positively related to intention. Feldne et al, (2006) investigated physical Concerns moderates the effects of emotion suppression, but not emotion observation.

Webster (1975) defined a socially conscious consumer (green consumer) as a consumer who takes into account the public consequences of his/her private consumption or who attempts to use his/her purchasing power to bring about social changes, i.e., consumers incorporate social/environmental issues (e.g.; an individual concerned about the amount of garbage generated) into their purchase decisions by evaluating the environmental consequences (e.g., could consider the recyclable packaging) associated with the purchase of a product. Basically, these products are not only satisfy a consumer's instant needs and wants, but also serve to benefit to the environment in the long run. (Rohini, 2012) state basically people whose behavior reflects a relatively consistent and conscious concern for the environmentally friendly purchase, use or disposal of particular products. According to the studies that mentioned above this study developed the first hypothesis to be as following:

Hypothesis 5 Psychological variables moderators the relationship between green marketing mix and total image.

- H.5.1 environmental knowledge moderators the relationship between green marketing mix and corporate image.
- H.5.2 environmental concern moderators the relationship between green marketing mix and corporate image.
- H.5.3 environmental belief moderators the relationship between green marketing mix and corporate image.
- H.5.4 environmental awareness moderators the relationship between green marketing mix and corporate image.
- H.5.5 environmental knowledge moderators the relationship between green marketing mix and brand image.
- H.5.6 environmental concern moderators the relationship between green marketing mix and brand image.
- H.5.7 environmental belief moderators the relationship between green marketing mix and brand image.
- H.5.8 environmental awareness moderators the relationship between green marketing mix and brand image.

3-3 Summary of Chapter

This chapter clarifies the relationships under investigation in this study as well as the theoretical foundation of the study. Based on the previous research the chapter illustrates that green marketing mix effect purchase intention as well as two dimensions of key total image. In addition, the chapter demonstrates that key total image affect purchase intention. The chapter further explains the mediating effect of key total image between green marketing mix and purchase intention, besides moderating role of psychological variables between green marketing mix and key total image. The succeeding chapter presents the research methodology.

CHAPTER FOUR

RESEARCH METHODOLOGY

4-0 Introduction

This chapter focuses on the method that the researcher used to collect data and analyze it. It greatly concerns the research design, target population, description of the sample size and sampling Procedures, research instrument and its validity and reliability, description of the data collection procedures, description of data analysis.

4-1 Research Design

A research design is the specification of methods and procedures for acquiring information need to structure or solve problems. It is the overall operational pattern or framework of the project that stipulates what information is to be collect, from which sources, and by what procedures. A research design me be describe as a series of advance decisions that, take together, from a specific master plan or model for the conduct of the investigation (yasir, 2010).

The purpose of this research is to establish and test the relationship between the green marketing mix, and purchase intention. On other word, The purpose of this study is to investigate the impact of the green marketing mix Variables (namely; product, price, place, and promotion) on purchase intention, as well as the mediating effect of the total image (namely; corporate image and brand image) and Psychological variables as moderator variables between green marketing mix Variables and purchase intention.

For this, survey method is a popular and common strategy in business research, because: Surveys allow the collection of large amount of data from a sizeable population in a highly economical way; Based mostly on the questionnaires; the data are standardized and allow easy comparison;

it is also easily understood, but much time is spent in designing and piloting the questionnaire, after that on analyzing the results even with the aid of an appropriate computer package the disadvantage is that by the survey method the data collected may not be wide ranging as those collected by qualitative research method. There can be limited number of questions; another threat is that the questionnaires might be answered not completely by the respondents; there are also other data collection devices that belong to the survey category such as structure observations and structure interviews where standardized questions are asked from all interviewees (Saunders et al., 2007). Therefore, this research will be used the questionnaire tool in order to gather data concerning the variables of this research.

4-2 Research population and Sample size

The precise selection of the target population is necessary considering the research project. The target population for the study is the postgraduate (MBA) listing all universities in Khartoum state that offered graduate level courses were used as the sampling frame. Data was gathered by using convenience sampling, and 417 questionnaire distributed among a sample of students in Sudanese universities in Khartoum state. 341 were collected during august and September 2015 and they were analyzed using SPSS. It is believed that if this sample is chosen carefully using the correct procedure, it is then possible to generalize the results to the whole of the research population (catherine, 2002). Graduate students were the samples in this study for several reasons. First, they are at an age where they understand the implications of environmental problems. Second, they are future custodians and policy makers of environment management. Third, they are in institutes of higher learning which provide the atmosphere for disseminating knowledge on environmental issues. And finally, they have the capacity to create a strong national movement and bring people's attention to environmental problems, they will be chosen for representing in sample of study.

4-3 Sampling Technique / Procedure

In this study were used non-probability the sampling techniques to create a sampling frame. For non-probability samples, the probability of each case being selected from the total population is not known and it is impossible to answer research questions or to address objectives that require you to make statistical inferences about the characteristics of the population. You may still be able to generalize from non-probability samples about the population, but not on statistical grounds (Saunders, 2009).

Non-probability sampling provides a range of alternative techniques to select samples based on your subjective judgment (Saunders, Lewis & Thomhill, 2009). The researcher used convenience sampling of non-probability sampling because the researcher cannot obtain the list of names of students in universities in Sudan. Therefore, data was collect from those students who were conveniently available in the class by the colleges' registrars.

The Arabic version of the scales was created through two rounds of translation/ back translation techniques and have been designed advertisement about assumed company because the green marketing is not applying in Sudan. Therefore were used convenience sampling is quite similar to stratified sample but non-random divide population into groups decide quota for every groups advantages: less costly and can be set up quickly, normally used for large population (Saunders et. al. 2007).delivered by hand to each respondent and collected later [delivery and collection questionnaire]. Postal shorter period.

4-4 Development of Questionnaire

According to Kumar, Asker and Day, (2001), there are five steps in developing a questionnaire. These steps includes: planning what to measure, developing the questionnaire, question wording, questionnaire layout pre-testing correcting problems and its implementations.

Step 1: Planning what to measure

This step is based on the research objectives, problem statement, and the research issues. The survey questions were designed precisely to give clear ideas about the problems for the target respondents to answer. The questions on the research instrument were divided into the following:

(1) questions about Personal Informational (2) questions covered green marketing mix variables namely; (green product, green price, green place, green promotion) (3) questions covered total image variables namely; (corporate image and brand image) (4) questions covered purchase intention to consumer (5) questions covered Psychological variables namely; (environmental knowledge, environmental concern, environmental belief).

All the responses answers to the students elicited on 5 point scale {namely: (a) strongly disagree; (b) disagree; (c) neutral (d); agree (e); and strongly agree}. So, this type of responses has been chosen from Likert scale for its clarity, and moreover, respondents prefer simple scales that are easily understood (McDonald, 2004). Thus, for most surveys, options that include 4-7 points will provide enough categories to cover the range of expected responses and provide the simplicity that respondents prefer (Trouth, 2005).

Step 2: Formatting questionnaire

This step involves the conversion of the research objectives into information required to obtain the necessary outputs of the questionnaire. It involved the formatting clear statements. All the research questions in

this study had been converted into the relevant questions and clearly stated. The most respondents were familiar with Arabic language. Therefore, the instrument required translation to Arabic language and then to English language again.

Step 3: question warding

This step examines whether the question are clearly understand to all respondents. Thus, it is necessary to use simple terminologies to avoid unclear or elusiveness in the meaning. It is important to avoid double—barreled or misleading and confusing question beside the phrasing and length of question, it is also designed to solicit idea and answers from target respondents. Simple statement can be used. So the questionnaire could be easily understood. Answering the questionnaire was estimated to take approximately twenty to thirty minutes.

Step 4: Sequence and layout Designs

This step is concerned with the sequence and flown the statements for achieving the respondent's cooperation. The instrument should start with easy question flow containing from general to specific question. The sensitive or difficult question must be avoided or not placed at the beginning. Moreover, an attractive layout of the questionnaire is considered for clarity of the items presented.

Step 5: Pre-testing and correcting problems

This step is involved conducting a pilot test on the questionnaire to ensure that the questions meet the researcher's expectations with no ambiguities, appropriateness in the length of the questions, and clearing the double-barreled questions. The objective of the pilot test is to eliminate confusing statements and checking the reliability of the variables. Therefore, to determine reliability the (Cronbach's, 1951) coefficient alpha will be used separately to assess the reliability of the scales adopted in this study.

The questionnaire was distributed for pre-tested among the students (n = 61). The reliability of the variables were used Cronbach's alpha if item deleted, the researcher acted develop item number (5) in green price to incise Cronbach's alpha from (.75- .76). in addition according to Cronbach's alpha if item deleted the researcher deleted item number (7) in environmental concern consequence incise Cronbach's alpha from (77-89).

Table 4.3
Reliability Test of the Pilot Study

Variables	Cronbach's
	alpha
Green marketing mix(I v)	.854
Green product	.85
Green price	.75
Green place	.73
Green promotion	.82
Total image(m v)	.862
Corporate image	.85
Brand image	.71
Purchase intention(d v)	.872
Psychological	.808
variables(mod v)	
environmental knowledge	.76
Environmental concern	.77
Environmental belief	.70

Source: prepared by researcher, (2016).

4-5 Measurement of the Variables

In the following part, the measurements of the variables used in this study are discussed in detail. Majority measures for constructs were taken from the existing literature, while few measures were identified by the researcher for adapting with the study. Moreover, the questionnaire items were adapted from different previous studies sources.

4.5.1 Green product (IV)

According to Hashem & Al-Rifai, (2011) green product are products that respond to environment needs and requirements. Was measured using five items adapted from Hashem & Al-Rifai and are evaluating on five-point Likert scale.

Table 4.4

Measurement of the green product

N	Items of green product	Sourc
O		e
1-	Company (x) makes products free of strong toxicity materials.	Hashe
2-	Company (x) makes Products refills do not cause damage to the	m &
	environment.	Al-
3-	There effective control on the food Product that are Produced by the	Rifai
	company(x).	(2011)
4-	The Company(x) concentrates on Producing the food products carry	
	e Least percentage of the adverse reflections on the human beings.	
5-	The companies(x) contribute, in producing food products with less	
	pollution.	

4.5.2 Green Price (IV)

green pricing refers to the price specified in the light of company's policies with regard to environmental consideration imposed by rules and company instructions or its initiatives in this regard (Hashem & Al-Rifai, 2011). Green pricing was measured using five items.

Table 4.5
Measurement of the green price

NO	Items of green price	Source
1-	The company(x) is keen to specify low prices for its food	Hashem &
	Products.	Al-Rifai
2-	Price of the food Products Proportionate with their quality.	(2011)
3-	It is noted that the company(x) raises the prices of its food	Teng et al,
	products which have harmful negative usage that happens as a	(2012)
	result of misusage.	
4-	High price of green foods sometimes stop me from purchasing	
	them	
5-	Price gap between the green foods and conventional foods is	
	huge.	

4.5.3 Green Place (IV)

This is related to distribution gates use that deal with green products, which are appropriate for consumers, in terms of facilitating their delivery, and to secure cycling procedures conducting within environmental conditions and requirements. Green place include "distribution, transportation, and store". The measures for green place an adapted in Burt and Encinas, (2000) and Hashem & Al-Rifai (2011). A five-point Likert scale was used.

Table 4.6
Measurement of the green place

NO	Items of green place	Source
1-	Products that are friendly to the environment are sold at	Hashem
	distinguished agents.	& Al-
2-	The company(x) is keen to deal with agents friendly to the	Rifai);
	environment.	Burt and
3-	The company(x) controls its distributors to prevent us age the	Encinas,
	products that harm the environment.	(2000)
4-	The store in company(x) is clean.	
5-	The company(x) make delivery is easy.	

4.5.4 Green promotion (IV)

According to Hashem & Al-Rifai, (2011) green promotion refers to providing real information about the products in a way that does not hurt the materialistic and moral consumers' interests. Green pricing was measured using four items. A five-point Likert scale was used.

Table 4.7
Measurement of the green promotion

NO	Items of green promotion	Source
1-	Company (x) Contribute in supporting the environmental	Hashem
	centers.	& Al-
2-	The company(x) devotes a special day for the environment.	Rifai
3-	The company(x) support holding. Seminars and conferences	(2011)
	related to the environment.	
4-	Employees of the company(x) direct the customers to hour they	
	can use the products in a way does not harm the environment.	

4.5.5 Purchase Intention Measurement (DV)

defined Purchase intention means the possibility that consumers have the intention to purchase the products, purchase intention contained five statements which will be measure on the intention to purchase green products which are taken from the questionnaire used by (Teng et al, 2012, and Chiu et al, 2012).a five-point Likert scale was used

Table 4.8

Measurement of the purchase intention

NO	Items of purchase intention	Source
1-	For future purchases, I plan to seek out environmental	(Teng et al
	products.	, 2012)
2-	For future purchases, I plan to buy environmental apparel	;Chiu et
	for myself or as gifts.	al, (2012)
3-	I plan to spend time searching company websites to learn	
	more about environmentally friendly options.	
4-	For future purchases, I will take more time to search	
	environmentally friendly alternatives to products that I	
	typically buy.	
5-	I plan to continue to purchase friendly products in the	
	future.	

4.5.6 Corporate Image Measurement (MD)

The corporate image is based on what people associate with the company or all the information (perceptions, inferences, and beliefs) about it that people hold. Whereas, some researchers use image and reputation as substitutes. Martenson, (2007) saw Customers who prefer traditional manufacturer brands are more knowledgeable, more aware in many respects and some of them have not enough time to do their shopping.

Therefore, traditional brands provide value to them even if they cost more.

(Kotler & Keller., 2006) defined corporate image as the way the public perceives the company or its products. They identify corporate image it is as the way the public perceives the company or its products. It is related to business name, architecture, variety of products/services, tradition, ideology, and to the impression of quality communicated by each person interacting with the organization's clients (Hashem & Al-Rifai, 2011). Corporate image based on seven statements. Which are taken from the questionnaire used by (Hashem & Al-Rifai, 2011). A five-point Likert scale was used.

Table 4.9 **Measurement of the corporate image**

NO	Items of Corporate image	Source
1-	I have the full information about the company(x) Participation in	Hashem
	the field of green marketing.	& Al-
2-	I feel with the desire to continue with the company(x) that carries	Rifai
	out green marketing	,(2011)
3-	I feel with trust in the food Products company(x) that carry out	
	green marketing.	
4-	The company(x) that I buy its food products participates	
	effectively in green marketing.	
5-	I believe that the company(x) that I deal with is successful in the	
	field of the food products.	
6-	The company(x) which I share with escorts developed methods in	
	food products.	
7-	I focus on green marketing fields which the company(x) follows	
	when taking the decision to share with it.	

4.5.7 Brand Image Measurement (MD)

Brand image is defined by Keller (1993) as "the perceptions about a brand as reflected by the brand associations held in consumer memory". Brand image based on five statements. Which are taken from the questionnaire used by (Suki, 2015) and (Shukla, 2011) and develop for suitable this research. In today's highly competitive business environment, a well-positioned brand image is very important. This is evidenced by the recent \$25 billion purchase price for RJR Nabisco which was based in large part on the value and equity in the images that had been established for RJR's brands (Graeff, 1996).

Table 4.10

Measurement of the brand image

NO	Items of Brand image	Source
1-	This particular brand company(x) has a differentiated image	(Suki,
	in comparison with the other brand.	2015)
2-	This particular brand company(x) has a clean image.	and
3-	This particular brand company(x) is well established	(Shukla,
4-	I tend to buy brands company(x) that really make me look good in front of my friends	2011)
5-	I avoid buying a brand company(x), which has a very cheap/poor image Composite reliability	

4.5.8 Environmental Knowledge Measurement (MV)

Environmental knowledge can be defined as "a general knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems (Fryxell & Lo, 2003). Environmental knowledge was measured using four items. A four -point Likert scale was used.

Table 4.11
Measurement of the environmental knowledge

NO	Items of environmental knowledge	Source
1-	I am very knowledgeable about environmental issues.	Bogan &
2-	I know that I buy products that are environmentally safe.	Kromrey,
3-	Information about friendly product is essential.	(1996)
4-	I know a lot of information about friendly products	Mostafa,
		2009)

4.5.9 Environmental Concern Measurement (MV)

Environment concern can be defined as global attitude with indirect effects on behavior through behavioral intention. Mentioned that environmental concern is a strong attitude towards preserving the environment (Chen, 2013).

Table 4.12

Measurement of the environmental concern

NO	Items of environmental concern	Source
1-	I have convinced members of my family or friends not to buy	(Attia,
	food products which are harmful to the environment.	2014)
2-	I have replaced food products in others companies with those	
	friendly products.	
3-	I have purchase friendly products because they cause less	
	pollution.	
4-	When I purchase food products, I always make a conscious effort	
	to buy those food products that is low in pollutants.	
5-	When I have a choice between two equal products, I always	
	purchase the one which is less harmful to other people and the	
	environment.	
6-	I will not buy food product if the company that sells it is	
	ecologically Irresponsible.	

4.5.10 Environmental belief Measurement (MV)

Environmental beliefs can be defined as ethical-normative cognitions concerning the relationship between humans and nature. Analogous to nature images, environmental beliefs are often classified according to their position on a dimension ranging from anthropocentrism to ecocentric (Catton & Dunlap, 1980).

Table 4.13

Measurement of the environmental belief

NO	Items of environmental belief	Source
1-	Friendly Products are healthier than conventionally grown food.	/I 0
2-	I would buy more friendly products if it were more available.	(Lea & Worsley
3-	Friendly products taste better than conventionally grown food	,2005)
4-	Friendly products have more vitamins and minerals than conventional foods.	,= : 30)
5-	I never buy friendly products.	
6-	I am put off food products because it looks Unappealing.	
7-	Eating friendly products is risky for one's health.	

4.6 Data Analysis Techniques

The survey strategy allows collecting quantitative data; therefore, the researcher exercised quantitative techniques to analyze and interpret the data. Quantitative is used as a synonym for any data collection technique (such as a questionnaire) or data analysis procedure (such as graphs or statistics) that generates or uses numerical data (Saunders, Lewis & Thomhill, 2009). The researcher used a single data collection technique (questionnaire). After the field exercise of collecting data, the process of analyzing was started. The data analysis was done by first cross-examining if the responses are rightly filled in and then coding was done according to the objectives of the study. To analyze the data and test the hypotheses, several statistical tools were employed. Statistical Package for Social Science (SPSS) was used with the following techniques:

- 1. Factor analysis (Principal component) used to validate and ensure the goodness of measures using the following criteria:
- a) Factor loading should be greater than 0.40.
- b) Any item cross loaded with two factor should be dropped

- c) If the percentage of variance explained is more than 50%, it is very good and acceptable. Although some scholars say more than 40%.
- d) Eigen values for each factor should be greater than 1
- 2. Cronbach alpha for Reliability to measure the internal consistency of the main variables of the study, the criteria of Cronbach alpha was 0.7 and some literature says more than 0.6 is internally consistent.
- 3. Descriptive statistics was used to describe the respondent's characteristics and to investigate the central tendency of population surveyed.
- 4. Pearson correlation was used to see the degree of correlation between the main variables.
- 5. Multiple Liner Regression was used to test the research hypothesis.
- 6. Hierarchal Regression was used to test the moderating effect.

