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PhD Thesis

Factors Influencing Green Consumption Behavior of Muslim Consumers in Bangladesh: Religiosity as a Moderator

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FACTORS INFLUENCING GREEN CONSUMPTION BEHAVIOR OF MUSLIM CONSUMERS IN BANGLADESH: RELIGIOSITY AS A MODERATOR

by

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A thesis submitted in fulfillment of the requirements for the degree of Doctor
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**School of Business Innovation and Technopreneurship
UNIVERSITI MALAYSIA PERLIS**

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DECLARATION OF THESIS

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CR	Composite Reliability
DOE	Department of Environment
DV	Dependent Variable
EK	Environmental Knowledge
GCB	Green Consumption Behavior
GR	Group Recommendation
HSC	Higher Secondary Certificate
IVs	Independent Variables
NIDCH	National Institute of Diseases of Chest and Hospital
PLS	Partial Least Squares
PLS-SEM	Partial Least Squares - Structural Equation Modeling
RBV	Resource-based view
SEC	Self-efficacy
SEM	Structural Equation Modeling
SPSS	Statistical Package for Social Science
SRS	Simple Random Sampling
SSC	Secondary School Certificate
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Actions
WCG	Willingness to Consume Green products
3Rs	Reusing, Reducing and Recycling

LIST OF SYMBOLS

f^2	Effect size assessment
Q^2	Predictive relevance
R^2	Coefficient of determination
%	Percentage
>	Greater than
<	Less than
t	T statistic
p	P value
β	Path coefficient
*	Multiplication
+	Addition
->	Direction

Faktor-faktor Mempengaruhi Tingkah Laku Penggunaan Hijau Pengguna Islam di Bangladesh: Keagamaan sebagai Moderator

ABSTRAK

Penggunaan hijau yang dipanggil sebagai penggunaan mesra alam tidak dapat dielakkan untuk pembangunan yang mampan. Penyelidikan ini bertujuan untuk mencari faktor yang mempengaruhi tingkah laku penggunaan hijau pengguna di Bangladesh; dan juga cuba untuk melihat kesan moderasi keagamaan antara niat tingkah laku untuk memakan produk hijau dan kelakuan penggunaan hijau pengguna Islam. Dalam kajian ini, teori gelagat terancang, dan teori tindakan beralasan telah diambil kira untuk mengenal pasti faktor-faktor yang berkaitan dengan tingkah laku. Pembolehubah termasuk niat tingkah laku untuk menggunakan produk hijau, kerelaan untuk menggunakan produk hijau, pendidikan alam sekitar, cadangan kumpulan, dan keberkesanan diri yang dianggap mempunyai pengaruh langsung terhadap kelakuan penggunaan hijau manakala sikap religiositi telah digunakan sebagai moderator dalam hubungan antara kelima IV dengan tingkah laku penggunaan hijau. Data telah dikumpulkan daripada pelanggan daripada beberapa pusat beli-belah terpilih di Bangladesh menggunakan pelbagai peringkat prosedur pensampelan. *Partial Least Square Structural Equation Modeling (PLS-SEM)* digunakan untuk menguji hipotesis kajian ini. Telah didapati bahawa niat tingkah laku untuk menggunakan produk hijau, kerelaan untuk menggunakan produk hijau, pendidikan alam sekitar, dan keberkesanan diri adalah faktor penting dalam mempengaruhi tingkah laku penggunaan hijau. Antara faktor-faktor tersebut, niat tingkah laku untuk menggunakan produk hijau didapati menjadi faktor yang paling penting. Telah diperhatikan bahawa cadangan kumpulan kurang penting sebagai faktor yang mempengaruhi kelakuan penggunaan hijau. Dalam kesan moderasi, didapati bahawa hubungan antara niat tingkah laku untuk menggunakan produk hijau dan tingkah laku penggunaan hijau dimoderasi oleh religiositi. Kajian ini mempamerkan rangka kerja baru yang mencadangkan keagamaan sebagai moderator untuk meramalkan tingkah laku penggunaan hijau di negara-negara membangun. Ia melengkapkan bukti empirikal sedia ada untuk menangani jurang penyelidikan dan menyahut seruan untuk mengkaji tingkah laku penggunaan di negara Islam yang membangun. Keputusan yang diperoleh daripada penyelidikan ini memberikan beberapa implikasi praktikal untuk pengurus yang bekerja di industri dan perangka dasar, terutamanya dari segi cara menilai, membina dan meningkatkan kesedaran di kalangan pengguna untuk mengkonsumsi produk hijau.