4.7 Validity and Reliability of Instrument

Reliability analysis was used to test the consistency and stability of the measurement instrument. And help to assess the goodness of measure (Hair et al, 2010). The internal consistency and stability can be determined by the coefficient value of Cronbach"s alpha. The closer Cronbach"s alpha is to 1.0, the higher the internal consistency reliability while Cronbach"s alpha of less than 0.6 is generally considered to be acceptable. And those higher than 0.8 are to be good (Sekran, 2003). Therefore, in this study reliability analysis were done on all the variables under study.

4.8 Summary of Chapter

This chapter depicted the research methodology which is covered the research design of the research instrument. Furthermore, the chapter is highlighted the measurement of the variables and depicted the statistical techniques used in testing the hypothesis. The succeeding chapter depicted the result of the finding and hypotheses testing.

CHAPTER FIVE

DATA ANALYSIS AND RESULTS

5.0. Introduction

The previous chapter detailed the research methodology adopted to test the proposed theoretical model, and to answer the research questions of the study. The purpose of this chapter is to presents the findings of the data analysis and it Is presented in three sections. The first section presents the normality test, response rate, demographic information. The second section discusses the reliability, and validity of the data, followed by descriptive analysis of main measures variables in section three, the fourth focuses on detailed discussion about the hypotheses tested using different statistical techniques sample t-test, Bivariate such as one correlation, and multiple regression analysis.

5.1 Respondents Rate

Table 5.14 presents a summary of the response rate and table 5.15 presents respondents demographic characteristics respectively. A total of 417 questionnaires were distributed to the respondents. Therefore, I asked the graduate students in my sample population to fill the questionnaires. The overall response rate was 82% and this high response rate (Sekaran, 2000).

Table 5.14

Questionnaires Rate of Return

Total Questionnaires sent to the college	417
Returned questionnaires (not filled- up)	9
Completed questionnaire received from respondents	341
Returned questionnaires (partially answered)	9
Questionnaires not returned	58
Overall response Rate	82 %
Usable response Rate	71%

Source: prepared by researcher, (2016).

5.2 Respondents Demographic Characteristics

Table 5.15 shows the profiles of sample students among eight demographic characteristics: gender, age, college, status, income, occupation, and experience. The SPSS output is presented in Appendix B1.

The respondents' ages (less than 3o) year represents (46.6%) and those between (30 -40) year was account for (34.0%) as higher ratio. Whereas the respondents' ages between (40 -50) years were (9.4%), the respondents ages between (50-60) year were represented (1.2%). For the income respondents between (500-1000) were represented (19.1%), the respondents among (1001-2000) were represented (46.0%), the respondents between (2001-4000) were represented (11.1%), the respondents between (4001-6000) were represented (6.7%), lastly respondents has no income represented (16.1%) as lower ratio. For the

respondents' governmental university were respondent (54%), the respondents' private university were respondent (46 %).

Table 5.15 General Characteristics of the Respondents (N=341)

Gender	Male	159	46.6
	Female	182	53.4
Total		341	100%
	Less than 30	189	55.4
Age	30-40	116	34.0
	41-50	32	9.4
	51-60	4	1.2
Total		341	100%
University/	Sudan University of scince& Technology	49	14.4
college	Alnilein University	40	11.7
	Khartoum University	33	9.7
	Alzaeem Alazhari University	40	11.7
	University of Science & Technology	36	10.6
	Amdurman Islamic	23	6.7

	University		
	Sudan Academy for Banking Science	27	7.9
	Alahfad University for girls	26	7.6
	Sudan International University	26	7.6
	The future University	7	2.1
	University of Medicine Science & Technology	13	3.8
	Garden City University	21	6.2
Total		341	100%
status	Married	135	39.6
	Single	193	56.6
	Other	13	3.8
Total		341	100%
income			
	500-1000	65	19.1
	1001-2000	157	46.0
	2001-4000	38	11.1
	4001-6000	26	6.7

	No income	55	16.1
Total		341	100%
occupation	employee	189	55.4
	Section management	35	10.3
	management	16	4.7
	Other	46	13.5
	Student	55	16.1
Total		341	100%
Experience	5 or less	157	46.0
	6-10	75	22.0
	11-15	29	8.5
	More than 15	24	7.0
	No experience	56	16,4
Total		341	100%

Source: prepared by researcher, (2016).

5.3 Goodness of Measures

This section, report the results of validity and reliability tests as means to assess the goodness of measure of study constructs (Sekaran, 2003). The study used exploratory factor analysis for testing the validity and uni-dimensionality of measures of all variables under study. In contrast, the reliability of empirical measurements was obtained by internal consistency (Nunnally, 1978) using Cronbach's

alpha test. In conducting factor analysis, this study followed assumptions that recommended by Hair et al., (2010). Firstly, there must be sufficient number of statistically significant correlations in the matrix. Secondly, Kaiser-Meyer-Olkin measure of sampling adequacy should be at least 0.6. Thirdly, Bartlett's test of Spherecity should be significant at 0.05. Fourthly, communalities of items should be greater than 0.50. Fifthly, the minimum requirement of factor loading 0.50 (since the sample size of this study 341 students) based on a 0.05 significant level, with value of cross loading exceeds 0.50. Also to provide a simple structure column for interpretation, the factors were subjected to Varimax rotation. Finally, Eigen values should be more than 1 for factor analysis extraction. The results of factor and reliability analyses are described as follows:

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5.3.1. Factor Analysis for green Marketing Mix Variables

Factor analysis was done on the 19 items, which was used to measure green marketing mix. Table 5.16 showed the summary of results of factor analysis on green marketing and the SPSS outputs is shown in appendix. In the first run of factor analysis, items (mix2=.485, mix6 = .396,) were found to have communalities less than 0.50. In the second run of factor analysis, item (im2 = .480) still had communalities value less than 0.50, and was dropped in the next run. In the third run Item (mix13) was dropped in the subsequent run, all assumptions were satisfactory fulfilled. All the remaining items had more than recommended value of at least 0.50 in IM with KMO value of 0.903 (above the recommended minimum level of 0.60) and Bartlett's test of Spherecity is significant (p<.01). Thus, the items are appropriate for factor analysis.

Table 5.16 shows that the items for green marketing mix loaded on four components/factors with Eigen values exceeding 1.0. These four factors explain 63.88% of variance in the data (above the recommended level of 0.60). All the remaining items also had the factor loading values above the minimum values of 0.50, with value of cross loading less than 0.35. The first factors for green marketing.

Green product captures all the items of support product. Second factor capture all the items of price. Original name of this factor was retained as it is. The third factor captures all the items of support place and the fourth factor captures all the items of support promotion. However, the original name of these factors was retained it is. As shown in Table 5.16, factor loading of items green marketing mix on the five factors Thus, this study found that green marketing mix perspective

of students in universities in Sudan consists of four factors, green product, green price, green place and green promotion.

Table 5.16

Rotated Factor loading for green Marketing mix

Items No:		Co	Components			
		f1	f 2	,	f3 f4	
Green	promotion:	I				
Mix1	The company(x) devotes a special	.795	. 241	.112	.175	
7	day for the environment.					
Mix1	The company(x) support holding.	.780	.206	.113	.180	
8	Seminars and conferences related to					
	the environment.					
Mix1	Employees of the company(x) direct	.651	.175	.252	.215	
9	the customers to hour they can use					
	the products in a way does not harm					
	the environment.					
Mix1	Company (x) Contribute in	.609	.315	.324	.098	
6	supporting the environmental centers.					
Green	place	ı	1	ı	'	
Mix1	Products that are friendly to the	.096	.753	.093	.282	
1	environment are sold at distinguished					
	agents.					

Mix1	The company(x) make delivery is	.237	.740	.229	.105
5	easy.				
N4: 1		250	71	102	121
Mix1	The company(x) is keen to deal with	.352	.716	.183	.131
2	agents friendly to the environment.				
Mix1	The store in company(x) is clean.	.282	.696	.285	.159
4					
Green	product:				
Mix4	The Company(x) concentrates on	.096	.163	.852	.119
	Producing the food products carry the				
	Least percentage of the adverse				
	reflections on the human beings.				
Mix5	The company(x) contributes, in	. 061	.283	.719	.125
	producing food products with less				
	pollution.				
Mix3	There effective control on the food	.335	.185	.638	.092
	Product that are Produced by the				
	company(x).				
Mix1	Company (x) makes products free of	.394	.060	.619	.179
	strong toxicity materials.				
Green	price:				
Mix8	It is noted that the company(x)	.245	.098	.092	.753
	raises the prices of its food products				
	which have harmful negative usage				
	that happens as a result of misusage.				

Mix9	High price of green foods	.065	.306	051	.737
	sometimes stop me from purchasing				
	them.				
3.51.4		100	0.50	2.7.2	
Mix1	Price gap between the green foods	. 102	.060	.252	.725
0	and conventional foods is huge				
Mix7	Price of the food Products	.298	.208	.289	.567
	Proportionate with their quality.				
	Eigenvalues	6.485	1.430	1.213	1.092
	Percentage of Variance Explain	40.534	8.940	7.584	6.827
	Total Variance Explained (%)	60.95			
	Kaiser-Meyer-Olkin (KMO)	0.903			
	Bartlett's Test of Spherecity	2282.24	1		

Source: prepared by researcher, (2016).* Variables loaded significantly on factor with Coefficient of at least0

5.3.2 Factor Analysis for Total Image Variables:

Factor analysis was done on the 12 items, which was used to measures total image of consumer namely (corporate image and brand image). Table 5.17 showed the summary of results of factor analysis on total image of consumer and the SPSS outputs is shown in appendix (B). In the first run of factor analysis, item (im1 = .469, im12 = .449, im7 = .403) is found to have communalities less than 0.50. This Items were dropped (im7= .403) in the subsequent runs. In the second run of factor analysis, items (im1 = .492, im12 = .449, im6 = .488) still had communalities value less than 0.50, and was dropped (im12 = .449) in the next run. Also was dropped in the subsequent runs item (im5) because is value of cross

loading (.612, .407). And was dropped (im8) was found to have cross loading for this item (.444, .474). Finally, all assumptions were satisfactory fulfilled. All the remaining items had more than recommended value of at least 0.50 in IM with KMO value of 0.843 (above the recommended minimum level of 0.60) and Bartlett's test of Spherecity is significant (p<.01). Thus, the items are appropriate for factor analysis.

Table 5.17 showed all models. The first model consists of (im1, im4, im2 and im3). Original name of this factor was retained as it is (corporate image). The second model consists of (im11, im9 and im10). Also Original name of this factor was retained as it is (brand image). Furthermore item (im9) was dropped because the remaining one question did not display any reliability.

Table 5.17 shows that the items for total image loaded on three components/factors with Eigen values exceeding 1.0. These three factors explain 65.090% of variance in the data (above the recommended level of 0.60). All the remaining items also had the factor loading values above the minimum values of 0.50, with value of cross loading less than 0.35. Thus, this study found that total image of students in universities in Sudan consists of two factors, namely; (corporate image and brand image).

Table 5.17

Rotated Factor loading for total image of consumers

Items No:		Components	
		f1	f 2
Im1	I have the full information about the company(x)	.822	.217
	Participation in the field of green marketing.		
Im2	I feel with the desire to continue with the	.819	.178
	company(x) that carries out green marketing.		
Im3	I feel with trust in the food Products	.726	.243
	company(x) that carry out green marketing.		
Im4	The company(x) that I buy its food products	.725	.156
	participates effectively in green marketing.		
Bran	d image:	L	
Im9	This particular brand company(x) has a clean	.011	.815
	image.		
Im1	This particular brand company(x) is well	.325	.719
0	established.		
Im1	I tend to buy brands company(x) that really	.344	.708
1	make me look good in front of my friends.		
	Eigen values	3.541	1.016
	Percentage of Variance Explain	50.580	14.509

Total Variance Explained (%)	65.090
Kaiser-Meyer-Olkin (KMO)	.843
Bartlett's Test of Spherecity	845.416

Source: prepared by researcher, (2016).* Variables loaded significantly on factor with Coefficient of at least 0.5,

5.3.3 Factor Analysis for Purchase Intention

The original questionnaire had 5 items measuring purchase intention, factor analysis was done on the 5 items, which was used to measure purchase intention. Table 5.18 showed the summary of results of factor analysis on purchase intention and the SPSS outputs is shown in appendix (B2.3) in the first run of factor analysis. All the remaining items had more than recommended value of at least 0.50 in OC with KMO value of 0.805 (above the recommended minimum level of 0.60), and Bartlett's test of Spherecity is significant (p<.01). Thus, the items are appropriate for factor analysis. Table 5.18 shows that the purchase intention loaded on one component/factor with Eigen values exceeding 1.0. This factor explains 61.115 % of variance in the data (above the recommended level of 0.60). All the remaining items also had the factor loading values above the minimum values of 0.50, with value of cross loading less than .50. As shown in Table 5.18, factor loading of purchase intention items on the one factor.

Table 5.18

Rotated Factor loading for purchase intention

Items n	o:	Factor
		1
purcha	se intention:	
Pur1	For future purchases, I plan to seek out environmental products.	.560
Pur2	For future purchases, I will take more time to search environmentally friendly alternatives to products that I typically buy.	.569
Pur3	I plan to spend time searching company websites to learn about environmentally friendly options.	n more .703
Pur4	For future purchases, I will take more time to search environmentally friendly alternatives to products that I typically buy.	.639
Pur5	I plan to continue to purchase friendly products in the fu	ture585
	Eigen values	3.056
	Percentage of Variance Explain	61.115
	Total Variance Explained (%)	61.115
	Kaiser-Meyer-Olkin (KMO)	.805
	Bartlett's Test of Spherecity	674.455

Source: prepared by researcher, (2016).* Variables loaded significantly on factor with Coefficient of at least 0.5, * Items deleted due to high cross loading.

5.3.4 Factor Analysis for Psychological Variables

Analysis was done on the 17 items, which was used to measure (environmental psychologies variables namely knowledge, environmental concern and environmental belief). Table 5.19 showed the summary of results of factor analysis on psychologies variables and the SPSS outputs is shown in Appendix (B2.4). In the first run of factor analysis, item (en3= 565, 390) was found to have cross loading as the result was dropped. Item (X5=.646, .371) was dropped in the subsequent run. All assumptions were satisfactory fulfilled. All the remaining items had more than recommended value of at least 0.35 in KMO value of 0.890 (above the recommended minimum level of 0.60), and Bartlett's test of Spherecity is significant (p<.01). Thus, the items are appropriate for factor analysis.

Table 5.19 shows that the items for psychological variables loaded on four components/factors with Eigen values exceeding 1.0. These four explain 68.388% of variance in the data (above the recommended level of 0.60). All the remaining items also had the factor loading values above the minimum values of 0.35, with value of cross loading less than 0.50. The first factor of psychological variables captures all the items of the environmental knowledge retention. The Second factor of psychological variables captures all the items of the environmental concern. The third factors of psychological variables captures items of the environmental belief divided two group the firstly include environmental belief while the Secondly after review the literature titled (environmental awareness). As shown in Table 5.19 factor loading of psychological variables items on the four factors. Thus, this study found that psychological variables in students' universities in Sudan consist of four factors, namely; (environmental knowledge, environmental concern, environmental belief and environmental awareness).

Table 5.19

Rotated Factor loading for psychological variables

Items		Factor	Factor2	Factor3	Factor4
no:		1			
enviro	environmental concern:				
En7	I have purchase friendly products	.793	.205	.167	.135
	because they cause less pollution.				
En8	When I purchase food products, I	.777	.228	.143	.135
	always make a conscious effort to				
	buy those food products that is low				
	in pollutants.				
En9	When I have a choice between two	.769	.156	.216	.162
	equal products, I always purchase				
	the one which is less harmful to				
	other people and the environment.				
En6	I have replaced food products in	.695	.164	.122	.274
	others companies with those				
	friendly products.				
En10	I will not buy food product if the	.675	.225	.227	.156
	company that sells it is ecologically				
	Irresponsible.				
enviro	environmental belief:				

ins and minerals than entional foods. Ily products taste better than entionally grown food. Id buy more friendly products ere more available. Idy Products are healthier than	.189	.763	.182	.126
ally products taste better than entionally grown food. Id buy more friendly products there more available.			.182	.126
Id buy more friendly products ere more available.			.182	.126
Id buy more friendly products ere more available.			.182	.120
ld buy more friendly products ere more available.	.301	.707		
ere more available.	.301	.707		
		,	.153	.216
dly Products are healthier than				
	.345	.615	.132	.280
entionally grown food.				
tal awareness:				
out off food products because	.180	.204	.823	.094
ks Unappealing.				
er buy friendly products.	.242	.118	.820	.084
g friendly products is risky for	.207	.295	.769	.088
health.				
tal knowledge:				
that I buy products that are	.113	.176	.086	.838
nmentally safe.				
ery knowledgeable about	.264	.124	1 .042	.784
nmental issues.				
	.219	.188	3 .127	.773
a lot of information about				
y a lot of information about y products.				
	health. tal knowledge: that I buy products that are namentally safe. ery knowledgeable about namental issues. a lot of information about	health. tal knowledge: that I buy products that are nmentally safe. ery knowledgeable about nmental issues. a lot of information about .219	health. tal knowledge: that I buy products that are nmentally safe. ery knowledgeable about nmental issues. a lot of information about .219 .188	health. tal knowledge: that I buy products that are .113 .176 .086 mmentally safe. ery knowledgeable about .264 .124 .042 mmental issues. tal knowledge: 2.113 .176 .086 2.264 .124 .042 3.264 .124 .042

Percentage of Variance Explain	42.519	10.588	8.374	6.908
Total Variance Explained (%)				68.388
Kaiser-Meyer-Olkin (KMO)				.890
Bartlett's Test of Spherecity				
			2	2423.597

Source: prepared by researcher, (2016).* Variables loaded significantly on factor with Coefficient of at least 0.5, * Items deleted due to high cross loading.

5.3.5 Reliability Analysis

Reliability is an assessment of the degree of consistency between multiple measurements of variables (Hair et al., 2010). To test reliability this study used Cronbach's alpha as a diagnostic measure, which assesses the consistency of entire scale, since being the most widely used measure (Sharma, 2000). According to Hair et al., (2010), the lower limit for Cronbach's alpha is 0.70, although it may decrease to 0.60 in exploratory research. While Nunnally, (1978) considered Cronbach's alpha values greater than 0.60 are to be taken as reliable.

The results of the reliability analysis summarized in Table 5.19 confirmed that all the scales display satisfactory level of reliability (Cronbach's alpha exceed the minimum value of 0.6). Therefore, it can be concluded that the measures have acceptable level of reliability. The full SPSS outputs are displayed in appendix (B3).