Kata kunci: Kerelaan untuk menggunakan produk hijau, Pengetahuan alam sekitar, Cadangan kumpulan, Keberkesanan Sendiri, Tingkah Laku Penggunaan Hijau, Bangladesh, Keagamaan

Factors Influencing Green Consumption Behavior of Muslim Consumers in Bangladesh: Religiosity as a Moderator

ABSTRACT

Green consumption which is termed as environment friendly consumption is inevitable for sustainable development. This research aims at finding and analyzing factors affecting green consumption behavior of consumers in Bangladesh; and it also attempts to see the moderating effect of religiosity between behavioral intention to consume green products and green consumption behavior of Muslim consumers. In this study, theory of planned behavior, and the theory of reasoned action have been taken into consideration for identifying the pertinent factors relating to behavior. The variables include behavioral intention to consume green products, willingness to consume green products, environmental education, group recommendations, and self-efficacy which are deemed to have a direct influence on green consumption behavior while religiosity has been used as the moderator in the relationship between these five independent variables and green consumption behavior. Data were collected from the customers of some selected shopping malls in Bangladesh using multi-stage sampling procedure. The Partial Least Square Structural Equation Modeling (PLS-SEM) is used to test the hypotheses of this study. It was found that behavioral intention to consume green products, willingness to consume green products, environmental education, and self-efficacy were significant factors which influence green consumption behavior. Among these determinants, behavioral intention to consume green products was found to be the most significant one. It was observed that the group recommendation is less significant as a factor which influences green consumption behavior. In the moderating effect, it was found that the relationship between behavioral intention to consume green products and green consumption behavior was moderated by religiosity. This study offers a new framework proposing the religiosity as a moderator to the green consumption behavior in developing countries. It supplements the existing empirical evidence to address the research gaps and responds to the calls for examining the consumption behavior in a Muslim developing country. The results derived from this research provide several practical implications for managers working in different industries and policy makers specifically, in terms of how to evaluate, build and improve the awareness among the consumers to consume green products.

Key Words: Willingness to Consume Green Products, Environmental Knowledge, Group Recommendation, Self-efficacy, Green Consumption Behavior, Bangladesh

CHAPTER 1: INTRODUCTION

1.1 Introduction

Over the last few decades, rapid industrialization and development activities have extended a quality of life. But the development has got along with a set of ecological problems. Climate change, exhaustion of natural assets, increased pollution, etc. cause deep concern as they pose threats to the existence (Shove, Watson, Spurling, & Skillington, 2015; Wang, Liu, & Qi, 2014). Environmental drifts impend to radically change the globe threatening the lives of many species including the human species. About 6 million hectares of land that were productive turned into useless desert (Brundtland, 1987; Daly, 1990). A significant share of the forests is being transformed into low-grade farmland. The countries of Europe are being suffered by acid precipitation, their forest, lakes are being destroyed, and the resourceful, artistic and architectural heritages are being spoiled. Vast tract of soil may have acidified and it can go beyond sensible hope of repair. Carbon dioxide is put into atmosphere by the burning of fossil fuel and as a result plodding of global warming is causing. This 'greenhouse effect' cases increase in average global temperatures enough to shift agricultural production areas, raise sea levels to flood coastal cities, and disrupt national economies (Brundtland, 1987; Daly, 1990). Other form of industrial gases has been a reason of threat to diminish protective layer of planet called ozone guard in such a degree that cancers of human and animal would increase sharply, food chain of the ocean would be upset, toxic substances are being put into the food chain of human, underground water and it is going beyond the level of cleansing (Brundtland, 1987).

Rising level of human consumption secures the inclination towards potential losses in a large scale, different natural assets like land, water and forests are inflicted unendurable loads. This situation is raising risks and uncertainties about the quality of environment, availability of main resources and their sustainability into the future. Many people of less developed countries such as Bangladesh are experiencing insecure livelihood due to poverty, dependence on degradable source and weak governance (Smith, 2013). Environmental degradation still continues even though awareness of different threats of earth has increased for sure over the last couple of decades. Interest of behavioral component of environmental problem is increasing in the recent years and attesting increasing awareness that consumption behavior of human is the critical element for environment degradation (Tanner, 1999). Therefore, changes in consumption behavior for example green behavior that is environment friendly behavior may be able to make a positive contribution to the wellbeing of the environment.