Table 5.20 Cronbach's Alpha for Study Variables

Construct	Variable	Number of	Cronbach's
		items	alpha
green marketing	Green product	4	.786
mix	Green price	4	.750
	Green place	4	.830
	Green promotion	4	.815
Total image	Corporate image	4	.817
	Brand image	3	.707
Purchase intention	Purchase intention	5	.840
psychologies variables	environmental knowledge	3	.796
	environmental concern	6	.865
	environmental belief	4	.804
	environmental awareness	3	.827

Source: prepared by researcher, (2016)

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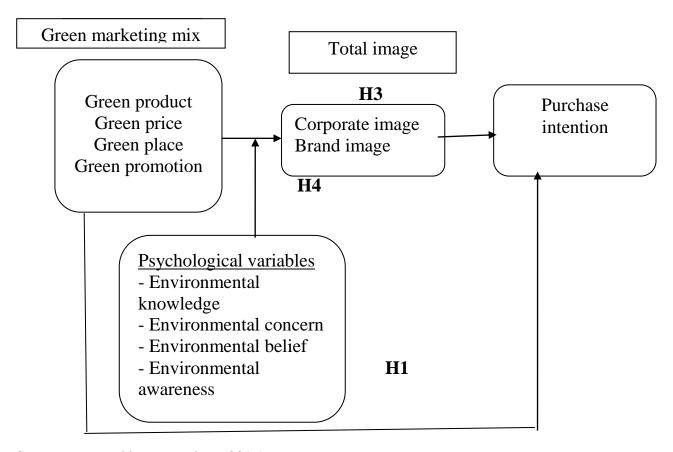
5.4 Modified of Research Framework and Hypotheses

From the result of the factors analysis, the previous conceptual framework had been changed. Obviously, the green marketing mix variables it is not changed (green product, green price, green place and green promotion). Also, total image dimensions, not changed (corporate image and brand image). Of course, purchase intention had not been changed.

The final components psychological variables of had been changed from three components to four components dimensions, consists of environmental knowledge, environmental concern, environmental belief and environmental awareness. Therefore, (The modified conceptual framework is presented in figure 5.2). Accordingly, the earlier hypotheses related to the some variables will be changed. And also, some previous partial hypotheses will be removed according to the factor analysis extraction. The bellow parts are exploring the change and removing in hypotheses according to factor analysis results.

Figure 5.2

Modified Conceptual Framework



Source: prepared by researcher, (2016)

Based on the modified theoretical framework, the hypotheses related to all dimensions Need to be restated. The restated hypotheses reflect the addition of new variables and the eliminated ones related to the constructs. The restated hypotheses are shown in table 5.21.

Table 5.21
Restated Research Hypotheses

NO	Hypotheses
H1	There is a positive relationship between green marketing
	mix variables and purchase intention.
H1.1	There is a positive relationship between green product and
	purchase intention.
H1.2	There is a positive relationship between green price and
	purchase intention
H1.3	There is a positive relationship between green place and
	purchase intention.
H1.4	There is a positive relationship between green promotion and
	purchase intention.
H2	There is a positive relationship between green marketing
	mix and total image.
H2.1.1	There is a positive relationship between green product and
	corporate image.
H2.1.2	There is a positive relationship between green price and
	corporate image.
H2.1.3	There is a positive relationship between green place and
	corporate image.
H2.1.4	There is a positive relationship between green promotion and
	corporate image.
H2.2.1	There is a positive relationship between green product and
	brand image.
H2.2.2	There is a positive relationship between green price and
	brand image.

H2.2.3	There is a positive relationship between green place and
	brand image.
H2.2.4	There is a positive relationship between green promotion and
	brand image.
Н3	There is a positive relationship between total image and
	purchase intention.
H3.1	There is a positive relationship between corporate image and
	purchase intention.
H3.2	There is a positive relationship between brand image and
	purchase intention.
H4	Total image mediates the relationship between green
	marketing mix variables and purchase intention.
H4.1.1	Corporate image mediates the relationship between green
	product and purchase intention.
H4.1.2	Corporate image mediates the relationship between green
	price and purchase intention.
H4.1.3	Corporate image mediates the relationship between green
	place and purchase intention.
H4.1.4	Corporate image mediates the relationship between green
	promotion and purchase intention.
H4.2.1	Brand image mediates the relationship between green product
	and purchase intention.
H4.2.2	Brand image mediates the relationship between green price
	and purchase intention.
H4.2.3	Brand image mediates the relationship between green place
	and purchase intention.
H4.2.4	Brand image mediates the relationship between green
	promotion and purchase intention.

H5	The Moderating Effect of Psychological variables_on the
	Relationship between green marketing mix variables and
	total image.
H5.1	The Moderating effect of environmental knowledge on the
	relationship between green marketing mix variables and total
	image.
H5.1.1	The Moderating effect of environmental knowledge on the
	relationship between green marketing mix variables and
	corporate image.
H5.1.1.a	The Moderating effect of environmental knowledge on the
	relationship between green product variable and corporate
	image.
H5.1.1.b	The Moderating effect of environmental knowledge on the
	relationship between green price variable and corporate
	image.
H5.1.1.c	The Moderating effect of environmental knowledge on the
	relationship between green place variable and corporate
	image.
H5.1.1.d	The Moderating effect of environmental knowledge on the
	relationship between green promotion variable and corporate
	image.
H5.1.2	The Moderating effect of environmental knowledge on the
	relationship between green marketing mix variables and
	brand image.
H5.1.2.a	The Moderating effect of environmental knowledge on the
	relationship between green product variable and brand
	image.
H5.1.2.b	The Moderating effect of environmental knowledge on the

	relationship between green price variable and brand image.
H5.1.2.c	The Moderating effect of environmental knowledge on the
	relationship between green place variable and brand image.
H5.1.2.d	The Moderating effect of environmental knowledge on the
	relationship between green promotion variable and brand
	image.
H5.2	The Moderating effect of environmental concern on the
	relationship between green marketing mix variables and total
	image.
H5.2.1	The Moderating effect of environmental concern on the
	relationship between green marketing mix variables and
	corporate image.
H5.2.1.a	The Moderating effect of environmental concern on the
	relationship between green product variable and corporate
	image.
H5.2.1.b	The Moderating effect of environmental concern on the
	relationship between green price variable and corporate
	image.
H5.2.1.c	The Moderating effect of environmental concern on the
	relationship between green place variable and corporate
	image.
H5.2.1.d	The Moderating effect of environmental concern on the
	relationship between green promotion variable and corporate
	image.
H5.2.2	The Moderating effect of environmental concern on the
	relationship between green marketing mix variables and
	brand image.
H5.2.2.a	The Moderating effect of environmental concern on the

	relationship between green product variable and brand
	image.
H5.2.2.b	The Moderating effect of environmental concern on the
	relationship between green price variable and brand image.
H5.2.2.c	The Moderating effect of environmental concern on the
	relationship between green place variable and brand image.
H5.2.2.d	The Moderating effect of environmental concern on the
	relationship between green promotion variable and brand
	image.
H5.3	The Moderating effect of environmental belief on the
	relationship between green marketing mix variables and total
	image.
H5.3.1	The Moderating effect of environmental belief on the
	relationship between green marketing mix variables and
	corporate image.
H5.3.1.a	The Moderating effect of environmental belief on the
	relationship between green product variable and corporate
	image.
H5.3.1.b	The Moderating effect of environmental belief on the
	relationship between green price variable and corporate
	image.
H5.3.1.c	The Moderating effect of environmental belief on the
	relationship between green place variable and corporate
	image.
H5.3.1.d	The Moderating effect of environmental belief on the
	relationship between green promotion variable and corporate
	image.
H5.3.2	The Moderating effect of environmental belief on the

	relationship between green marketing mix variable and brand
	image.
H5.3.2.a	The Moderating effect of environmental belief on the
	relationship between green product variable and brand
	image.
H5.3.2.b	The Moderating effect of environmental belief on the
	relationship between green price variable and brand image.
H5.3.2.c	The Moderating effect of environmental belief on the
	relationship between green place variable and brand image.
H5.3.2.d	The Moderating effect of environmental belief on the
	relationship between green promotion variable and brand
	image.
H5.4	The Moderating effect of environmental awareness on the
	relationship between green marketing mix variables and total
	image.
H5.4.1	The Moderating effect of environmental awareness on the
	relationship between green marketing mix variables and
	corporate image.
H5.4.1.a	The Moderating effect of environmental awareness on the
	relationship between green product variable and corporate
	image.
H5.4.1.b	The Moderating effect of environmental awareness on the
	relationship between green price variable and corporate
	image.
H5.4.1.c	The Moderating effect of environmental awareness on the
	relationship between green place variable and corporate
	image.
H5.4.1.d	The Moderating effect of environmental awareness on the

	relationship between green promotion variable and corporate
	image.
H5.4.2	The Moderating effect of environmental awareness on the
	relationship between green marketing mix variables and brand
	image.
H5.4.2.a	The Moderating effect of environmental awareness on the
	relationship between green product variable and brand
	image.
H5.4.2.b	The Moderating effect of environmental awareness on the
	relationship between green price variable and brand image.
H5.4.2.c	The Moderating effect of environmental awareness on the
	relationship between green place variable and brand image.
H5.4.2.d	The Moderating effect of environmental awareness on the
	relationship between green promotion variable and brand
	image.

5.5 Descriptive Statistics of Variables

In this section descriptive statistics such as mean and standard deviation was used to describe the characteristics of surveyed universities and all variables (Independent, dependent, moderators and mediators) under study.

5.5.1 Descriptive Analysis for Green Marketing Mix Variables

Table 5.22 shows the means and standard deviations of the four components of green marketing mix; green product, green price, green place and green product. The table reveals that the universities students in Sudan emphasized more on green product (mean=4.227, standard deviation= 0.768), followed by green promotion (mean=

4.222, standard deviation =0.758), then green place (mean= 4.14, standard deviation= 0.781), and the lowest components of green marketing mix is green price (mean= 4.01, standard deviation= 0.768). Given that the scale used a 5- point scale (1=strongly disagree, 5=strongly agree), it can be concluded that Sudanese universities are highly of green promotion above the average mean.

Table 5.22

Descriptive Analysis of green marketing mix Variables

green marketing mix	Mean	Standard Deviation
Variables		
Green product	4.227	0.768
Green price	4.019	0.768
Green place	4.148	0.781
Green promotion	4.222	0.758

Source: prepared by researcher, (2016). Note: All variables used a 5-point likert scale (1= strongly disagree, 5= strongly agree).

5.6.2 Descriptive Analysis for Purchase Intention Variable

Table 5.23 shows the means and standard deviations of one component of repurchase intention. Table reveals that the students of universities in Sudan concern in purchase intention. Means and standard deviations (mean= 4.051, standard deviation=0.763). Given that the scale used a 5-point scale (1=strongly disagree, 5=strongly agree).

Table 5.23

Descriptive Analysis for purchase intention Variable

Variables	Mean	Standard Deviation
purchase intention	4.051	0.763

Source: prepared by researcher, (2016). Note: All variables used a 5-point likert scale (1 = strongly disagree, 5 = strongly agree).

5.5.3 Descriptive Analysis for total Image Variables

Table 5. 24 shows the means and standard deviations of the two components of corporate image and brand image. The table reveals that the universities students in Sudan emphasized more on brand image (mean=4.188, standard deviation=0.6873), the lowest components of corporate image (mean=4.079, standard deviation=0.7712). Given that the scale used a 5-point scale (1=strongly disagree, 5=strongly agree) it can be concluded that Sudanese universities of Sudan is highly of pay corporate image above the average mean.

Table 5. 24
Descriptive Analysis of total image Variables

Variables	Mean	Standard Deviation
corporate image	4.079	0.7712
brand image	4.188	. 6873

Source: prepared by researcher, (2016). Note: All variables used a 5-point likert scale (1= strongly disagree, 5= strongly agree).

5.5.4 Descriptive Analysis for Psychological Variables

Table 5.25 shows the means and standard deviations of the four components of Psychological variables: environmental knowledge, environmental concern, environmental belief and environmental

awareness. The table reveals that the universities students in Sudan emphasized more on environmental awareness (mean=4.169, standard deviation= 0.7752) followed by environmental concern (mean=4.058, standard deviation=0.8475) followed by environmental (mean=4.053, standard deviation=0.7967) and environmental knowledge (mean= 3.571, standard deviation= 0.9395) Given that the scale used a 5-point scale (1=strongly disagree, 5=strongly agree) it can be concluded that Sudanese universities of Sudan is highly environmental concern equity above the average mean.

Table 5.25

Descriptive Analysis of Psychological variables

Psychological	Mean	Standard Deviation
Variables		
environmental	3.571	0.9395
knowledge		
environmental concern	4.058	0.8475
environmental belief	4.053	0.7967
environmental	4.169	0.7752
awareness		

Source: prepared by researcher, (2016). Note: All variables used a 5-point Likert scale (1= strongly disagree, 5= strongly agree

5.6 Correlation Analysis

Table 5.26 represents the correlation matrix for the constructs operationalized in this study. These bivariate correlations allow for preliminary inspection and information regarding hypothesized relationships. In addition to that, correlation matrix gives information regarding test for the presence of multicollinearity. The table shows that

no correlations near 1.0 (or approaching 0.8 or 0.9) were detected, which indicate that multicollinearity is not a significant problem in this particular data set.

Table 5.26 reveals also that all the correlations are in the hypothesized positive relationship. For example the relationship between all the four components of green marketing mix and all the tow variables of total image are distinctively positive and statistically significant (0.396\leqrefre 06.12, p<0.01). The table shows also that all the four components of mix are significantly correlated with the purchase green marketing intention (the correlations rang between $(0.419 \le r \le 06.12, p < 0.01)$). The table also reveals that two dimension of total image are significantly correlated with the one dimension of purchase intention (0.396\le r bivariate <0.566). Based the correlations there was some on expectation that these coefficients would be significant. The full SPSS output is attached in Appendix B9.

Table 5.26
Person Correlation Coefficient for All Variables

No	Variables	1	2	3	4	5	6	7	8	9	10	11
1	green	1										
	product											
2	green	.434**	1									
	price											
3	green	.532**	.503**	1								
	place		.505									
4	green	.564**	.507**		1							
	promotio			.612**								
	n											
5	corporate	.509**	.438**	.487**	.586**	1						
	image											
6	brand	.416**	.476**	.396**	.509**	.540**	1					

	image											
7	purchase	.451**	.419**	.476**	.533**	.566**	.464**	1				
	intention						.+0+					
8	Envir	.298**	.235**	.256**	.395**	.430**	.360**		1			
	knowledg							.468**				
	e											
9	Envir	.427**	.342**	.396**	.478**	.477**	.402**	.536**	.487**	1		
	concern								.407			
10	Envir	.445**	.394**	.410**	.471**	.509**	.436**	.530**	.469**	.584**	1	
	belief									.504		
11	Envir	.311**	.304**	.296**	.280**	.327**	.286**	.371**	.289**	.503**		1
	awarenes										.518**	
	S											

While correlation analysis in Table 5.26 provides a strong indication of association, in order to undertake a more complete examination of the proposed relationships and to evaluate whether such associations are direct or indirect, hierarchical regression was conducted. Hierarchical regression employed because it gives the best predictive model of the linear relationship present among the independent variables & Fidell, 2001). Hierarchical regression was chosen rather than a structural equations approach because of sample (Frazier, Tix, & Barron, 2004). The next finding analyses are testing the hypotheses.

5.7 Hypotheses Testing

This section discusses the results of hypotheses of the study. Given that the new emerged variable from factor analysis and the eliminated ones, there are (54) hypotheses in this study. The main effects as well as the mediating and moderating effect were examined using hierarchical

regression analysis, the statistical procedures of which had been explained in chapter 3.

In order to perform hierarchal regression analysis, it is generally agreed that there are at least five assumptions (normality, linearity, multicollinearity, homoscedasticity and outliers) should be met. The results of testing these assumptions are provided below:

- 1. The normality had been established through the relevant histogram. The histograms show that most values fall in the center and the curves take the bell-shape. The normal probability (P-P) plots also show that the residual points are close to the diagonal line. Therefore, the variables are normally distributed.
- 2. Linearity of relationships: No curvilinear pattern of relationship is apparent from the scatter plots. Therefore, there is no violation of the assumption of linearity.
- 3. Heteroscedasticidity was checked through the scatter plots of standardized residual. The residual plots take roughly the rectangular shape, which indicates that there is no problem of heteroscedasticidity in the data.
- 4. The result of multicollinearity test indicated that all values of the VIF are less than the threes hold of 10, all Tolerance values are more than 0.1, and all Variance Proportions are less than 0.90. This indicates that, there is no multicollinearity in the data.
- 5. Outliers were identified and removed through using a case-wise diagnostics.

Therefore, the assumptions of multiple regression analysis were met in this study and the regression analysis can securely be used to test the designated hypotheses. Hierarchical regression analyses were used for in all tests of the model to show the effects of green marketing mix dimensions (namely; green product, green price, green place, and green promotion), (total image as mediating variable between green marketing mix variables and purchase intention (corporate image and brand image), as well as, Psychological variables as moderator variable.

5.7.1 The Relationship between green marketing mix and purchase intention

This section deal with the first hypotheses in the study which predicts that four green Marketing mix components (green product, green price, green place, and green promotion) have positive relationship with the dimension of purchase intention. As shown in figure 5.3 below.

Figure 5.3

The Relationship between Green marketing mix and Purchase intention



Table 5.27 show the results of hierarchical regression analyses were of the multiple regression equation testing the impact of green marketing mix variables on Purchase intention: The green marketing mix variables explained 45% of the variance in Purchase intention. However, the result shows that the model is significant.

In addition the results show that the four components of green marketing mix is a positive significantly influenced purchase intention. The results showed that the hypothesis was fully supported, i.e. there is a positive relationship between green marketing mix (green

product, green price, green place, and green promotion) and Purchase intention.

The results also showed that green product have significant effect on purchase intention (β =0. .196, p<0.01), followed by green place (β =0.183, p<0.01), green promotion (β =0. 314, p<0.01), green price (β =0. .119, p<0. 05). These results give support to hypotheses H1.1 (green product and purchase intention.), H1.2 (green price and purchase intention) and H1.3 (green place and purchase intention.), H1.4 (green promotion and purchase intention).

Table 5. 27

Multiple Regressions: green Marketing mix Variables, and purchase intention (Beta coefficient)

Variables	Purchase
	intention
Green product	.196***
Green price	.119**
Green place	.183***
Green promotion	.314***
\mathbb{R}^2	.445
Adjusted R ²	.439
$\Delta \mathbf{R}^2$.445
F change	65.627***

Source: prepared by researcher, (2016). **Note:** Level of significance:

^{*}p<0.05, **p<0.01, ***p<0.001

Table 5.28
Summary of Hypotheses Testing Results for the Relationship between green marketing Variables and purchase intention

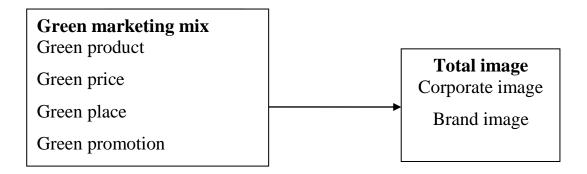
Item	Statement of Hypothesis: There is a positive	Remark
	relationship	
	Between:	
H1.1	Green product and purchase intention.	Supported
H1.2	Green price and purchase intention.	Supported
H1.3	Green place and purchase intention.	Supported
H1.4	Green promotion and purchase intention.	Supported

5.7.2 The Relationship between green Marketing mix and total image

This subsection deal with hypotheses in the study which predicts of green Marketing mix variables (green product, green price, green place, and green promotion). Have positive relationship with the two dimensions of total image (corporate image and brand image). As shown in Figure 5.4 below.