In this connection, different quarters are amplifying voices to promote green behavior. As a result of the increased concern of various stakes, new initiatives are being taken. New policies and strategies are being formulated to ensure sustainability of the environment. Asian region is taking the responsibility to enhance the grade of the environment accepting the power of 'going-green' (Lee, 2008). Going green can be termed as doing environment friendly behavior. Riding bicycle, giving up smoking, avoiding plastics bags, switching off electronic devices while getting exit from house or office, are few examples of going green. In Singapore, the '3Rs' campaign has been adopted by governments for encouraging the people to reuse, reduce and recycle of domestic wastes (Pariatamby & Fauziah, 2014). On the other hand, going green concept has been involved promoting by Malaysian government through the establishment of 'The Malaysian Green

Technology Policy’ and it is the commitment of the nation to have the vision of ‘Green Malaysia’. Sustainable development and speeding up the national economy would be promoted by serving this policy and seeking to promote the proper way for use of energy. It is supposed that by maintaining the integrity of environment and increasing national economic development will ensure the quality life of Malaysian (Wong, Ngadi, Abdullah, & Inuwa, 2015).

As for Bangladesh, ‘No Plastic Bag’ policy has been adopted recently by the government for reducing plastic-waste. Not only that, the government has taken it in the level of implementation encouraging the bags made of Cotton and Jute. Grameen Phone, Dutch-Bangla Bank, Islami Bank Bangladesh Limited (IBBL) and many other corporate sectors have joined different campaigns like ‘Plant a Tree’ program and ‘Mangrove-Saving’ project. Thus, the awareness about sustainability of environment has been raised and people are willing to purchase products which are safe or that have less harmful effects on environment like green product. Many research studies show that consumers are more conscious and concerned than before about the consumption of environmental resource and impact on it. One of the studies by Dagnoli and Klein showed that large number of (around 60 to 90 percent) consumers were relating their procurements with environmental impact (Dagnoli, 1990; Klein, 1990). This research focuses on analyzing the factors influencing the green consumption behavior of Muslim consumers in Bangladesh and to see if the Muslim religiosity has any effect on their consumption behavior. Muslims are considered for study as because they constitute around 90 percent population of the country. This chapter discusses the background of this study, research problems, research questions, research objectives, research area, and definitions of key points.

1.2 Research Background

The pervasiveness of environmental matters in the social environment and media has fortified a large group of consumer to raise concerns and friendly attitude about environment and a desire to buy environment friendly products called green products and environment friendly behavior called green behavior (Bergin-Seers & Mair, 2009; Peattie, 2010). People have many trade-offs with the natural environment in particular. Saving the nature from degradation is not a choice; it is a must to ensure a safe living of lives in this earth. People's consumption behavior significantly affects environment; so, consumers need to pay attention to sustainable or green consumption behavior avoiding the conventional harmful consumption to mark a positive footprint to the environment (Wu, 2015). Marketers now respond to consumers' growing environmental awareness by promoting 'environmentally friendly' or 'green' products (Kim, 2005). Around 70 percent of Americans opined that they were in favor of environmental protection and about 49 percent reported that they would avoid buying products those are potentially injurious to the environment (Hueber, 1991). Green or fair or ethical consumption behavior of the people can give birth to a sustainable environment. A remarkable number of researches have been contributed to find the factors affecting green behavior. Some researchers (Kaufmann, Panni, & Orphanidou, 2012; Stutzman & Green, 1982; Wahid, Rahbar, & Shyan, 2011) have tested the effects of the assumed factors on green behavior.

Another aspect is religiosity that can be considered to be one of the important variables that may affect consumer behavior (Yuri Seo, Mohd Suki, & Mohd Suki, 2015). Religiosity, which is the degree of religious commitment, has been found to be a more significant predictor of consumer behavior than mere affiliation to a particular religion

(Islam, 2016). Religiosity is examined and it is found that it plays a vital role as one of the personal values and it explains the preference of consumer. If so, ‘Can religiosity be a significant construct?’ is a vital question. Although former researches showed that religiosity and green consumption has a positive relationship (Eid & El-Gohary, 2015). Chairy (2012) investigated about the influence on spirituality and self-transcendence for going with an intention of green purchase. The study shows that it influenced remarkably for the intention of green purchase (Chairy, 2012). Thus, the study wires an idea and it is spirituality and self-transcendence can make a bridge to a stronger willingness about consuming pro environmental product or green product. But a limited number of researches have been done to find the detail of relationship in between Muslim religiosity and green consumption behavior, or the consumption pattern of Muslim Individuals. Particularly in Bangladesh, very few researches have been done to find any such relationship when Bangladesh is highly Muslim intensive area. So, the researcher has initiated this research with a view to investigate the effect of Muslim religiosity on green consumption or green behavior of Muslim consumers in Bangladesh.

In general terms, Muslim consumers can be defined as the consumers who follow Islam as their religion and they keep the divine commandments in mind while making buying decisions. There are nearly 1.7 billion Muslim consumers who account for 30% of the emerging market (Islam, 2016). Bangladesh is a market of 148.6 million Muslim populations representing 90.4% of the total population (Nisha & Iqbal, 2017).

The outcomes of this research may help the marketers formulating their strategies if they consider the outcomes while framing their strategies. Moreover, this study will produce information regarding the patterns of green consumptions and the notions of Muslim consumer behavior relating to green consumption from Bangladesh, a developing

country, perspective. If it is revealed from this study that the religious values of Muslim consumers motivate those consuming green products, it will elicit an orientation for the business leaders to produce and promote their products considering the religious matters of Muslims while operating in the Muslim intensive markets in particular.

1.2.1 Green Products and Green Consumers – Conventional and Islamic Perspective

Generally, a green consumer is one who remains knowledgeable, careful, and concerned about the matters of environment and who becomes responsive to the wellbeing of the environment. The implication of his/her concern is ‘buying things which are not hostile to the environment’. It can be said that the pro-environmental or green consumers are those who always buys products that offer low influence to environment consistently. The brands those have ecofriendly packaging, consumers like these may focus. They consider buying organic food or buying from a corporation that offer goods or service by the trade fair or environmental practices like The Body Shop and Starbucks. Makower (2011) found that younger, better educated persons are sometimes supposed to prefer green consumption than that of conventional ones. A green consumer, in Islam, is one who acts with good conscience, accountability and integrity. A person holding the proper sense of religion and who is a practicing Muslim must be pro-environmental. As it is stated in the Qur’an (Chapter 17, verse 27) that spendthrifts certainly are brothers of the devils (*Shayatin*), and the Devil is ever ungrateful to his Lord. It is seen from the opinion of Watkins attitudes to do a particular behavior work as a driving force for an individual to do that behavior (Watkins, Aitken, & Mather, 2016). However, investigating the link between sustainable consumption and moral foundations, there is insufficient literature to date.

Islam suggests an individual to do green behavior. There are a lot of instances of green consumption behavior in Islam. For example Islam greatly discourages wasteful consumption of resources. There are evidences in the Hadiths that Prophet Muhammad (peace be upon him) encouraged Muslims to plant trees and not to waste water even if one is performing ritual ablution by a flowing river. Islam says that he is not a believer who eats his fills while his neighbor remains hungry. Consider recycling, the prophet Muhammad (peace be upon him) used to repair his own shoes and sow his own garments.

Green consumption involves a wide range of activities in both the fields namely consumption and production, including the preservation of species, the efficient use of energy, the protection of environment, the recycling material and green products. Experts or Thinkers about protection of environment have designed a definition for the green consumption as the ‘5Rs’: Reduce, Reevaluate, Reuse, Recycle, and Rescue (Ding, 2014). The products which is made up with material that is recyclable , produce least amount of wastage, and use less amount of water and energy, and produce a low amount of toxic substances are called green products (Nimse, Vijayan, Kumar, & Varadarajan, 2007).

1.2.2 Green Issues

From the above discussion it is noticed that the environment is experiencing changes in many dimensions. With the changes in environment, people need to become ever more aware of the problems that encircle it. The challenges this earth is facing currently are: i. immense incursion of natural disasters, ii. warming and cooling periods, iii. different types of weather outlines, etc. Now, the inhabitants of this earth need to become aware and they need to develop mechanism to face these challenges. Global warming is a

concern to all stakes as a fact of present livelihoods; the earth is warming up and people are surely contributing to the problem. However, this is one of the environmental problems and people should concern about it. All over the world, people are facing an inventory of problems about environment every day. Few ecosystems are affected by some of them those are small, but landscape are being changing drastically by others and people already know about it.

There are some prominent environmental issues or problems that have been published in a website namely Conserve-energy-future.com. They are i) pollution, ii) global Warming, iii) overpopulation, iv) natural resource depletion, v) waste disposal, vi) climate change, vii) loss of bio diversity, viii) deforestation, ix) ocean acidification, x) ozone layer depletion, xi) water pollution, xii) urban sprawl, xiii) acid rain, xiv) public health issues, xv) genetic engineering, etc.