Figure 5.4

Green marketing mix and total image



The results of five hierarchical regression analyses were discussed in next subsections.

5.7.2.1 The Relationship between Green Marketing Mix and Corporate Image

Table 5.29 shows the results of the multiple regression equation testing the Impact of green marketing mix variables on corporate image: The green marketing mix variables explained 49% of the variance in corporate image. However, the result shows that the model is significant.

In addition the results show that the four components of green marketing mix is a positive significantly influenced corporate image. The results showed that the hypothesis was fully supported, i.e. there is a positive relationship between green marketing mix (green product, green price, green place, and green promotion) and corporate image.

The results also showed that green product have significant effect on corporate image (β =0.321, p<0.01), followed by green place (β =0.112, p<0.05), green price (β =0.130, p<0.001), green promotion (β =0.286, p<0.001). These results give support to hypotheses H1.1 (green product and corporate image), H1.2 (green price and corporate image) and H1.3 (green place and corporate image.), H1.4 (green promotion and corporate image).

Table 5.29

Multiple Regressions: green Marketing mix Variables, and corporate image (Beta coefficient)

Variables	Corporate image
Green product	.321***
Green price	.130***
Green place	.112**
Green promotion	.286***
\mathbb{R}^2	.485
Adjusted R ²	.478
$\Delta \mathbf{R}^2$.485
F change	76.916***

Source: prepared by researcher, (2016). **Note:** Level of significance: **p<0.05, ***p<0.01

5.7.2.2 The Relationship between Green Marketing Mix and Brand Image

Similar analysis was conducted for the relationships between green marketing mix and brand image. Table 5.30 shows the results of the multiple regression equation testing the influence of the green marketing mix variables on brand image. The green marketing mix variables explained 12% of the variance in brand image. However, the result shows that the model is significant. In addition the results show that three of the four component of green marketing mix is a positive significantly influenced brand image.

The results showed that the hypothesis was supported, i.e. there is a positive relationship between internal marketing and employee empowerment. The results also showed that green promotion have the

most significant effect on brand image. (β =0.280, p<0.001), followed by green price (β =0.261, p<0.001), green product (β =0.121, p<0.05).

These results give support to hypotheses H2.1 (green product and brand image) H2.2 (green price and brand image), H2.3 (green promotion and brand image). While not support to hypotheses H2.4 (green place and brand image).

Table 5.30

Multiple Regressions: green Marketing mix Variables, and brand image (Beta coefficient)

Variables	Brand image
Green product	.121**
Green price	.261***
Green place	.036
Green promotion	.280***
R ²	.317
Adjusted R ²	.309
$\Delta \mathbf{R}^2$.317
F change	38.460***

Source: prepared *by researcher, (2016).* **Note:** Level of significance: **p<0.05, ***p<0.01

5.7.3 The Relationship between Total Image and Purchase Intention

This subsection deal with hypotheses in the study which predicts that two dimension of total image (and brand image). Have positive relationship with the dimension of purchase intention. As shown in Figure 5.5 below.

Figure 5.5
Relationship between total image and purchase intention



Table 5.31 shows the results of the multiple regression equation testing the influence of the total image on purchase intention. The total image explained 52% of the variance in purchase intention. However, the result shows that the model is significant. In addition the result show that the total image is a positive significantly influenced purchase intention. The results showed that the hypothesis was supported, i.e. there is a positive relationship between corporate image and purchase intention. (β =0. 512, p<0.01). This result gives support to hypotheses H3.1 (brand image and purchase intention). (β =0. 305, p<0.01).

Table 5.31

Multiple Regressions: total image and purchase intention (Beta coefficient)

Variables	purchase intention
Corporate image	.512***
Brand image	.305***
R ²	.516
Adjusted R ²	.513
$\Delta \mathbf{R}^2$.516
F change	171.927***

Source: prepared by researcher, (2016). Note: Level of significance:

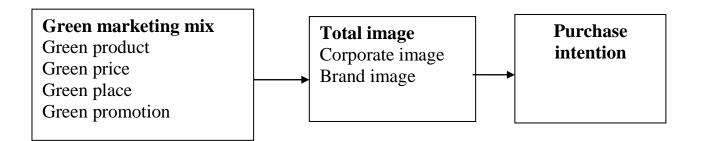
^{***}p<0.01

5.7.4 Mediation Effect of Total Image

The support from the hypotheses provides the initial steps required to test the Hypotheses in the study which predicts whether total image. May be a mediating variable between green marketing mix (green product, green price, green place, and green promotion) and purchase intention. Of (Baron & Kenney, 1986). As shown in figure 5.6 below.

Figure 5.6

Mediation Effect of total image

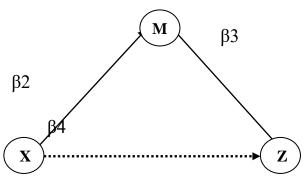


To test these hypotheses, this study was applied a three-step hierarchical regression recommended by (Baron & Kenny, 1986). First step, the independent variable must affect the dependent variable significantly (\$\mathbb{B}\$1 must be significant). Second step, the independent variable should affect the mediating variable (\$\mathbb{B}\$2 must be significant). Third step, mediating variable must influence the dependent variable significantly (\$\mathbb{B}\$3 must be significant). On the other hand, in order to establish whether mediator is fully or partial mediating the relationship between the independent variable and dependent variable, the impact of independent variable on dependent variable controlling for mediating variable should be zero or \$\mathbb{B}\$4 is not significant in fully mediator, while partial mediator exists once \$\mathbb{B}\$4 is significant but reduced. To establish that the mediator (M) is fully mediates the relationship between the initial

variable (X) and outcome variable (Z), the impact of X on Z controlling for M should be zero or 4 is not significant, whereas, partially mediator exists when 4 is significant. As shown in figure 5.7 below.

Figure 5.7





5.7.4.1 Mediation Effect of Corporate Image on the Relationship between Green Marketing Mix and Purchase Intention

The corporate image was hypothesized to mediate the relationship between green marketing mix and purchase intention. However, based on the result of multiple regression analysis that had been presented in Table 5.32, showed that (green marketing, green price, green place and green promotion) significantly influenced corporate image.

Table 5.32 showed that green product, green price, green place and green promotion significantly influenced purchase intention. Likewise, Table 5.24 showed that corporate image significantly influenced purchase intention. Accordingly, the conditions for testing the mediation effect of corporate image on purchase intention were fulfilled. Thus, the mediation effect of relationship will be considered with the relationship between

green product, green price, green place and green promotion significantly influenced purchase intention.

Table 5.32 showed the results of the hierarchical regression testing the mediation effect of corporate image on the relationship between green product, green price, green place and green promotion significantly influenced purchase intention.

In model 1, the results showed that green product, green price, green place and green promotion significantly influenced purchase intention. Significantly influence purchase intention with beta coefficient for green product (B = . 173, p<0.01), green price (B = . 149, p<0.01), green place (B=. 172, p<0.01) and green promotion (B=. 288, p<0.01). In model 2, green product (B = . 103, p<0.01), green price (B = . 112, p<0.01), green place (B = .138, p<0.01) and green promotion (B=. 176, p<0.01).

Concerning the type of mediation of corporate image on the relationship between green product, green price, green place and green promotion significantly influenced purchase intention. The results showed that the value of green product, green price, green place and green promotion significantly influenced purchase intention were significantly reduced (in model 2) this indicated that, corporate image partial mediated the relationship between green product, green price, green place and green promotion significantly influenced purchase intention. The SPSS output is reflected in appendix (B9).

Table 5.32

Hierarchical Regression: Mediation Effect of corporate image on the Relationship between green marketing mix and purchase intention

Variables	Corporate image		
	Model 1	Model 2	
Green product	.173***	.103**	
Green price	.149***	.112**	
Green place	.172***	.138***	
Green promotion	.288***	.176***	
Corporate image	-	.325***	
F value	56.423***	57.910***	
R ²	.405	.467	
Adjusted R ²	398	.459	
$\Delta \mathbf{R^2}$.405	.062	
F change	56.423***	38.375***	

Source: prepared by researcher, (2016). **Note:** Level of significant: **p<0.05, ***p<0.

5.7.4.2 Mediation Effect of Brand Image on the Relationship between Green Marketing Mix and Purchase Intention

As regard the mediation effect of brand image on the relationship between green marketing mix variables and employee performance (employee satisfaction and employee empowerment). The results of regression analysis given in Table 5.33 showed that (green product, green price, green place, and green promotion) significantly influenced brand image.

Table 5.33 showed that green product, green price, green place, and green promotion significantly influenced purchase intention. Likewise, Table 5.27 showed that brand image significantly influenced purchase intention. Accordingly, the conditions for testing the mediation effect of brand image on purchase intention were fulfilled. Thus, the mediation effect of relationship will be considered with the relationship between green product, green price, green place, and green promotion on purchase intention.

In model 1, the results showed that c green product, green price, green place, and green promotion on purchase intention. Significantly influence purchase intention with beta coefficient for green product (B = .196, p<0.01), green price (B = .119, p<0.01), green place (B=. 183, p<0.01) and green promotion (B=. 314, p<0.01). In model 2, green product (B = .169, p<0.01), green price (B = .060, p<0.10), green place (B = .180, p<0.01) and green promotion (B=.250, p<0.01).

Concerning the type of mediation of bran image on the relationship between green product, green price, green place, and green promotion and purchase intention. The results showed that the value of green product, green place, and green promotion on purchase intention were significantly reduced while green price not significantly (in model 2) this indicated that, brand image partial mediated the relationship between green product, green price, green place, and green promotion and purchase intention. The SPSS output is reflected in appendix (B9.1).

Table 5.33

Hierarchical Regression: Mediation Effect of brand image on the Relationship between green marketing mix and purchase intention

Variables	purchase intention			
	Model 1	Model 2		
Green product	.196***	.169***		
Green price	.119***	.060		
Green place	.183***	.180***		
Green promotion	.314***	.250***		
Brand image	-	.221***		
F value	65.627***	59.627***		
R ²	.445	.478		
Adjusted R ²	.439	.470		
$\Delta \mathbf{R}^2$.445	.032		
F change	65.627***	20.208***		

Note: Level of significant: *p<0.10, **p<0.05,***p<0. *Source:* prepared by researcher, (2016).

Table 5.34

Summary of the Hypotheses Testing Results of Mediation Effect of total image

Item	Statement of Hypothesis: total image mediates the relationship between green marketing mix and purchase intention.	Remark
H4.1a	Corporate image mediates the relationship between green product and purchase intention.	Supported
H4.1b	Corporate image mediates the relationship between green price and purchase intention.	Supported
H4.1.c	Corporate image mediates the relationship between green place and purchase intention.	Supported

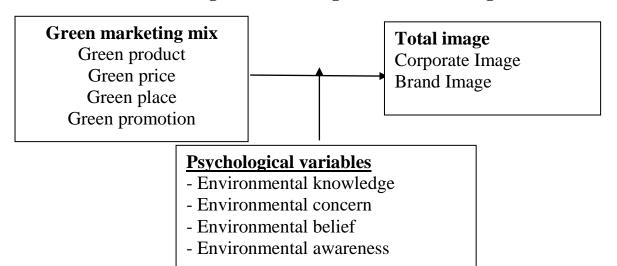
H4.1.d	Corporate image mediates the relationship between	Supported
	green promotion and purchase intention.	
H4.2.a	Brand image mediates the relationship between	Supported
	green product and purchase intention.	
H4.2.b	Brand image mediates the relationship between	Supported
	green price and purchase intention.	
H4.2.c	Brand image mediates the relationship between	Not
	green place and purchase intention.	Supported
H4.2.d	Brand image mediates the relationship between	Supported
	green promotion and purchase intention.	

5.7.5 Moderating Effect of Psychological Variables

The fifth hypothesis predicts that the four dimensions of psychological variables (Environmental knowledge, Environmental concern, Environmental belief, and Environmental awareness) moderate the relationship between green marketing mix total image as shown in Figure 5.8 below.

Figure 5.8

The Moderating Effect of Psychological variables on the Relationship between green marketing mix and total image



To test these hypotheses a three-step hierarchical regression analysis was conducted (Baron & Kenny, 1986; Sharma, Durand & Gur-Arie, 1981) for each of moderator. In the first step, the predictor variables entered in the regression equation. In the second step, moderating variable was entered into the regression equation to test its isolated effect on the criterion variable. While in step three, the process requires the introduction of a multiplicative interaction term into the regression equation. Accordingly, one multiplicative interaction term were created by multiplying the value of green marketing mix by the values of hypothesized psychological variables.

To demonstrate if the moderator effect is present on the proposed relationship, three maximum conditions were used. Firstly, the final model is significant. Secondly, the (F change) is significant. Thirdly, multiplicative interaction term is also statistically significant.

Additionally, in order to establish whether moderator is a pure or a quasi-moderating this research applied the criteria mentioned by (Sharma et al., 1981). If the coefficients of both the multiplicative interaction term and the moderator variable are significant, the moderator is a quasi-moderator. However, if the coefficient of the multiplicative interaction term was significant and the coefficient of the moderator variable effect was not significant, the moderator is a pure moderator. A pure moderator effect implies that the moderator variable (Psychological variables) modified the relationship.

On the other hand, in order to illustrate the nature of moderator effect, a graphical representation was carried out for each significant effect. This process was carried out for testing the moderating effect of each of variable (environmental knowledge, environmental concern,

environmental belief, and environmental awareness) on each of the relationship that links the four components of green marketing mix (green product, green price, green place, and green promotion) with the two types of total image (corporate image and brand image).

This study also splits each component of green marketing mix and psychological variables into three groups (low, moderate, high) by using percentiles to see how the moderator has change the relationship. The analyses began with environmental knowledge, followed by environmental concern, followed by environmental belief, and finally environmental awareness.

5.8.5.1 The Moderating Effect of Environmental Knowledge on the Relationship between Green Marketing Mix and Total Image

At first, the results of its direct and moderating effects of environmental knowledge on the relationship between green marketing mix and total image are as follows:

5.8.5.1.1 The Moderating Effect of Environmental Knowledge on the Relationship between Green Marketing Mix and Corporate Image

Table 5.35 summarized the results of moderating effect of environmental knowledge on the relationship between green marketing mix and corporate image. The results showed that the F change was significant in all three steps. The results showed that the environmental knowledge moderates the relationship between green product (product: $\beta = -.629$, p<0.01). The introduction of the interaction terms in step three increase R square about .54% and the model as a whole is significant (F=39.32, p<0.01). However, environmental knowledge shows no moderating effect between others three components (green place, green promotion and green price) and corporate image. Further

inspection reveals that the coefficient of the environmental knowledge effect was significant, which indicate that it is a quasi-moderator. The SPSS output is shown in Appendix B11.

Table 5.35

Moderating effect of environmental knowledge on the relationships between green marketing mix and corporate image

	Step 1	Step 2	Step 3
	Std. Beta	Std. Beta	Std. Beta
Predictor variables:			
Green product	.321***	.294***	.828***
Green price	.130***	.124***	.278
Green place	.112**	.117**	.040
Green promotion	.286***	.231***	.002
Moderating variable:	-	.188***	.855***
environmental knowledge			
Interaction terms:			
Know*product			629***
Know*price			528
Know*place			.331
Know*promotion			031
F value	76.916***	69.111***	42.237***
R2	.485	.515	.541
Adjusted R2	.478	.507	.529
R2 change	.485	.030	.027
F change	76.916***	20.007***	4.710**

Note: Level of significant: **p<0.05; ***p<0.01 Source: prepared By Researcher, (2016).

Figure 5.9

Moderating effect of environmental knowledge on the relationships between green product and corporate image

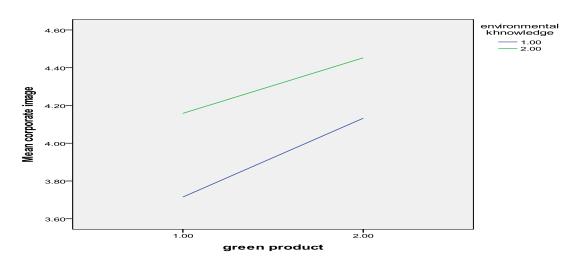


Table 4.33 summarized the results of moderating effect environmental knowledge on the relationship between green product and corporate image. The results showed that the results showed that the F change was significant in all three steps. The results showed that the environmental knowledge moderates the relationship between the green product :B= 629, p<0.01. the introduction of the interaction terms in step three increase R square about 5% and the model as a whole is significant. However, the environmental knowledge show no moderating effect between green product and corporate image. Further inspection reveals that the coefficient of the environmental knowledge effect was significant, which indicate that it is a pure moderator. The SPSS output is shown in appendix B11.

5.8.5.1.2 The Moderating Effect of Environmental Knowledge on the Relationship between Green Marketing Mix and Brand Image

Table 5.36 summarized the results of moderating effect of knowledge relationship between environmental on the marketing mix and brand image. The results showed that the F change was significant in all three steps. The results showed that the environmental knowledge moderates the relationship between only two component of green marketing mix (green price: β = -1.062, p<0.01; green place: β = -1.136, p<0.01). The introduction of the interaction terms in step three increase R square about . 55% and the model as a whole is significant (F=44.57, p<0.01). However, environmental knowledge show no moderating effect between others two components (green product and green promotion) and corporate image. Further inspection reveals that the coefficient of the environmental knowledge effect was significant, which indicate that it is a quasi-moderator. The SPSS output is shown in Appendix B11.

Table 5.36

Moderating effect of environmental knowledge on the relationships between green marketing mix and brand image

	Step 1	Step 2	Step 3
	Std. Beta	Std. Beta	Std. Beta
Predictor variables:			
Green product	.144***	.125***	.248
Green price	.282***	.276***	.794***
Green place	.079	.084	.659***
Green promotion	.284***	.232***	.153

Moderating variable:		.179***	2.192***
environmental knowledge	-		
Interaction terms:			
know*product			380
know*price	-1.062***		
know*place	-1.136***		
know*promotion			019
F value	53.744***	48.077***	44.571***
R2	.394	.422	.552
Adjusted R2	.387	.413	.540
R2 change	.394	.028	.130
F change	53.744***	15.781***	23.643***

Note: Level of significant: **p<0.05; ***p<0.01 Source: prepared By Researcher, (2016).

Figure 5.10

Moderating effect of environmental knowledge on the relationships between green price and brand image

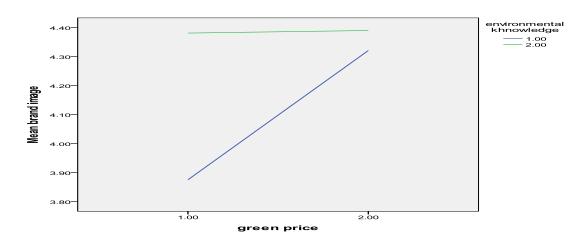
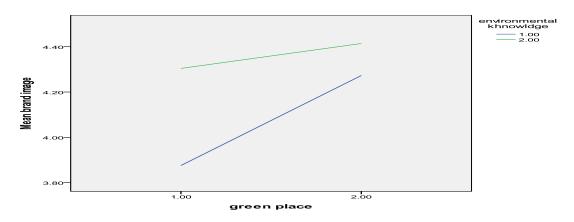


Figure 4.10 illustrates the moderating effect of environmental knowledge on green price brand image relationship. It can be observed from the figure that environmental knowledge was discovered to impact positively the brand image along low to moderate range of

green price when a companies facing low level of environmental knowledge was discovered to impact positively the brand image along low to moderate range of green price when a companies facing low level of environmental knowledge. However, above moderate range of environmental knowledge would result in a drastic increase in brand image. Additionally, in low range of environmental knowledge. However, above moderate range of environmental knowledge would result in a drastic increase in brand image. Additionally, in low range of environmental knowledge companies that have facing moderate level of environmental knowledge show a weaker tendency to have brand image with companies that have facing high level of green price achieved greater brand image than companies that have facing moderate level of environmental knowledge. Again, above moderate range of environmental knowledge that facing moderate level of environmental knowledge has achieved greater brand image than banks that facing high level environmental knowledge.

Figure 5.11

Moderating effect of environmental knowledge on the relationships between green place and brand image



In terms of the moderating effect of environmental knowledge on the relationship between the green place and brand image, figure

4.11 shows this relationship. It can be observed from the figure that environmental knowledge was discovered to negative impact the brand image along low to moderate range of environmental knowledge. However, above moderate range of environmental knowledge would result in a drastic decrease in brand image. Additionally, the figure shows that in low range of environmental that facing knowledge, companies moderate environmental knowledge were seen to achieve greater brand image compare with the companies that facing low environmental knowledge.

5.8.5.2 The Moderating Effect of Environmental Concern on the Relationship between Green Marketing Mix and Total Image

At first, the results of its direct and moderating effects of environmental concern on the relationship between green marketing mix and total image are as follows:

5.7.5.2.1 The Moderating Effect of environmental concern on the Relationship between green marketing mix and corporate image

Table 5.37 summarized the results of moderating effect of environmental concern on the relationship between green marketing mix and corporate image.

The results showed that the F change was significant in all three steps. The results showed that the environmental concern moderates the relationship between green price and corporate image (green place: β = . -1.399, p<0.01). The introduction of the interaction terms in step three increase R square about. 54% and the model as a whole is significant (F=42.49, p<0.01). However, environmental concern show no moderating effect between others three components (green price, green promotion and green product) and corporate image. Further in

section reveals that the coefficient of the environmental concern effect was significant, which indicate that it is a quasi-moderator. The SPSS output is shown in Appendix B11.

Table 5.37

Moderating effect of environmental concern on the relationships between green marketing mix and corporate image

	Step 1	Step 2	Step 3
	Std. Beta	Std. Beta	Std. Beta
<u>Predictor variables:</u>			
Green product	.280***	.236***	.016
Green price	.104**	.085*	092
Green place	.161***	.143***	1.013***
Green promotion	.299***	.233***	.113
Moderating variable:	-	.235***	.740***
environmental concern			
<u>Interaction terms</u> :		l	
con*product			.311
con*price			.225
con*place			-1.399***
con*promotion			.109
F value	74.599***	69.974***	42.490***
R2	.476	.517	.542
Adjusted R2	.470	.510	.529
R2 change	.476	.041	.025
F change	74.599***	27.431***	4.447**
		1	1

Note: Level of significant: *p<0.10; **p<0.05; ***p<0.01 Source: prepared By Researcher, (2016).

Figure 5.12

Moderating effect of environmental concern on the relationships between green place and corporate image

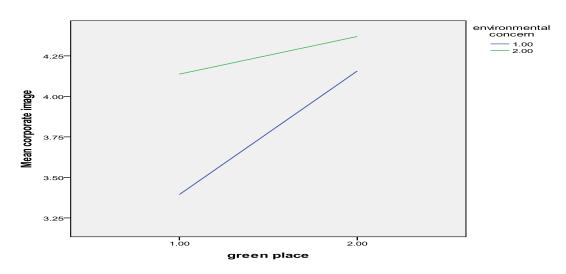


Figure 5.12 shows the moderating effect of environmental concern on the relationship between the green place and corporate image. This shows that at lower range of green place, green place has negligible negative impact on corporate image for consumers that have facing low and high environmental concern. However, for both moderate and highly environmental concern, retaining above moderate ranges of green place would contribute to corporate image. Concerning moderate level of environmental concern, the figure shows that green place has continuous positive impact on corporate image. Another inspection can be made is that highly and moderately environmental concern achieved greater contribute to corporate image than moderate environmental concern in highly range of green place.

5.7.5.2.2 The Moderating Effect of Environmental Concern on the Relationship between Green Marketing Mix and Brand Image

Table 5.38 summarized the results of moderating effect of environmental concern on the relationship between green marketing and brand image.

The results showed that the F change was significant in all three steps. The results showed that the environmental concern moderates the relationship between three component of green marketing mix (green product: β = -1.507, p<0.01; green price: β = -.601, p<0.05; green place: β = -.989, p<0.05). The introduction of the interaction terms in step three increase R square about .54% and the model as a whole is significant (F=42.41, p<0.01). However, environmental concern shows no moderating effect between others three components (green place, green promotion and green product) and brand image. Further inspection reveals that the coefficient of the environmental concern effect was significant, which indicate that it is a quasi-moderator. The SPSS output is shown in Appendix B11.

Table 5.38

Moderating effect of environmental concern on the relationships between green marketing mix and brand image

	Step 1	Step 2	Step 3
	Std. Beta	Std. Beta	Std. Beta
Predictor variables:			
Green product	.163***	.124**	.929***
Green price	.265***	.251***	.535***
Green place	.083	.068	.623**

Green promotion	.271***	.218***	149
Moderating variable:	_	.206***	1.951***
environmental concern	_		
<u>Interaction terms</u> :			
con*product			-1.507***
con*price			601**
con*place			989**
con*promotion			.503
F value	51.075***	46.719***	42.409***
R2	.383	.416	.541
Adjusted R2	.376	.407	.528
R2 change	.383	.033	.125
F change	51.075***	18.456***	22.039***

Note: level of significant:*p<0.10; **p<0.05; ***p<0.01 Source: prepared by researcher, (2016)

Figure 5.13

Moderating effect of environmental concern on the relationships between green price and brand image

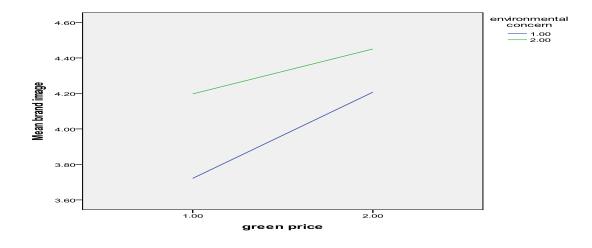
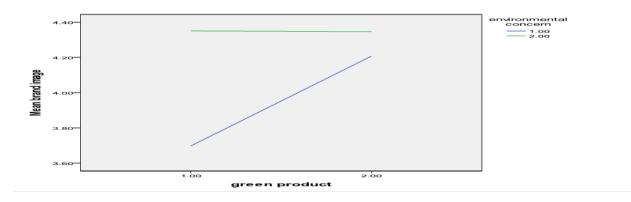


Figure 5.14 shows the moderating efect of environmental concern on the relationship between green price and brand image . in terms of

consumers that have facing high level of environmental concern, price was discovered to negative impact the brand image moderate range of green price. conversely, above along low to moderate range of green price would result in a drastic increase in brand image green price on the other hand was discovered to have negligible impact on brand image for consumers that facing moderate level of environmental concern theough all range of green price. Additionally, figure 5.29 shows that positive relationship would still exist between green price and brand image without taking into account the environmental concern in consumers that have facing lower level of environmental concern generally, consumers that facing low level of environmental concern attained the brand image for highly range of green price, followed by highly environmental concern.

Figure 5.14

Moderating effect of environmental concern on the relationships between green product and brand image

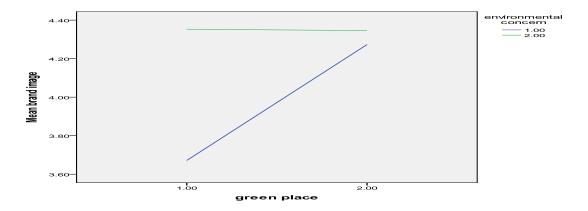


The graph depicted in figure 4.14 illustrates the effect of environmental concern on the relationship between green product and brand image. this shows that at lower range of green product, green product has positive impact on brand image for consumers

that have facing low and high environmental concern. However, for both moderate and highly environmental concern, retaining above moderate ranges of green product would contribute to corporate image. Concern moderate level of environmental concern, the figure shows that green product has continuous positive impact on corporate image. Another inspection can be made is that highly and moderately environmental concern achieved greater contribute to corporate image than moderate environmental concern in highly range of green product.

Figure 5.15

Moderating effect of environmental concern on the relationships between green place and brand image



shows moderates effect of environmental concern 5.15 on the relationship between green place and brand image. this consumers that have facing shows that in high level of environmental concern, green place was discovered to positive brand image along moderate range of impact the low to However, above moderate range of green place green place. would result in a drastic increase in brand image. Quite the for that have facing high level of opposite consumers

environmental concern which shows that green place not impact brand image .

5.8.5.3 The Moderating Effect of Environmental Belief on the Relationship between Green Marketing Mix and Total Image

At first, the results of its direct and moderating effects of environmental belief on the relationship between green marketing mix and total image are as follows:

5.8.5.3.1 The Moderating Effect of Environmental Belief on the Relationship between Green Marketing Mix and Corporate Image

Table 5.39 summarized the results of moderating effect of environmental belief on the relationship between green marketing mix and corporate image.

The results showed that the F change was significant in all three steps. The results showed that the environmental belief moderates the relationship between green place and corporate image (green place: β = -.833, p<0.05). The introduction of the interaction terms in step three increase R square about .47% and the model as a whole is significant (F=31.93, p<0.01). However, environmental belief show no moderating effect between others three components (green price, green promotion and green product) and corporate image. Further inspection reveals that the coefficient of the environmental belief effect was significant, which indicate that it is a quasi-moderator. The SPSS output is shown in Appendix B11.

Table 5.39

Moderating effect of environmental belief on the relationships between green marketing mix and corporate image

	Step 1	Step 2	Step 3
	Std. Beta	Std. Beta	Std. Beta
<u>Predictor variables:</u>			
Green product	.207***	.158***	.081
Green price	.121**	.087	066
Green place	.107**	.086	.612**
Green promotion	.342***	.290***	.334
Moderating variable:	-	.233***	.652***
environmental belief			
<u>Interaction terms</u> :			
belief*product			.091
belief *price			.194
belief *place			833**
belief *promotion			123
F value	58.538***	54.596***	31.929***
R2	.411	.449	.465
Adjusted R2	.404	.441	.450
R2 change	.411	.038	. 016
F change	58.538***	23.292***	2.430**

Note: level of significant:*p<0.10; **p<0.05; ***p<0.01 Source: prepared By researcher,

Moderating effect of environmental belief on the relationships between green place and corporate image

Figure 5.16

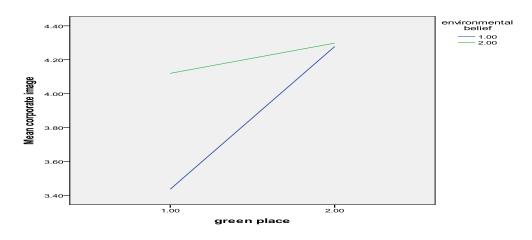


Figure 5.16 shows the moderate effect of environmental belief on the relationship between green place and corporate image. This result indicates that consumers that are facing high level of environmental belief show positive impact of green place on corporate image at high range of green place. with regards to consumers that facing moderate level of environmental belief, green place was not found to influence the corporate image at low and moderate range of green place. however, beyond moderate range of green place is shown to drastically improve the corporate image. for low level of environment belief, on the other hand ,green place was found to influence continuously the corporate image at all range of green place. Corporate image is composed of elements go beyond an individual's perception. It is the interactions from experiences, impressions, beliefs, feelings and knowledge between stakeholders and corporations (Lea & the Worsley, 2005).

5.7.5.3.2 The Moderating Effect of Environmental Belief on the Relationship between Green Marketing Mix and Brand Image

Table 5.40 summarized the results of moderating effect environmental belief on the relationship between green marketing mix and brand image. The results showed that the F change was significant in all three steps. The results showed that the environmental moderates the relationship between green price and brand image (green; green price: β = -.942, p<0.01). The introduction of the interaction terms in step three increase R square about .52% and the whole is significant (F=39.57, p<0.01). However, model as a belief environmental shows no moderating effect between three component of green marketing mix (green promotion, green and green place) and brand image. Further inspection product reveals that the coefficient of the environmental belief effect was significant, which indicate that it is a quasi-moderator. The SPSS output is shown in Appendix B11.

Table 5.40

Moderating effect of environmental belief on the relationships between green marketing mix and brand image

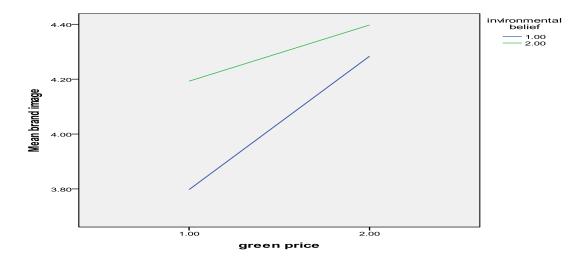
	Step 1	Step 2	Step 3
	Std. Beta	Std. Beta	Std. Beta
Predictor variables:			
Green product	.144***	.100**	.293
Green price	.282***	.251***	.778***
Green place	.079	.062	.312
Green promotion	.284***	.241***	.346
Moderating variable:	-	.216***	1.523***

environmental belief			
Interaction terms:			
belief*product			377
belief *price			942***
belief *place	459		
belief *promotion	280		
F value	53.744***	49.508***	39.572***
R2	.394	.429	.523
Adjusted R2	.387	.421	.510
R2 change	.394	.035	.094
F change	53.744***	20.112***	15.924***

Note: level of significant: *p<0.10; **p<0.05; ***p<0.01 Source: prepared By researcher,

Figure 5.1

Moderating effect of environmental belief on the relationships between green price and brand image



5.8.5.4 The Moderating Effect of Environmental Awareness on the Relationship between Green Marketing Mix and Total Image

At first, the results of its direct and moderating effects of environmental awareness on the relationship between green marketing mix and total image are as follows:

5.7.5.4.1 The Moderating Effect of Environmental Awareness on the Relationship between Green Marketing Mix and Corporate Image

For moderating effect of environmental awareness on the relationships between green marketing mix and corporate image, the results are presented in Table 5.41. An in section on the beta coefficients for interaction terms shows that environmental awareness moderates the relationship between two components of green marketing mix and corporate image, namely, green product (β =-.375, p<0.01), and green place (β =-.925, p<0.05). The introduction of the interaction terms in step four increase R square near 51% and the model as a whole is significant (F=37.78, ρ <0.01). The SPSS output is shown in Appendix B11.

Table 5.41

Moderating effect of environmental awareness on the relationships between green marketing mix and corporate image

	Step 1	Step 2	Step 3
	Std. Beta	Std. Beta	Std. Beta
Predictor variables:			
Green product	.223***	.200***	.433*
Green price	.130**	.107*	584**
Green place	.130*	.118*	.748**

Green promotion	.353***	.347***	.237
Moderating variable:		.147**	.227
environmental awareness	_		
Interaction terms:			
aware*product			375***
aware *price			1.047
aware *place			925**
aware *promotion			.135
F value	72.535***	62.409***	37.770***
R2	.466	.485	.510
Adjusted R2	.460	477	.496
R2 change	.466	.019	.024
F change	72.535***	12.156**	4.074**

Note: level of significant:*p<0.10; **p<0.05; ***p<0.01 Source: prepared By researcher, (2016).

5.7.5.4.1 The Moderating Effect of Environmental Awareness on the Relationship between Green Marketing Mix and Brand Image

Table 5.42 summarized the results of moderating effect of environmental awareness on the relationship between green marketing mix and brand image.

The results showed that the F change was significant in The results showed that the environmental three steps. moderates the relationship between tow component of awareness (green price: β = -1.281, p<0.01; green marketing mix green promotion: β = -.762, p<0.01). The introduction of the interaction terms in step three increase R square about .34% and the model (F=31.93, p<0.01). as a whole is significant However,

environmental awareness shows no moderating effect between others tow components (green price and green promotion) and brand image. Further inspection reveals that the coefficient of the environmental awareness effect was significant, which indicate that it is a quasi-moderator. The SPSS output is shown in Appendix B11.

Table 5.42 Moderating effect of environmental awareness on the relationships between green marketing mix and brand image

	Step 1	Step 2	Step 3
	Std. Beta	Std. Beta	Std. Beta
Predictor variables:			
Green product	.122**	.089	.330
Green price	.256***	.219***	.991***
Green place	.037	.019	.508
Green promotion	.207***	.193***	480
Moderating variable:		.198***	1.113***
environmental awareness	_		
Interaction terms:		l	
aware*product			447
aware *price			-1.281***
aware *place			762**
aware *promotion			1.006**
F value	26.792***	25.334***	18.558***
R2	.246	.279	.341
Adjusted R2	.237	.268	.322
R2 change	.246	.033	.062
F change	26.792***	14.946***	7.551***

Note: level of significant:*p<0.10; **p<0.05; ***p<0.01 Source: prepared By researcher, (2016)

Figure 5.18

Moderating effect of environmental awareness on the relationships between green price and brand image

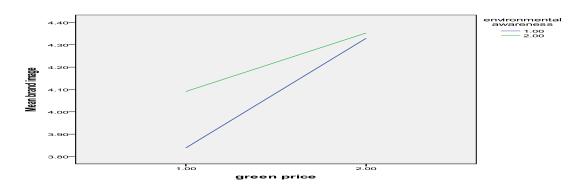


Figure 5.19

Moderating effect of environmental awareness on the relationships between green place and brand image

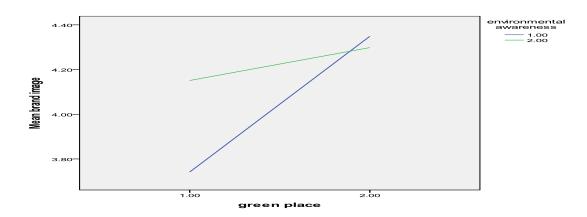
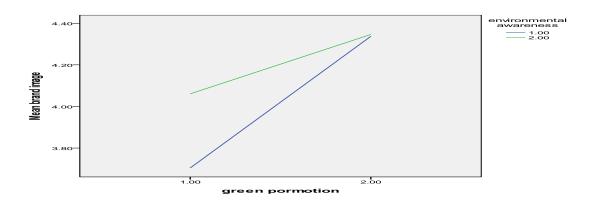


Figure 5.19 above shows the moderating effect of environmental awareness on the relationship between green place and brand image, the figure indicates that when consumers faces low level of environmental awareness the relationship between green place and consumers brand image increase and opposite is right, the hypothesis (H4.2) in this study predicts a positive moderating effect of environmental awareness on the relationship between green place and brand image.