1.3 Statement of Problem

The people of main cities of Bangladesh are living in pollutions of different kinds. Poverty, lack of awareness about environment and over population are the reasons for the humiliation (different natural calamities, destruction of wetlands, and erosion of soil) of environment of Bangladesh. Deforestation is also a consequence. Environment of Bangladesh cannot be stated as equilibrium. Bangladesh's economic growth, ecosystems, human health is being threatened by severe air, noise, and water pollutions. Burning of fossil fuels, associated motorization, industrialization and increase of population are the reasons for air pollution. Reasons of water pollution are unmanaged chemical dumping or trashing garbage and rubbish to the rivers and canals. The mineral water of Bangladesh

has been polluted due to the presence of arsenic. The residents of major cities of Bangladesh are also exposed to high level of noise pollution (Alam, 2009). Government take few steps with the intention of improving environmental degradation and control of pollution (Alam, 2009).

It is also explained by Alam (2009) that air pollution is a grave for the health of environment and people of Bangladesh is under the peril of it. The population is growing so fast in the city area and also associated motorization and these are the reasons for air pollution. Most of the house has poor ventilation system for the smoke, created by the use of biomass fuel, to emit out and it causes indoor air pollution. Industrial emissions and automobiles are the principle sources of outdoor air pollution. The national ambient air quality standards of Bangladesh and amount of pollutants in the air of Dhaka city is shown below:

Table 1. 1 Bangladesh National Ambient Air Quality Standards

Land use Category	8-hour average concentration in $\mu\text{g}/\text{m}^3$			
	CO	NO ₂	SPM	SO ₂
Industrial/mixed use	5,000	100	500	120
Commercial/ mixed use	5,000	100	400	100
Residential/ rural use	2,000	80	200	80
Sensitive use *	1,000	30	100	30

*Sensitive areas include national monuments, health resorts, hospitals, archeological spots, and educational institutions. Source: Department of Environment (DOE), 1997.

Urban children are mostly affected by air pollution. Air pollution is a great threat for health and indoor air pollution is more harmful than outdoor air pollution. Anybody will be surprised seeing the intensity of carbon emission in Bangladesh. As per the report of

World Bank, carbon emission is increasing rapidly. The chart below shows the intensity of carbon emission from the year 1972 (Just after independence of Bangladesh) to year 2014:

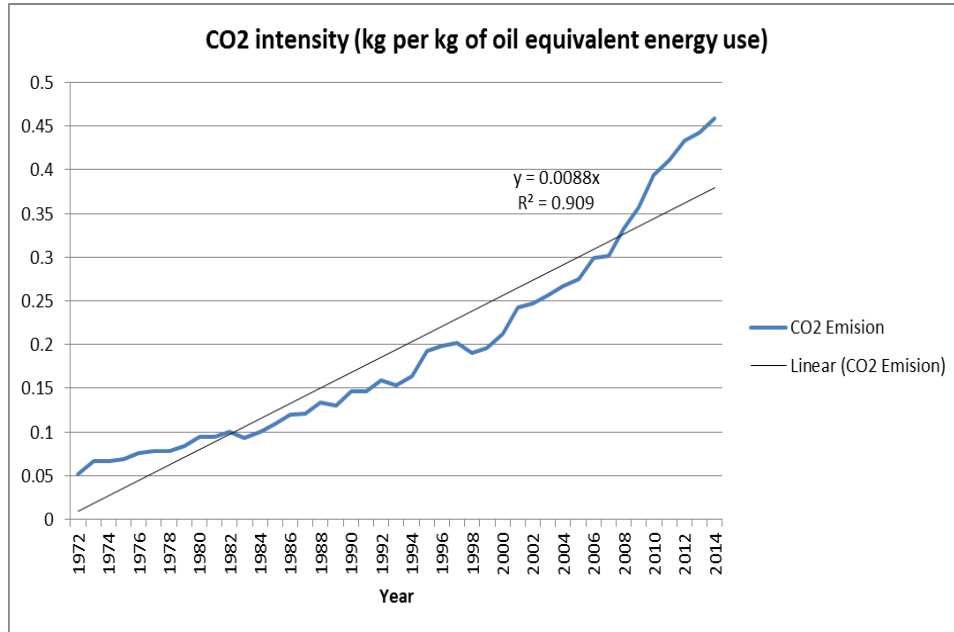


Figure 1. 1 CO₂ intensity (kg per kg of oil equivalent energy use)

In 2014 the carbon emission stands 2.066 kg per kg of oil equivalent energy use when it was 0.598 in 1972. A World Bank report released recently that says, around 15,000 Bangladeshis are being killed each year by the causes of air pollution. The report states Bangladesh could save a significant amount of currency if they could be able to reduce the air pollution of its four main cities and the amount is between \$200 million and \$800 million per year, about 0.7 to 3.0% of its gross national product. The report swells that a lot of people have to grieve for the effect of air pollution every year and the number is 6.5 million. Air pollution from vehicles causes respiratory distress in urban Bangladesh. National Institute of Diseases of Chest and Hospital (NIDCH) reports nearly 7 (seven) million people in Bangladesh suffer from asthma, more than half of them are children (Mahmood, 2011).