Moderating effect of environmental awareness on the relationships between green promotion and brand image

Figure 5.20



The figure above (5-20) demonstrates the moderating influence of environmental awareness on relation between green promotion and brand image; the result indicates that consumers that are faced low level of environmental awareness will positive impact on high level of green promotion and brand image relationship.

5.7.5 Summary of hypothesis test

Table 4.43b shows the summary of the hypotheses related to the green marketing mix and total image, the moderating effect of psychological variables, we tested thirteen hypotheses in four different model.

Table 4.43

Summary the result of testing hypotheses concerning the moderating effect of psychological variables between green marketing mix and total image

Item	Statement of hypotheses:	Remark
H5	The Moderating Effect if Psychological variables on the	Partially
	Relationship between green marketing mix variables and	Supported
	total image	
H5.1	The Moderating Effect if environmental knowledge on the	Partially
	Relationship between green marketing mix variables and	Supported
	total image	
H5.1.1	The Moderating Effect if environmental knowledge on the	Partially
	Relationship between green marketing mix variables and	Supported
	corporate image.	
H5.1.1.a	The Moderating Effect if environmental knowledge on the	Supported
	Relationship between green product variables and corporate	
	image	
H5.1.1.b	The Moderating Effect if environmental knowledge on the	Not
	Relationship between green price variables and corporate	Supported
	image	
H5.1.1.c	The Moderating Effect if environmental knowledge on the	Not
	Relationship between green place variables and corporate	Supported
	image	
H5.1.1.d	The Moderating Effect if environmental knowledge on the	Not
	Relationship between green promotion variables and	Supported
	corporate image	
H5.1.2	The Moderating Effect if environmental knowledge on the	Partially

	Relationship between green marketing mix variables and	Supported
	brand image	
H5.1.2.a	The Moderating Effect if environmental knowledge on the	Not
	Relationship between green product variable and brand	Supported
	image	
H5.1.2.b	The Moderating Effect if environmental knowledge on the	Supported
	Relationship between green price variable and brand image	
H5.1.2.c	The Moderating Effect if environmental knowledge on the	Supported
	Relationship between green place variable and brand	
	image	
H5.1.2.d	The Moderating Effect if environmental knowledge on the	Not
	Relationship between green promotion variable and brand	Supported
	image	
H5.2	The Moderating Effect if environmental concern on the	Partially
	Relationship between green marketing mix variables total	Supported
	image.	
H5.2.1	The Moderating Effect if environmental concern on the	partially
	Relationship between green marketing mix variables	Supported
	.corporate image	
H5.2.1.a	The Moderating Effect if environmental concern on the	Not
	Relationship between green product variables corporate	Supported
	image	
H5.2.1.b	The Moderating Effect if environmental concern on the	Not
	Relationship between green price variables corporate	Supported
	image	
H5.2.1.c	The Moderating Effect if environmental concern on the	Supported
	Relationship between green place variables corporate	
	image	

H5.2.1.d	The Moderating Effect if environmental concern on the	Not
	Relationship between green promotion variables corporate	Supported
	image	
H5.2.2	The Moderating Effect if environmental concern on the	Partially
	Relationship between green marketing mix variables brand	Supported
	.image	
H5.2.2.a	The Moderating Effect if environmental concern on the	Supported
	Relationship between green product variables brand image	
H5.2.2.b	The Moderating Effect if environmental concern on the	Supported
	Relationship between green price variables brand image	
H5.2.2.c	The Moderating Effect if environmental concern on the	Supported
	Relationship between green place variables brand image	
H5.2.2.d	The Moderating Effect if environmental concern on the	Not
	Relationship between green product variables brand image	Supported
H5.3	The Moderating Effect if environmental belief on the	Partially
	Relationship between green marketing mix variables and	Supported
	total image	
H5.3.1	The Moderating Effect if environmental belief on the	Partially
	Relationship between green marketing mix variables and	Supported
	corporate image	
H5.3.1.a	The Moderating Effect if environmental belief on the	Not
	Relationship between green product and corporate image	Supported
H5.3.1.b	The Moderating Effect if environmental belief on the	Not
	Relationship between green price and corporate image	Supported
H5.3.1.c	The Moderating Effect if environmental belief on the	Supported
	Relationship between green place and corporate image	
H5.3.1.d	The Moderating Effect if environmental belief on the	Not
	Relationship between green promotion and corporate	Supported

	image	
H5.3.2	The Moderating Effect if environmental belief on the	partially
	Relationship between green marketing mix variables and	Supported
	brand image	
H5.3.2.a	The Moderating Effect if environmental belief on the	Not
	Relationship between green product and brand image	Supported
H5.3.2.b	The Moderating Effect if environmental belief on the	Supported
	Relationship between green price and brand image	
H5.3.2.c	The Moderating Effect if environmental belief on the	Not
	Relationship between green place and brand image	Supported
H5.3.2.d	The Moderating Effect if environmental belief on the	Not
	Relationship between green promotion and brand image	Supported
H5.4	The Moderating Effect if environmental awareness on the	partially
	Relationship between green marketing mix variables and	Supported
	total image	
H5.4.1	The Moderating Effect if environmental awareness on the	antecedent
	Relationship between green marketing mix variables and	
	corporate image	
H5.4.1.a	The Moderating Effect if environmental awareness on the	supported
	Relationship between green product and corporate image	
H5.4.1.b	The Moderating Effect if environmental awareness on the	Not
	Relationship between green price and corporate image	supported
H5.4.1.c	The Moderating Effect if environmental awareness on the	Supported
	Relationship between green place and corporate image	
H5.4.1.d	The Moderating Effect if environmental awareness on the	Not
	Relationship between green promotion and corporate	Supported
	image	
H5.4.2	The Moderating Effect if environmental awareness on the	partially

	Relationship between green marketing mix variables and	supported
	brand image	
H5.4.2.a	The Moderating Effect if environmental awareness on the	Not
	Relationship between green product variables and brand	Supported
	image	
H5.4.2.b	The Moderating Effect if environmental awareness on the	Supported
	Relationship between green price and brand image	
H5.4.2.c	The Moderating Effect if environmental awareness on the	Supported
	Relationship between green place and brand image	
H5.4.2.d	The Moderating Effect if environmental awareness on the	supported
	Relationship between green promotion and brand image	

5.8 Summary of the Chapter

This chapter presents the result of analyzing data, which was Sudanese universities from students. The data generated was analyzed using various statistical analysis techniques. The first part, T- test was conducted to test for non-different followed by the validity and reliability test on the items used to measures the study variables. Then, descriptive analyses were utilized to identify the characteristics of responding consumers and respondents and also conducted to variables under study. Bivariate correlations were all identify Inter relationships among the variables. Finally, multiple hierarchical regression and moderated hierarchical regression were used to test research hypotheses. The next chapter reviews the finding and discusses the results and their implications as well limitations and conclusions of the study. as

CHAPTER SIX

DISCUSSION AND CONCLUSIONS

6.0 Introduction

The final chapter is the conclusion and remarks, section one will discuss the major findings and comparing to the literature available, discussion of the results in section two, research implication, limitations, recommendation and conclusion.

6.1 Recapitulation of the Major Findings

This section is summary of the major findings of the study and relates to the findings of previous studies when it possible, and will discuss more each findings on the nest section. This study was basically proposed to identify the Impact of green marketing mix on purchase intention, the moderating role of psychological variables, and study on Sudanese universities in Khartoum state. Further, the study was also tested the moderating influence of psychological variables on the relationship between green marketing mix, and total image, and mediating influence of total image on the relationship between green marketing mix, and purchase intention.

The objectives of this study are 1) to determine the relationship between green marketing mix variables and total image. 2) To find out the effect the relationship total image on purchase intention of food product. 3) To assess the effect of total image as mediating variable between green marketing mix variables and purchase intention. 4) To show the possibility of psychological variables as moderator variable between

green marketing mix variables and total image. 5) Suggesting applicable solutions to deal with expect of purchase intention to green food product.

Five research questions were outlined to achieve the aims of the study. The questions are as follows:

- 1- To what extent do the green marketing mix variables influence purchase intention?
- 2- To what extent do total image Influence purchase intention?
- 3- To what extent do the green marketing mix variables influence on total image?
- 4- Does the total image mediate the relationship between green marketing mix variables and purchase intention?
- 5- To what extent do psychological variables moderate the relationship between green marketing mix variables, and total image as overall outcome?

Based on literature review, the study identified the variables to be focused on and to include four components of green marketing mix (green product, green price, green place, and green promotion) and one dimension of purchase intention. This is in addition to two types of total image (corporate image and brand image,) and four dimensions of institutional context (environmental knowledge, environmental concern, environmental belief, and environmental awareness).

The data for this research was obtained from a cross-sectional survey on 341 students Sudanese universities in Khartoum. The purposive sampling technique was used in selecting a sample for this study (judgment). Data collection was done through a structured questionnaire survey. The t-tests showed no significant differences between control variable and (dependent variable, mediator variables), this result consistent with the

research (Gray, 2012; Ansar, 2013; Perez & Bosque, 2014; Christopher et al, 2008).

Before running the analyses for hypothesis testing, factor analysis and reliability test were conducted to ensure goodness of measures. Factor analysis was used to test for validity of the measures on all the study variables. Particularly, varimax rotation was utilized to identify the dimensionality of the research variables. The results indicated that the extracted factors fit the conceptualized variables. The reliability of empirical measurements was obtained by internal consistency method using Cronbach's alpha test. The result of descriptive analysis showed that most of the responding large government universities were from the Sudan and Al-Nilein followed Alzaim Alazhari as well as private universities.

To describe the characteristics of surveyed firms and all variables under study, the study used descriptive statistics. The results showed that the Sudanese universities emphasized more on green product followed by green promotion, green place and the lowest components of societal marketing orientation was the green price. The result of the t-test revealed that there are no significant differences between control variables namely :(gender, age, income, college, status, occupation and experience) and all variables under the study.

The results of the bivariate correlations between the constructs incorporated in both the measurement and theoretical framework shows that all the correlations are in the hypothesized positive relationship. The result exposed that all the four components of green marketing mix are significantly correlated with the one dimension of purchase intention. However, the results also revealed that the relationship between all the four components of green marketing mix and all the two types of total image are distinctively positive. The patterns of the correlation revealed

that two dimensions of total image are significantly correlated with the purchase intention.

The first hypothesis predicts that there is a positive relationship between green marketing mix and purchase intention. The results revealed that there is a positive relationship between the four components of green marketing mix and purchase intention.

The second hypotheses in this study predict that the four green marketing mix components (*green product, green price, green place, and green promotion*) have a positive relationship with the two types of total image (corporate image and brand image). The results predict that there significant positive relationships between green marketing mix with all two types of total image.

The third hypothesis predicts that total image (corporate image, and brand image) have a positive relationship with purchase intention. The results indicate that total image have a positive relationship with one dimension of purchase intention.

The forth hypothesis predicts that four types of total image (*corporate image*, *and brand image*) mediate the relationship between green marketing mix (*green product, green price, green place, and green promotion*) and the one dimension of purchase intention. The results implied that green marketing mix variables influence the purchase intention through corporate image and brand image.

The fifth hypothesis predicts that the four dimensions of institutional context (environmental knowledge, environmental concern, environmental belief, and environmental awareness) moderate the relationship between green marketing mix and total image (corporate image and brand image). The result of testing this hypothesis revealed that environmental knowledge moderate the relationship between one components of green marketing mix (green product) and corporate image.

In addition, the results revealed environmental knowledge moderate the relationship between two components of green marketing mix (green price and green place) and brand image. Environmental concerns were found to moderate the relationship between one components of green marketing mix (green price) and relationship corporate image. Environmental concerns were also found to moderate the relationship between three components of green marketing mix (green product, green price and green place) and brand image. The results, furthermore, revealed that environmental belief moderate only the relationship between green place and corporate image.

With regard to environmental awareness, the results revealed that it moderates the relationship between two components of green marketing mix (green product, and green place) and corporate image. Environmental awareness was also found to moderate the relationship between two components of green marketing mix (green price and green place) and brand image.

The results of testing the moderating effect of psychological variables between green marketing mix and total image showed that psychological variables moderates the relationship between green price and corporate image.

6.2 Discussion

Based on the previous section, this section further discusses the research findings. The discussion is based on theoretical perspective, empirical evidence and conceptual studies that are considered to be appropriate for this study. The discussion covers the dimensions of green marketing mix and purchase intention and total image, the relationship between total image and purchase intention. The discussion also covers the mediating effect of total image between green marketing mix and purchase intention

as well as the moderating effects of psychological variables context and the control variables.

6.2.1 The Relationship between Green Marketing Mix and Purchase Intention

The first objective of the study was to investigate the impact of green marketing mix elements on purchase intention in Sudanese universities in Khartoum state. Data analysis and interpretation revealed the following major findings under this objective. This study found that green marketing perspective students in Sudanese universities. These results are discussed in the following subsections.

The results of the study showed that all four components of green marketing mix (green product, green price, green place, and green promotion) have positive relationship with purchase intention. The findings of this study proved that green product has significant relationship with purchase intention. This means that enhancing consider a product to be of high quality and products that will not cause any health hazard to human being and animal wellbeing intend to purchase green products because it is more concern on food safety. This coincides with the results of (Wanniayake & Pradeep, 2008) who found the significant relationship between environment friendly products and packages, promotion with the environment friendly product information and Place and distribution on customer buying decisions. This is also consistent with the research suggesting that the credibility of claim in green advertising plays the most important role in influencing consumer purchase intention of green products. Consumer attitude toward green advertising positively influence consumer purchase intention of green products (Bing, 2013). This is also consistent with the research

suggesting environmental advertisements, Price and ecological packaging positively related with the Green purchase intention (Ansar, 2013).

Similar to the effect of green product, green promotion was found in this study to have a significant and positive relationship with purchase intention. This result aligns with previous research that found that companies need to increase their communication with the customers' ongoing green, and that attributes like price and quality are more important than "environmental responsibility (Syeda, 2011). And that advertising plays an important role in influencing the consumer in purchasing the green product (Yavuz, 2011; Tias, 2013).

The result of the study revealed that green product has a significant effect on purchase intention. This result is consistent with the previous findings that found significant relationship between Perception of environment-friendly product has positive effect on purchase intention for environment-friendly product (Yusof et al, 2013; Lin & Huang, 2012). This result disagree with D'Souza et al, (2006) how found influence of perception about green products on purchase intention even if the product is somewhat more expensive is negative and stronger. Sampson (2009) found a significant estimate and positive attitudes toward green products increase, intention to purchase green apparel increases, was indicated.

The results further reveal that green promotion positively affects purchase intention. This result aligned with Bing Zhu, (n.d) found there is relationship between green advertising and consumers" purchase intention of green products. Weng & run, (2013) suggested that was no significant effect of sales promotion techniques preferences on purchase satisfaction and behavioural intention. Furthermore, Juwaheer & Pudaruth, (2012) argued positive correlation between customers' level of

preference towards green advertisements and their green purchase intentions, and Saadeghvaziri et al, (2013); Gandhi & Rao (2013) found that attitudes toward Web advertising were significant and positive predictor of consumer's Web advertising behavior and purchase intention. This result disagree with Elham & Nabsiah, (2011) results they showed perception of environmental advertisement had no a significant positive effect on purchase intention for environment-friendly product, and It is also another dimension of green marketing tool that is not significant with purchase behavior. However, Haytko & Matulich, (n.d) assumed green advertising may be best at reaching those who are already practicing green behaviors. Purchase intention was not significantly influenced by ad claim type, but it was significantly greater for those higher in activism than for those lower in activism behaviors. Elizabeth et al (2012) consumer relationship marketing (CRM) campaigns have positive effect on purchase intention, Hunjra et al, (2012).

According to The result has shown that green place, green price have significant effect on purchase intention. Thanika al et (2012) results showed consumers accept as true that a portion of the price for green products goes to a worthy environmental cause. While Weisstein et al, (2014) the results showed that different formats of price promotion presentations influence consumers' purchase perceptions differently. As well as D'Souza et al, (2006) respondents reported that they perceived the green products to be of lower quality than alternative products and they perceive the environmentally safe products to be more expensive than alternative products because customers appear to be more forgiving in terms of somewhat higher prices, while not being compromising in relation to quality. (Teng et al, 2012) results indicated that price is an important factor that influences the consumers' purchasing behaviour. If

the price of green foods is expensive, consumers are not willing to purchase the green foods.

Ling, (2013) results indicated some respondents that are sensitive to the price and not willing to pay for the additional price charged to the green personal care products as compared to the alternative. Other respondents that have accepted the price gap and willing to pay. The rate of changes in purchase intention for each incremental change on the environmental attitudes was higher as compared to the influence from the consumers those have accepted the fact that the price of green personal care products is generally higher than the alternative. This mean that the respondents those were price sensitive need to have higher level of environmental attitudes in order to drive themselves to have higher purchase intention. Hence, the willingness of the consumer to pay more for green personal care product is influencing the decision of consumer that driven by the environmental attitudes when come to purchasing of green personal care products.

Consumers' purchase intentions are driven by green marketing mix. The majority of the respondents are embrace to looking for modification on available green products Suresh & Phil, (n.d). Rashad & Igbazua (2011) consumers were motivated to buy from companies that are eco-friendly in the production, and consumers are willing to buy eco-friendly products but not many are willing to pay a higher price for such products. Ishaswini & Saroj (2011) noted marketers need to change their perception about the consumers that they may not pay premium price for eco-friendly products. Sangeeta et al (2014).

Purchase intention positively influences the chances of a consumer decision to purchase green products. (Hassan, 2014) results showed that's a person with positive intentions to buy green product show higher actual

buying rates than those people who have low or no intention of buying green products. Afzaal et al (2011) results show competitive price and quality of a green product have positive impact on customers green purchase behavior (GPB), if they have high and positive intention to purchase them. In addition, Konuk, (2013) results show the significantly effect of price consciousness on purchase intentions. While Junior et al, (2015) indicated that different formats of price promotion presentations influence consumers' purchase perceptions differently.

The results by D'Souza et al, (2006) also indicate that customers were not tolerant of lower quality and higher prices of green products. The influence of perception about green products on purchase intention even if the product is somewhat more expensive is negative and stronger than its negative influence on purchase even if product is of somewhat lower quality Product perception, packaging, and ingredients, appear to have no significant contribution to the overall perception of green products. In European countries should be noted that the level of WTP remains lower than the market price of organic food, which is two to three times higher than the conventional food price. Consumers' concern for their own health has a positive effect on their willingness to purchase organic food Yin et al, (2009). (Teng et al, 2012) result showed that the consumers were more likely to purchase or consume green foods because there is an existence intention will affect their behaviour towards green foods consumption.

The nature experiences level evoked by the advertisements moderates the effects of the behavioral antecedents studied on brand attitude and purchase intention. Hartmann & Ibáñez, (2012). Correlations between buying green products and ambivalent attitudes were not significant discomfort. Chang, (2011).

(Juwaheer & Pudaruth, 2012) results reveal significant relationship between green advertisements and purchase intentions of consumers. Empirical survey finding there was a significant relationship between green advertisements and purchase intentions of consumers in Sudan have proved that there is a fairly positive correlation between customer's level of preference towards green advertisements and their green purchase intentions as suggested by Hawkins et al. (1998), the emotional content in advertisement can also increase customers' attention towards these advertisements. Similarly, customers seek more concrete and authenticated product information from these advertisements to guide them in their purchasing decisions (Chan, 2004). In this respect, marketers should ensure that green advertising is effective in order to encourage customers towards greener purchasing patterns by ensuring greater accuracy of information in the green product advertisements. Therefore, business executives and marketers should emphasize on the importance of environmental concerns in Sudan.

Suki et al, (2016) reported green marketing awareness effected on consumer purchase intentions of the retail product. Ariffin et al, (2016) had found that green value had significant relationship with repurchase intention toward green products.

6.2.2 The Relationship between Green Marketing Mix and Total Image

The result of the study showed that green marketing mix has a significant effect on corporate image. This result is in line with Thanika al et (2012) research showed that customer share the view that green advertisements should promote environmental friendly products in a credible manner and consumers feel that green products should bear an eco-image and with Hashem & Al-Rifai (2011) suggests in their study statistical influence of

applying green marketing mix elements (product, price, distribution and promotion) on consumer's mental image.

The results of the study also demonstrated that green marketing mix had a positive relationship corporate image. This finding consistent with the result of Levent & Yavuz (2011) who found the corporate give more attention their product images then their corporate images. This result is also consistent with the study by Ko et al, (2013) who found that the green marketing has a direct effect on the social responsibility and product image. The result of the study also shows that green marketing mix was a significant effect brand image. The finding of the study lends support to other findings D'Souza et al, (2006) who concluded that consumers appear to be somewhat less inclined to consider known brands as being environmentally safe and seem to rely more on their own experience in selecting environmentally safe products. No association existing between "Satisfied with the information on product labels" and purchase intention if the product is somewhat more expensive. In addition, Rashad & Igbazua (2011) explained most consumers' spending pattern shows that they have a desire for brands that go green.

The difference in price between always purchasing a recycled product and a new product was considered According to Leila & Jonathan (2010), and Carneiro et al, (2005) results showed Price caused the highest impact, with low priced products positively contributing to purchase intention. On the other hand, Guinalı'u & Torres (2005) indicated distribution through traditional channels no significant differences exist in the intensity of the effect of the image.

Based on the research findings, the researcher concludes that a systematic and well-planned scheme is needed to launch a green advertising campaign. Green marketing strategy should be applied so that the firms

will be able to establish a strong corporate image of "being green" and achieve optimistic sales of green products.

Research findings reveal that the green advertising plays the most important role in influencing consumer purchase intention of green products in Sudan. Consumer attitude toward green advertising also positively influence consumer purchase intention of green products. According to Ajzen, (1991) the more positive attitude consumers have toward a behavior, the stronger intention the consumers will have to perform the behavior under his or her control. In this study, Sudanese consumers" intentions to purchase green product are strong as their attitudes toward green advertising are positive because the most respondents age among (20-30). While the consumers optimistically respond to green advertising, the companies and their products, the firms should stress their environmental actions, which will allow consumers to differentiate between "green" firms and "non-green" firms as green products are in demand. In addition, the application of green methods in production and green product attributes should be emphasized to convince and attract consumers.

Elizabeth et al (2012) investigated advertisement claim type had a significant main effect on brand attitude and no moderating or main effects of activism, gender, or occupation emerged. D'Souza & aghian (2005) found there is a significant difference in the attitudes of green advertising for high and low involved consumers. These consumers may not be interested in green advertisement because they are unwilling to buy green brands. Therefore, poor attitude towards green brands, potentially, articulates unfavorable intention to purchase a green brand.

6.2.3 The Relationship between Total Image and Purchase Intention

The current study had discovered that two components of total image namely; corporate image and brand image are positively related to the purchase intention. These results general are consistent with previous study indicating that supported direct effect of price image, brand image and perceived risk on purchase intention. Erdil, (2015). This is because Brand awareness is positively related to consumers' intention to purchase (Private label) PL products. (Kakkos et al, 2015, Sharifi, 2014). The study done by Ko et al, (2013) suggested the three factors of corporate image, product image and corporate reputation have a direct effect on purchase intentions. This finding is also coherent with a considerable body of research that have indicated that corporate image have an impact on purchase intention Karaosmanog lu et al, (2010).

Similar to the effect of corporate image, brand image was found in this study to positively effect on purchase intention. This finding is in line with Wu (2014) who reported that corporate image significantly affect behavioral intentions. And consistent with Hartmann & Apaolaza (2011) found attitude toward the advertisement significantly contributes to the attitude toward the brand. This result is also consistent with Afzaal & Israr (2012) that found the effect of competitive product price & quality in influencing the purchase of a green product is very strong for respondents from environment friendly businesses having a positive image toward the protection of the environment. In addition, (Latwal & Sharma, 2012, Chen & Chang, 2008, Latwal & Sharma, 2012; Hwang et al, (2011) results showed brand quality has a significant direct effect on purchase intention.

This result lend support to a study conducted by Huang et al, (2014) who found that green brand positioning (GBP) positively affect attitude

toward green brand (AGB). Attitude toward green brand (AGB) positively influence green purchase intention (GPI). On the other hand, Porral & Lang, (2015) indicated the influence of private label image and perceived quality on purchase intention. Consequently, Ryu et al, (2008) argued restaurant image is significant predictors of customers' behavioral intentions. Also Clow et al, (1996) explained In terms of purchase intentions, advertisements one and two were viewed as being superior to advertisements.

According to Romero & Gómez (2014) Sophistication brand personality dimensions are significant predictors of purchase intention. Thus (Simonian et al, (2012), which argued that product brand image and online store image will positively influence purchase intention. In addition Thanika al et (2012) result revealed that positive relationship between customers perceptions on brands that are less damaging to the environment and their green purchasing intentions. Consequently, the effect of the type of recall on the manufacturer's image, customer loyalty and their purchase intentions. Souiden & Pons, (2009) and store image perceptions and store brands (SB) price-image Influence significantly SB purchase intention (Diallo, 2012).

According to Christopher et al (2008) the study have found brand consciousness negatively impacts consumers' green product purchasing decision. That Higher Price and Unfamiliar Brand have a negative impact on the consumers' likelihood to buy green products. Also Gan et al, (2009) results indicted brand Consciousness negatively impacts consumers' green product purchasing decision.

Many consumers would like to purchase products that will influence manufacturers to become environmentally responsible. Manufacturers and advertisers have responded to this consumer pressure by promoting the environmental attributes of their products and packaging Church, 1994). Thanika al et (2012) found there is a fairly positive correlation between customers level of preference towards green advertisements and their green purchase intentions. (Punyatoya, 2015) suggested consumers with positive environment friendly (EF) brand attitude have significantly higher intention to purchase the brand.

Corporate image significantly positive influence on consumer purchase intention.Lin & lu, (2010). In addition sponsor image had direct and fairly strong total effects on both purchase intentions, customers' corporate perception with respect to companies placing higher priority on profitability than on reducing pollution and regulatory protection were the significant predictors of customers' negative overall perception toward green products. They are not tolerant of lower quality and higher prices of green products. The influence of perception about green products on purchase intention even if the product is somewhat more expensive is negative and stronger D'Souza et al, (2006). There is a significant relationship between green branding and green purchase intention of consumers in Sudan. (Juwaheer & Pudaruth, 2012) survey findings demonstrate a positive relationship between customer's perceptions on brands that are less damaging to the environment and their green purchasing intentions. Similarly, marketers should take into consideration that green branding can change consumer attitudes to a more sustainable greener consumption patterns. As highlighted by (Travis, 2000); Pickett-Baker & Ozaki, (2008); Wustenhagen & Bilharz, 2006) brand can change customer attitudes towards greener consumption patterns. Brand image was an antecedent of purchase intention. Jalilvand & Samiei, (2012; Bian & Moutinho, (2011).

Wei et al, (2016) results showed that corporate image relates significantly and positively to intention-to-apply. Jeng, (2016) results indicate that

airline brand credibility increases consumer purchase intention by increasing consumers' decision convenience and enhancing affective commitment.

6.2.4 Total Image Mediation the Relationship between Green Marketing Mix and Purchase Intention

The four research objective of this study deals with examining whether the two dimensions of the total image (corporate image, and brand image) mediate the relationship between green marketing mix and purchase intention. This relationship is generally important since the process, through which green marketing mix leads to purchase intention, has often been neglected in previous research.

Although, theoretically, the links between green marketing mix, total image and purchase intention were conceptualized as a conventional mediated relationship, the results of the study showed that all two components of total image (corporate image and brand image) mediated the relationship between green marketing mix and purchase intention.

The first sub-section deals with the mediating impacts of corporate image on the relationship between green marketing mix and purchase intention. The outcomes do support the mediating impact of green marketing mix on purchase intention. However, the outcomes of this research provide evidence that corporate image fully mediate the relationship between green marketing mix and purchase intention. This result aligned with Lu et al, (2015) who found the destination image fully mediates the relationship between perceived authenticity and tourists' satisfaction. And with Erdil, (2015) which suggests the mediating effect of store image on the relationship between price image and risk perception and purchase intention. In addition Eman et al, (2013) investigated the corporate image and reputation mediating between service quality and customer

satisfaction and customer loyalty. Salvad et al, (2014) empirical work has indicated the moderating role of the green corporate image in the relationship between environmental product innovations and firm performance. Store image and corporate reputation enhance private label image and perceived quality Porral & Lang, (2015).

Regarding the mediating effects of brand image on the relationship between the green marketing mix and purchase intention, the results reveal that the brand image fully mediated the relationship between green marketing mix and marketing effectiveness while it partially mediated the relationship between customer concern and purchase intention. These findings mean that green marketing mix only have an indirect effect on purchase intention after including the brand image as intervening variable.

On the other hand this results reveals that consumer attitude fully mediates the influence of environmental concern, and partly mediates the effect of perceived effectiveness belief, and functional value on purchase intention Tang et al (2013). And in line with the Sharifi, (2014) studied the brand awareness is mediating between cognition, affection, and conation directly, and future purchase intentions indirectly.

On the contrary, the partial mediating effect of brand image on the impact of green marketing mix on the purchase intention revealed that, by the introduction of brand image as intervening variable, the impact of green marketing mix on purchase intention became both direct and indirect. This would mean green marketing mix could have direct effect on purchase intention and though it is not strong, it still shows that brand image will provide an additional effect on the impact of green marketing mix on purchase intention. As well as Bian & Moutinho, (2009) found brand image is not a mediator of the effects of involvement/knowledge on

purchase intention. Bian & Moutinho (2011) found brand image is not a mediator of the effects of involvement/knowledge on purchase intention. And Tsiotsou & Alexandris, (2009) found sponsor image was to be a mediator of the relationship between sport attachment and word-of-mouth and purchase intentions.

Diamantopoulos et al, (2011) suggests country-of origin image COI impacts purchase intentions indirectly in that its influence is fully mediated by brand image. Teah et al, (2014) state image of charitable organizations has a positive influence on attitudes towards charities. Both image of charitable organizations and attitudes towards charities influence motivation to donate. Study done by Bickart & Ruth, (2012) found attitudes toward the ad and brand would mediate effects of the ecoseal and brand familiarity on purchase intentions. Effects are mediated through attitudes toward the advertisement and brand.

6.2.5 Psychological Variables Moderation the Relationship between Green Marketing Mix and Total Image

The fifth research objective of this study deals with the moderating effect of psychological variables (environmental knowledge, environmental concern, environmental belief, and environmental awareness) on the relationship between green marketing mix and total image. Accordingly, several interesting findings come to light were discussed in the next subsections. This study discovered that the degree of environmental knowledge quasi moderates the relationship between four components of green marketing mix (green product, green price, green place, and green promotion) and total image.

Tang et al (2013) found consumers' environmental concern, perceived effectiveness belief and functional value positively affect their attitude toward such products. Consumer attitude positively affects purchase

intention. Consumers' awareness of government policy is not associated with attitude or purchase intention. Kumar & Ghodeswar (2015) results showed supporting environmental protection, drive for environmental responsibility, green product experience, environmental friendliness of companies and social appeal are identified as important factors affecting green product purchase decisions. Chan et al, (2014) results reveal positive relationships between environmental knowledge, environmental awareness, environmental concern and ecological behaviour, and between ecological behaviour and intention to implement.

According to Mostafa, (2009) altruistic values, environmental concern, environmental knowledge, skepticism towards environmental claims, attitudes toward green consumption, and intention to buy green products. Zhu et al, (2013) argue promotion/diffusion can bring green food consumption intention but environmental value of consumers is needed. Education affects green food consumption intention and family income decides if green food consumption intention can really bring green food consumption behaviors.

Robinson, (2002) psychosocial variables found to be independent predictors of intention to purchase sustainably produced foods (attitudes, beliefs, perceived behavioral control, and subjective norm). People between the ages of 61 and 70 were more likely than those ages 18 to 30 to have reported past purchases and future intended purchases of sustainably produced foods.

Ling, (2013) indicated the environmental attitudes and self-efficacy are found as significant predictors to purchase intention. The interaction between environmental attitudes and willingness to pay more was found statistically significant. Interaction of environmental attitudes and

willingness to pay more will reduce the purchase intention of consumer on green personal care products. That willingness of consumers to pay more on green personal care products was moderating the relationship between environmental attitudes and purchase intention. Paul & Rana, (2012) explain health, availability and education from demographic factors positively influence the consumer's attitude towards buying organic food. Consumers are willing to pay more price for organic food but retailers will have to convince them for its benefits.

6.2.5.1 The Moderating Effects of Environmental Knowledge on the Relationship between Green Marketing Mix and Total Image

The first sub-section discussed the moderating effect of the first dimensions of psychological variables (environmental knowledge). The pattern of results revealed by the moderator analyses provided some support for the hypotheses that environmental knowledge played a significant role in moderating the relationship between green marketing mix and total image.

Concerning firms that facing high level of environmental knowledge, product was found positively influencing the firm's corporate image at moderate to high levels of product below which there is a negligible impact. In case of firms facing moderate level of environmental knowledge, product was not found to influence the corporate image at low and moderate range of product, beyond which there is positive impact. However, in low level of environmental knowledge, product was found to influence continuously corporate image at all range of product. According to Peng & Chen, (2015), diners' product knowledge can moderate the relationships between restaurant stimuli and diners' emotion. Dhruvgrewal & shnan,(1998) regard the consumer product knowledge may moderate the effects of price, brand name and store name

) on consumer internal reference price, product evaluation and purchase intention.

According to Das, (2014) knowledge about a particular brand that consumer stores in his/her memory and applies in buying situations is termed as brand association, one of the most important market based assets. The value of a retailer name (brand name). The relationship between price and quality is one such judgmental parameter. Perceived quality is a key determinant of retail brand success.

(Teng et al, 2012) results indicate consumers' knowledge and awareness of the underlying advantages that comes with green foods are associated with intention to purchase these products.

That there existed a significance relationship between environmental knowledge, attitudes, environmental concern and social influence and green purchase intention Lingyun (2013). Lizawati et al (2012) in his study indicated that there is significant direct influence between environmental knowledge and concern on green purchase intention.

On the contrary, some researcher found no significant relationship between knowledge and green product such as Bridget & Antonis (1995) suggested that no strong relationships exist between knowledge and attitudes towards the impact of green product lines on the environment. Have a positive product-line-specific environmental attitude, but with lower levels of product-line-specific environmental knowledge. Respondents' attitudes towards the impact of green product lines on the environment are not significantly higher than their knowledge of the impact of those green product lines on the environment. The growth of advertising of green product lines is bound to have increased consumer knowledge of green product lines and their impact on the environment.

Yusof et al, (2013) found relationship between responsibility feeling towards environmental issue and the perception of an environmental advertisement was significant and positive. Links between environmental knowledge and perception of environmental advertising, was non-significant. The relationship between environmental knowledge and perception of eco-product was significant and positive.

Additionally, Sampson, (2009) found consumer knowledge of green industry initiatives and green brands increase, motivation to purchase green apparel increases. Consumer knowledge of green industry initiatives and green brands increase, positive attitudes toward green apparel increases. Bian & Moutinho, (2011) found Involvement/knowledge has no significant influence on counterfeit purchase intention.

Besides, Mohamed (2007) explain influence of the consumers' natural environment orientation, ecological knowledge, and environmental concern on their attitudes towards green purchase. Environmental knowledge and environmental concern significantly influenced green purchase intention among consumers. Aman & Harun, (2012) attitude is found to have a partial mediation effect on the relationship between environmental concern and green purchase intention. Attitude is found to have no mediating effect on the relationship between environmental knowledge and green purchase intention.

Ling & Piew, (2012) in their results found government initiative has the most significant influence on green purchase intention among Malaysian consumers. Eco-label failed to show significant relationship to green purchase intention. Environmental knowledge is positively related to the green purchase intention. Environmental attitude is positively related to

the green purchase intention. Government initiative is positively related to the green purchase intention.

Barber et al, (2009) results reveal involvement with the environment would have a positive causal relationship with the knowledge constructs of objective and subjective environmental wine knowledge. Negative and significant relationship between subjective environmental wine knowledge and attitudes. Strong and significant relationship between attitude and willingness to purchase environmentally friendly wine.

Chen, (2013) there existed a significance relationship between environmental knowledge, attitudes, environmental concern and social influence and green purchase intention. There is a significant difference between the collectivistic (Chinese) and the individualistic (American) consumers with respect to environmental knowledge, attitudes, social influence and green purchase intention except environmental concern. Gan et al, (2009) discovered Involvement/knowledge has no significant influence on counterfeit purchase intention.

6.2.5.2 The Moderating Effects of Environmental Concern on the Relationship between green Marketing Mix and Total Image

This study supposed that the environmental concern purely moderate the relationship between the two components of societal marketing orientation (green price) and relationship corporate image. For the moderating effect of environmental concern on the relationship between (green product, green price, and green place) and relationship brand image, firms that face high level of regulations, social concern was discovered to have a negative impact on the relationship capability along low to moderate range of social concern. However, above moderate range of social concern would result in a drastic increase in relationship

capability. The negative relationship may be due to the fact that low to moderate social concern is explained by strategic partners as reactions to regulations rather than proactive strategy. This means that strategic partners see the social concern as pragmatic rather than altruistic (Handelman & Arnold, 1999).

Murat Ar, (2012) test managerial environmental concern only moderates the relationship between green product innovation and firm performance. Irawan & Darmayanti, (2012) explain environmental concern, perceived seriousness of environmental problems, and perceived environmental responsibility-were significantly affecting green purchasing behavior.

According to Lin & Huang, (2012) results of respondents with high environmental concerns link green products with higher functional value, social value, emotional value, conditional value, and epistemic value, and are therefore more likely to choose green than those with low concern for the environment. Obviously, consumers with high environmental concerns have more confidence in the price and quality of green products, and also entertain more positive emotions regarding them. Compared to those with low environmental concerns, consumers with high environmental concerns are more likely to be concerned with peer opinions regarding going green and related social approval. When presented with certain conditions or situations, such as perceived worsening environmental threats, or the availability of subsidies or discounts for green products, consumers with high environmental concerns are more willing to go green, Such consumers, furthermore, are more aggressive in pursuing product information, and are more likely to seek novelty. Thus, the more consumers are concerned with the environment, the more they support green products. All parties involved in green production and sale should continue advocating concepts of environmental protection and its links to consumer behavior to help consumers internalize the message and make choices accordingly. Lizawati et al (2012) found there is significant relationship between environmental concern and attitude on green purchase intention.