Mental and physical illnesses are caused among the people for noise pollution. Deafness, heart attack and many other diseases can happen due to the same. Expecting mothers would fall under severe health problem if any sort of noise smog is around her. It also results peptic ulcer, high blood pressure, tachycardia, indigestion, headache due to some other forms of environmental hazards. Environmental pollution is the reason for the death of many people every year (Saifuddin, Shahinuzzaman, Muhammad, & Quader, 2010). All these glitches are being happened due to human behavior. Human behavior is changing. Consumers are found uncaring to the environment.

Research shows there are trivial changes in the consumer behavior when an increasing concern for sustainability and environmental issues like global warming, pollution, ozone layer depletion, over-use of natural and non-renewable resources are visible (Peattie, 2010; Samarasinghe, 2015). Evidence found from research suggests that increasing numbers of consumers prone to purchase following environmental values (Peattie, 2010).

It is observed from the previous discussions that the growing picture of green consumption is of a process that is strongly influenced by consumer values, norms, and habits, yet is highly complex, diverse and context dependent (Peattie, 2010). Some research findings show that many individuals act like predators. They show their positive attitudes towards environment but they fail to translate their pro-environmental and ethical attitudes into actual behavior during decision making to do green behavior (Carrigan & Attalla, 2001; Connolly & Prothero, 2008; Kollmuss & Agyeman, 2002).

The capitalistic models or philosophies encourage materialism where there is a lack of values. So, the level of consumption in the society is high and remains prevalent (Autio, Heiskanen, & Heinonen, 2009; Peattie, 2010) and is conflicting to environmental and social

interests while some green consumption behavior (i.e., regular recycling, using reusable supermarket bags) is becoming a socially accepted and desirable norm (Carrington, Neville, & Whitwell, 2010; Haanpää, 2007). Not only that the green consumption behavior is generally accepted by all religions. The Qur'an has mentioned, *"Give the relatives their [due] right, and the needy and the traveller [as well], but do not squander wastefully. Indeed the wasteful are brothers of Satan (Devil), and Satan is ungrateful to his Lord"* (Al Qur'an, Surah Israa: Verse 26 and 27).

There has been limited number of research works on how to facilitate and impede green consumption behavior on social environment (Grønhøj, 2006; Oskamp et al., 1991). There should have been more researches about how to increase the knowledge of green consumption behavior, the 'attitude-intention-behavior' gap, and pro-environmental behavior change by considering the individual, household and societal variables that underlie and influence green consumption behavior. Skepticism is there about how loyal consumers are to green products in the real marketplace. Not all people hold positive attitude about green products consider purchase and consume products which are environmentally positioned (Kim & Choi, 2005). Researchers found several factors which influence green consumption behavior. The factors are: behavioral intention to consume green products, willingness to consume green products, group recommendation, environmental knowledge, and self-efficacy.

Environmental knowledge is an important factor which is used as an independent variable to predict behavioral intention and green consumption behavior in several researches. In some researches it is proven that this variable has strong relationship to the behavioral intention to consume green and to do environment friendly behavior (Barber et al. 2009; Flamm, 2009; Polonsky et al. 2012). There are also negative arguments and

findings which show that consumers do not respond to green products remarkably despite sound environmental knowledge (Carrete et al., 2012).

Perceived behavioral control or self-efficacy is used interchangeably in researches. Sometimes, it is also termed as perceived consumer effectiveness that is defined as consumers' perception about their determination on behaving environment friendly. This is considered as an independent variable or is found as a strong predictor to consumer behavior (Roberts 1996). It was claimed that the opinion of public regarding self-efficacy was changing due to increased coverage of media about environmental issues like disasters of different types (Maibach, 1993).