Ascribed environmental concern increases the probability to choose the product with a low environmental impact over the more harmful alternative Bertrandias & Gambier (2014). Therefore, environmental involvement and willingness to pay more for green products mediate the relationship between environmental concern and sustainable behaviors. Thieme et al (2015). Environmental concern has no effect on the declared purchase for green products. Environmental concern reflects the intention to purchase Juniora et al, (2015). Loebnitz & Grunert, (2015) argue the relationship between environmental concern and environmental purchase intentions was significant. Newton et al, (2015) descovered environmental concern drive purchase intentions. Participants with high levels of environmental concern express higher purchase intentions toward abnormally shaped food.

Yin et al, (2009) state consumers' concern for environmental protection and current food safety, knowledge of organic food and convenience of purchasing have a weak effect on their purchase intention. Increased knowledge of organic food does not necessarily translate into a stronger willingness to purchase. Junior et al, (2015) noted environmental concern has no effect on the declared purchase for green products. But, has a significant relationship with the intention of purchase.

That particular values, pro-environmental concern and perceived environmental knowledge were related with attitudes towards an ecological brand. Attitude towards an ecological product is related to the value of a sense of belonging and pro-environmental concern; intention to purchase a local brand is predicted by the attitude towards the local brand Pikturnienė & Mackelaitė, (2013).

6.2.5.3 The Moderating Effects of Environmental Belief on the Relationship between Green Marketing Mix and Total Image

The current research shows that the environmental belief moderate the relationship between four components of green marketing mix (green product, green price, green place and green promotion) and total image. With respect to the moderating effect of environmental belief on green place corporate image relationship, this study found that when a firm faces a low level of Teah et al, (2014) found environmental belief, the positive impact of green place on corporate image only applies as the green place is below moderate range. While environmental belief the moderating effect between green place and brand image. Religious beliefs moderates the relationship between attitudes towards charities and motivation to donate. Therefore, Sampson, (2009) found environmental consumer beliefs increase, motivation to purchase green apparel increases, indicated a significant estimate.

Francisco et al (n.d) argu demonstrate that using independent environmental certifications strengthens beliefs in the product's ecological performance. However, positive relationship between customers' beliefs and green consumption patterns as regards to the use of biodegradable soaps/detergents Thanika al et (2012). And environmental beliefs held by festival campers' influenced their perceptions of naturescape, socialscape and overall satisfaction. Festival campers' who attended more than once were found to have stronger proenvironmental beliefs than those who attended once Gration et al, (2015).

Gadenne et al (2011) found general environmental belief factors were significantly associated with positive environmental attitudes. Saribas et al, (2014) showed participants environmental attitude, concern, and perception of environmental issues were relatively high. Significant correlation between their self-efficacy beliefs and their concern for the environment. Geenen et al, (2012) results showed that is Significant positive relationships were found between both beliefs on procedural and distributive justice expectations. The relationship between belief in tests and both types of justice expectations was stronger among experienced applicants. The relationship between belief in a just world and distributive justice expectations was stronger among inexperienced applicants.

Junior et al, (2015) found positive relationship between customers' beliefs and green consumption patterns. Pickett-Baker & Ozaki, (2008) found positive relationship between customers' perceptions on brands that are less damaging to the environment and their green purchasing intentions. Environmental behaviors are not significantly affected by environmental beliefs.

The majority of participants believed organic food to be healthier, tastier and better for the environment than conventional food. Expense and lack of availability were strong barriers to the purchasing of organic foods. Women were more positive about organic food than men (e.g. women were more likely to agree that organic food has more vitamins/minerals than conventional food). The personal value factor related to nature, environment and equality was the dominant predictor of positive organic food beliefs (Lea & Worsley, 2005).

6.2.5.4 The Moderating Effects of Environmental Awareness on the Relationship between green Marketing mix and Total Image

This section discusses the moderating effect of environmental awareness on the relationship between green marketing mix and total image. The overall result shows that environmental awareness pure moderates the relationship between four components of green marketing mix (green product, green price, green place and green promotion) and total image. For the moderating effect of environmental awareness on the relationship between green marketing mix and corporate image, environmental awareness no moderating between green marketing mix and corporate image (antecedents for corporate image).in addition environmental awareness moderating between green price, green place and brand image.

In case of the firms that face low and moderate level of environmental awareness, the customers concern was not found to have an impact brand image through the low to moderate range of green price and green place. Thus, this would encourage a firm to be more awareness about the environment. Some consumers are prepared to base their buying decisions on purchasing products that do not harm the environment Arminda, (2010).

The relationship between Attitude toward environmental protection and purchase intention is decisively moderated by consumers' awareness of the relevant Eco-Label for the chosen product. Effect of high awareness of the eco-label in influencing the purchase of a green product is very strong for respondents having positive attitude toward the protection of the environment. The effect of attitude toward environmental protection on purchase intention is a crucial prerequisite, the moderating effect of

awareness of eco-label (high) on the relationship between knowledge of green products(positive) and purchase intention (Abdul Rashid, 2009).

Richard et al, (1999) in their study had a significant and positive relationship between environmental consciousness and the price premium for environmentally certified products. There is a positive relationship between environmental importance and willingness-to-pay a premium for environmentally certified products. There is a negative relationship between price premium and consumer willingness-to-pay for environmentally certified products.

According to Richard & Abigail (2010) that prices prove challenging for the consumer while brands battle perceptions in some categories and companies need to put more effort into being green. And found that consumers believed that the environment was in danger, but along with that so too was the economy. Thus that fewer consumers worry that the environment is headed in the right direction and that being an environmentally friendly company is a main concern.

Sangeeta et al (2014) studies undertaken in the area of consumers' environmental attitudes assessing awareness and span from environmental awareness\knowledge to analyzing perceived importance of being environmentally friendly. Wanninayake & pradeep, (2008) in hem reported that green products have substantial awareness among customers and they are willing to bay something more on green products. That customers believed that they are knowledgeable about green practices but they would still like to know more about them. Customers expressed preferences related to restaurants that are environmentally friendly and use environmentally safe products. Female customers and people with higher education were more conscious regarding green

practices. Customers that utilized green practices at home intended to visit green restaurants more often Robin et al (2013).

Green marketing is made manifest through the development and commercialization of green products and through green communication. The environmental sensitivity of consumers is significantly and negatively related to the development and commercialization of green products. Positive relationship between the environmental consciousness of the marketer and green marketing. A significant and positive relationship is found between the sensitivity of a business to environmentalism and green products, positive and significant relationship between the development and commercialization of green products Langerak et al (1998).

Trivedi et al, (2014) found consumers' willingness to pay for green products is significantly predicted by consumers' pro-environmental behaviors and environmental locus of control. Kim & Chung, (2011) explain that environmental consciousness and appearance consciousness positively influence attitude toward buying organic personal care products. Past experiences as a predictor of purchase intention and perceived behavioral control as a moderator of the attitude-purchase intention relationship. Relationship between consumer values and attitude, environmental consciousness and appearance consciousness rather health consciousness were found to be important in predicting consumers' attitudes toward organic personal care products.

Gender somehow influences consumers' willingness to pay more for green products in a statistically significant. Attitudes are very good predictors of consumers' willingness to spend more for green products. Consumers willing to pay more for green products did not perceive it inconvenient to behave in an ecologically favorable manner. Consumers willing to pay a higher price for green products perceive that it is very important to behave in an ecologically favorable way (Laroche et al, 2001).

Growing awareness about the implications of global warming, non-biodegradable solid waste, harmful impact of pollutants etc., both marketers and consumers are becoming increasingly sensitive to the need for switch in to green products and services. The shift to "green" is expensive to look at but still is expected to prove advantageous in the long run in terms of cost of product (Vashisht et al, n,d). Gan et al, (2009) environmentally Consciousness positively impacts consumers' purchasing decision on green products. Arttachariya, (n.d) environmental consciousness will positively influence green purchasing behavior of Thai graduate students. Environmental attitude will positively influence green purchasing behavior of Thai graduate students. Concern for Thailand's environment will positively influence Green purchasing behavior of Thai graduate students.

6.4 Implications of the Study

In this section, the findings of this research are presented in terms of their implications. Firstly, the theoretical implications of research findings are discussed. Next, the practical contributions of this research are then identified.

6.4.1 Theoretical Implications

This study was examined the relationship between green marketing mix and purchase intention.

According to theory planned behavior logic, firm possession of certain key resource characteristics, which are value, rareness, quality, and substitutability, will enable the firm to sustain purchase intention. In this study, green marketing mix was conceptualized as a strategic resource since it fulfilled the four mentioned characteristic (refer to chapter Two). These characteristics enable green marketing.

Companies adopts green marketing sustain purchase intention was conceptualized in this research in terms of purchase decision (Wanniayake & Pradeep, 2008; Tias, 2013). The result of the study revealed that attention to the long-term well-being of customer will enhance firms" products advantage. This result is consistent with previous studies (Bing, 2013; Ansar, 2013; Yusof et al, 2013; Lin & Huang, 2012), which suggested theory planned behavior as essential theory to understand why green marketing can encourage purchase intention compared with other companies don't a interest it.

This study found some evidence of a direct linear relationship between green marketing mix and purchase intention. Such findings represent a support over previous leadership research in the field which has predicted a linear relationship between green marketing mix and purchase intention. This study offers additional contribution to the literature in terms of research into green marketing field and its links to consumers purchase intention.

This study adds to the theory planned behavior by providing empirical evidence to support the effect of attitude toward behavior, which describes the extent to which company practices the theory planned behavior (Mostafa (2007; Ling, 2013; Teng et al, 2011).

this study also contributes to the literature by broadening the knowledge on the linkage between green marketing and purchase intention of consumers. Many studies have explored the link between green marketing mix and the purchase intention of consumers using the three dimension (Anser, 2013; Wanniayake & pradeep, 2008). The study was

investigating the moderating effect of psychological variables on relationship between green marketing mix and total image, the data supported positive moderating effect of psychological variables between the relationship

6.4.2 Managerial Implications

Besides the theoretical implications addressed above, this research also contributes towards management practice. Three groups concerning green marketing mix can get an advantage from information obtained within these findings: managers responsible for strategic marketing, policy makers responsible for promoting good corporate image and finally raise environmental awareness.

This research is relevant for all the modern business firms as they have to follow environment laws and also the consumers these days are getting aware and conscious about green practices adopted by firms.

Given that limited efforts have been made to measure green marketing mix, validating a thrifty tool to measure green marketing should help managers in several ways. At initially, this study helps to identify the key domains a manager should speak to. These key domains include, firstly, inherent propensity to make marketing decisions to enhance consumers" intention to improve their products and develop them to be friendly products to environment. Secondly, firms involve in major activities support the environment cause and to fulfill commitments to corporate environmental responsibility such as support holding, seminars and conferences related to the environment, Contribute in supporting the environmental centers, devotes a special day for the environment. Thirdly, respecting and caring for the environmental awareness has been highlighted while firms intend to satisfy customer needs or wants within interest of the nature environment.

Besides, identifying the key domains a manager should address and measure green marketing should help managers to understand how to operate with such an orientation and guide managers to better learn how to building good corporate image and brand image for their products.

Moreover, the study discovers that four components of green marketing constructs (green product, green price, green place, and green promotion) and reflects differentiation orientation while one component reflects product quality orientation (green product). This means that managers can use green marketing as a positioning tool for products and firms become effective contributor to identify target markets and motivate consumers to engage in green purchasing behaviour. Finally, the four components in the green marketing orientation may serve to develop appropriate training programs that can help improve employees" understanding of the activities involved in enhancing customer and environment well-being.

For government and policy makers, validating societal marketing orientation scale will help policy makers who are responsible for promoting good corporate image in Sudan; pressure of government plays an important role in increase environmental awareness for companies even adopted green marketing. And become concerned about green marketing activities that they have attempted to regulate them.

It is worth mentioning that in this study each of the components of green marketing mix was found to be significantly related to a certain aspect of consumer's purchase intention. While the impact of green product on purchase intention is higher than that of other three components, especially the foods that produce are critical for food safety, environmental products and healthy products.

Based on the findings of this study, green marketing mix as drives that motivating the consumer in having the purchase intention, can enable companies to develop key good total image. Generally, this finding can serve as a practical guide for marketing practitioners and managers by enhancing their understanding of the total image benefits and intent to purchase green food when integrating their business policies with environment responsibility marketing. Specifically, the finding of this study has proven that green marketing mix (green product, green place, green price, and green promotion) have significant positive relationship on all two types of total image. This indicates that as food products companies become more involved in activities related to customer and environmental well-being, their total image such as corporate image, brand image.

The results of the study demonstrate support for the effects of the two dimension of total image on purchase intention to green food, linking these images with purchase intention provides management to products food companies to improve their products and develop them to be friendly products to environment.

The results of this study indicate that psychological variables moderated the relationship between green marketing mix and total image. This suggests that managers of the food product industry need to raise environmental awareness, environmental concern, environmental knowledge, and environmental belief of the importance of green marketing in products food companies and work on establishing a special department of environmental complaints that may be caused by products food companies to do address them.

More studies in this field will provide more information about obstacles and limitations faced by products food companies to increase their level of applying green marketing strategies, the results of the study showed that the significant relationship between green marketing mix and purchase intention, while the price is an important factor that influences the consumers' purchasing behaviour. If the price of green foods is

expensive, consumers are not willing to purchase the green foods. This result indicates that managers of the food products companies should determine low prices on green food products than traditional products.

The results indicated the high concern issues from the respondents with variables such as environmental concern, environmental knowledge, environmental belief, and environmental awareness of environmental problems, and environmental responsibility were already in the mind of consumers, the marketers should improve their marketing campaign by making sure that they were conveying the message on how their product could help to reduce environmental problems, also the message on how the customers were being responsible to the environmental by buying their green product. The study has proposed findings that would be useful in the future and it was expected to be beneficial to those who were willing to participate in green marketing activities. In addition, many consumers would like to purchase products that will influence manufacturers to become environmentally responsible. Manufacturers and advertisers have responded to this consumer pressure by promoting the environmental attributes of their products. Important promotion tools green advertising (refer chapter tow) is plays the most important role in influencing consumer purchase intention of green products in Sudan. Managers need promotional campaigns should be conducted to highlight the role of products food companies in the application of green marketing in order to serve the surrounding community.

6.5 Limitation of the Study

While this study contributes to increased understanding of the applicability of theory planned behavior across institutional forces through testing the relationship between green marketing mix, total image, purchase intention, and psychological variables, the results of this study must be interpreted with caution because of some certain

limitations. First, while the study sample adequately meets the desirable statistical standards, as well as demonstrates sufficient construct, internal and external validity, its inclusiveness of the Sudanese universities in Khartoum but limited in Sudan, (judgment sampling) potentially limits its quota sampling in this study. Second the time to conduct the study which approximately only 2 months. Third, offline questionnaire can only reach to a smaller number of respondents, compared to online questionnaire. The number of respondents used in this study only 417 university students from universities in Indonesia but limited in Sudan.

Fourth, the cross-sectional nature of the study meant that conclusions must be restricted to those of association. The dynamic of the effect of green marketing mix was not analyzed. Therefore, the findings of this study are time-specific and may not give hard conclusions. A study conducted in a longitudinal frame would throw light on causal relationship between the variables of concern and thus give results that are more valid.

Fifth, this study investigates the relationship between green marketing mix, total image, purchase intention, and psychological variables across different types in universities.

Six, the scope of the study was limited to universities in Khartoum state. Some of the respondents refused to take part in this study, while others claimed not having a time to fill in the questionnaires. Finally, based on the converging results from the multiple regressions' analysis, it can be deducing that green marketing mix and total image can be used to explain the purchase intention variation among Sudanese universities students.

6.6 Suggestions for Future Research

This study represents an early attempt to test a theoretical framework of green marketing mix. However, based on the limitations of the study mentioned above, this study provides some suggestions for future research. These suggestions are as follows:

First, future studies can replicate this study using larger sample and different contexts such as different sectors or countries. This would not only enlarge sample size, but also more importantly grant the opportunity for direct comparison of model efficacy based on either firm size or country/region designation. Consequently, this would help resolve the issue of generalizability and allow for richer analysis of the validity of each hypothesized relationship as well the proposed overall model. In addition, confirmatory factor analysis (CFA) can be used to test whether the four components suggested by the exploratory factor analysis is a good representation of green marketing. Second, future studies should take into consideration other elements for example, green product strategies, challenges to face green marketing in Sudan. Thirdly, although it could be costly and time-consuming, longitudinal study is better suited to a clearer understanding of the dynamic, interactive and reversible nature of the relationship between green marketing mix, total image, purchase intention and psychological variables. Moreover, this study relies fully on secondary data by using a single-informant approach. Thus, future studies may be replicated by collect data through more than one source, it would be useful also to obtain a broader sample of students in future research. fourthly ,this research used students sample for data collected, future studies should be used other sample mangers of companies, employees, senior citizens people, other consumers, households .finely, future studies should adopt some other factors can be also taken into consider for the study of green marketing such as physical

evidence and process of seven ps. also, different areas and different industry could be interesting to investing also include types of total image could intervene in the associations between green marketing mix and purchase intention ait is possible, for example, that other types of total image such as product image and brand awareness mediate this relationship base on the investing in this study, a further study can be put on a research about how to gain advantages, such as customers' loyalty and trust, by improving their green strategy therefore, future studies should adopt service company, like bank and hotel, should put attention to the green marketing as well, which helps to express the green idea of the company to their customers.

6.7 Conclusions

This study is investigated the connection between green marketing mix and purchase intention exploring the role that key total image play in mediating that relationship .in addition , the study has examined the moderating effect of psychological variables between green marketing mix and two key total image .the present research was run among 12 universities in Sudan . This research is an attempt to enhance the understanding of the consumer's purchase intention concept in the context of universities in Sudan.

This study has investigated the connection between green marketing mix and purchase intention exploring the role that key total image play in mediating that relationship. In addition, the study has examined the moderating effect of psychological variables between green marketing mix and two key total image .the present study was conducted among 341 Sudanese universities. This study has established from its empirical findings that green marketing mix consists of four components (green product, green price, green place, and green promotion) and can be measured using 19 questionnaire items, which demonstrate internal

consistency, its content and construct validity. The result also found students in Sudan have high concern for environmental .in relation to the business value of green marketing mix, this study provided empirical evidence that green marketing mix can lead consumers to purchase intention in long terms. The study showed that green marketing mix can provide companies with unique total image, particularly. These attitude assist affirm in its value creation and ultimately increase purchase intention. In sum, this study outlined several objectives, which it hoped effectively to accomplish in fact, the true contribution of this study lies primarily in its theoretical and practical implications as well as its ability to hopefully motivate and incite future academic endeavors .if the results in replications of this study support the study findings. Rather than relying only on traditional marketing concepts, firm might use their green marketing behavior in order to achieve a purchase intention .that consumers are more concern about their health, food safety, and protection of the environmental and animal welfare.