Religion is considered as one of the striking sub-cultural instrument that has historically influenced human behavior and conduct that has retained its relevance even in the rational scientific age. Academicians in the fields of psychology, sociology, anthropology etc. have broadly investigated the topic of religion and its connections in their respective fields. But, religion has not been adequately investigated in the field of marketing and consumer research (Islam, 2016). Few researchers have developed theoretical approaches that show religious factors influencing green consumption behavior. The target of this study is to get an understanding of different factors affecting green consumption behavior and to know if there is any effect of religiosity as moderating variable. More specifically, it will investigate the relationship in between willingness to consume green, group recommendation, self-efficacy, and behavioral intention to go for green and the actual behavior. Moreover, the researcher will find the moderating effects of religiosity as moderator on the link in between behavioral intention to go green and the green consumption behavior. The research done by Iqbal and Nisha (2016) shows that there

is largely a strong positive relationship in between religion and the purchase behavior of Muslim consumers.

There is a claim that the level of religious values is deteriorating which lead to an uncontrolled consumption behavior and the uncontrolled consumption is detrimental to the sustainability of global environment. Islam is not merely a religion; it is a complete code of life. Islam is termed as complete code of life as it has given solutions to every problem in human life. If a person is religious in true sense, s/he is bound to do pro-environmental behavior. But, the problem is tendency to exclude religion from daily affairs of human beings. It is observed that, marketers play a great role in shaping the culture of the people in the respective geographical area. With the increase of environmental concern and for sustainable development, it is very important to let the business community and all concerned know the behavioral patterns of customers or consumers so that the concerned can get ready with all strategic preparation to face the challenges relating to sustainability. Literature supporting pattern of consumption behavior of Muslim consumers is scarce.

Green consumption behavior consists discrepancies, contradiction and compromises (Kennedy, Beckley, McFarlane, & Nadeau, 2009). There have been several researches to understand the 'attitude behavior gap' of green consumerism and the researchers tried to explore the situation like what practical and motivational intricacy which the consumers face (Kollmuss & Agyeman, 2002; Moisander, 2007). Consumers may be influenced to turn their minds to purchase conventional products based upon price, product performance and compatibility issue of the product. There has not enough understanding about how consumer can be used to and rationalize with non-environmental behavior and it is not consistent with their pro environmental attitudes.

To date, only a small number of studies have considered religion as a moderator of consumption patterns despite having significant thirsts in the literature. Cutler (1991) revealed that the frequency with which research articles on religion were published in the academic literature- only thirty five articles had a religious focus. Thus, examining the impact of religion needs more researches. This study fills the gap by studying the above question (Ansari, 2014).

Therefore, there are significant researches in the area of understanding green consumers (Autio et al., 2009), green consumption behavior (Peattie, 2010), and the 'attitude-behavior' gap of green and ethical consumerism (Carrington et al., 2010). Researches about the green and ethical literature, most of them are conventional, there has been inadequate number of research into how a consumer's willingness and intention are guided by religiosity (Caruana, 2007; Szmigin, Carrigan, & McEachern, 2009). Understanding green and mainstream consumers' willingness and how these willingness shape, and are shaped by, individual experiences and the group recommendation, and there need further research about self-efficacy (Iqbal & Nisha).

It is reported from the green literature that the behavior of a consumer is inconsistent with his/her pro-environmental attitudes or willingness (Carrington et al., 2010; Kennedy et al., 2009). The relationship between consumer rationalizations and non-environmental behavior may explain how individuals adjust when they behave in ways inconsistent with their pro-environmental attitudes. In case of green consumption behavior, social factors are important drivers, it has inferred by quantitative research (Griskevicius, Tybur, & Van den Bergh, 2010; Lee, 2008; Young, Hwang, McDonald, & Oates, 2010). By exploring the type and nature of social and religious influence, new insight may be revealed

about how the religious knowledge and experience can encourage pro-environmental behavior change and reduce the ‘attitude-intention-behavior gap’.

Taking above into consideration, it can be said that green consumerism research, until now, has focused only on individual level and the variables available in TPB (Dolan, 2002; Moraes, Shaw, & Carrigan, 2011). Through understanding the effect of religious values particularly the values originated from Islam, better understanding will be gained by readers about green consumption. In addition, the role of religion in facilitating green consumption behavior will be unveiled.

1.4 Research Questions

On the basis of statement of the problem, some research questions have been developed which are as follows:

- RQ1: What is the level of green consumption behavior among Muslim consumers in Bangladesh?
- RQ2: Do willingness to consume green products, group recommendation, environmental knowledge, self-efficacy influence behavioral intention to consume green products of Muslim consumers in Bangladesh?
- RQ3: Does self-efficacy influence behavior of green consumption among Muslim consumers in Bangladesh?
- RQ4: Does behavioral intention to consume green products influence behavior of green consumption among Muslim consumers in Bangladesh?

RQ5: Does Islamic religiosity moderate the relationship between behavioral intention to consume green and behavior of green consumption among Muslim consumers in Bangladesh?

1.5 Research Objectives

Broadly, this study aims at identifying factors influencing Muslim consumers' behavior regarding the consumption of green products. It is important to research and understand the relationship in between the religiosity of Muslim consumers and their consumption behavior.

The specific objectives of this study are as follows:

1. To evaluate the level of green consumption behavior among Muslim consumers in Bangladesh.
2. To find out if willingness to consume green products, group recommendation, environmental knowledge, self-efficacy influence behavioral intention to consume green products of Muslim consumers in Bangladesh.
3. To test if self-efficacy influence behavior of green consumption among consumers in Bangladesh.
4. To investigate if behavioral intention to consume green products influence behavior of green consumption among Muslim consumers in Bangladesh.

5. To examine whether Islamic religiosity moderate the relationship between behavioral intention and behavior of green consumption among Muslim consumers in Bangladesh.

1.6 Scope of the Study

This research is a correlational research in the field of consumer behavior. Researches of these kinds show the cause and effect relationship of any event. This study specifically aims at analyzing factors influencing green consumption behavior of Bangladeshi consumers living in Dhaka and Chittagong cities. This study works with five independent variables namely behavioral intention to consume green products, willingness to consume green products, group recommendations, environmental knowledge, and self-efficacy. Green consumption behavior is the dependent variable. Beside these, Muslim religiosity is a component which is assumed to have moderating influence on green consumption behavior of Bangladeshi Muslim consumers. To serve the objectives of the study, data have been collected from the customers of some selected shopping malls in Bangladesh. The sample shopping malls have been chosen from two cities of the country. The cities are Dhaka (capital) and Chittagong (commercial capital). People (respondents) from different parts of the country rush in these two cities and their opinions are supposed to be greatly representative. Moreover, there are significant numbers of shops that sell green products in the shopping malls of these two cities. This study has been conducted during the year 2014 to 2018.

1.7 The Significance of the Study

In this era of globalization, multinational companies are continuously introducing new and updated products both to international and domestic markets which urges the importance of studying the relationship between religion and consumer behavior (Ansari, 2014). Studying the effects of religion on consumer behavior is crucial now among other reasons, because consumers communicate their religious identities to others and express the intensity of their beliefs through consumption choices (Coşgel & Minkler, 2004). The importance of this research springs from its anticipated theoretical contributions to knowledge and practical contributions to businesses of different nature. This is much important in Bangladesh as there are 90.4% people who are Muslims (Nisha & Iqbal, 2017).

1.7.1 Theoretical Contributions

Due to the growing significance of green or pro-environmental issues and their effects on business organizations, this study is contemporary for adding to the knowledge in the discipline of business particularly in marketing. Many scholars have conducted researches to investigate green consumption or green purchase behavior. From this study it will be possible to know and understand the factors influence one's consumption behavior and particularly green behavior. As this study attempts to unveil the moderating effect of religiosity on the relationship in between behavioral intention to consume green and consumption behavior of consumers, the stakeholders will be able to know how the levels of religiosity strengthen or weaken the relationship between behavioral intention to

consume green products and green consumption behavior of a Muslim consumers in Bangladesh. In this way, a better understanding can be developed about ‘green’ and ‘mainstream’ (i.e., not so green) consumers that how they face the tradeoffs, sacrifices, pre-conceptions, positive and negative experiences regarding green consumerism.

The contributions of this research therefore furnish better explanation of tradeoffs, sacrifice and experience that green and conventional consumers face during consumption. This study also examines how green behavior and the adoption of greener consumption habits influence individuals’ consumption behavior. In this study the literatures, theories, frameworks and many facts and figures are depicted which can act as reference points for future researchers in this field of study.

1.7.2 Practical Contributions

Findings of this research can play very significant role in the practices of marketing. The results can be utilized for successfully launching green products in Muslim dominated countries like Bangladesh where there are Muslim majorities. Besides Bangladesh it can help managers understanding markets in other middle-east countries which are predominantly Muslim intensive countries.

This research is expected to enrich the performance of business people or marketers in some ways. Specially it has implications in designing advertisements and promotional strategies. The aspects of green consumption are examined in this study. This study is also supposed to unveil that the latitude of acceptance of green and not-so-green consumers are not same regards to consistency and inconsistency about green concepts. The results of this study will enhance the importance of green concept to one’s identity and self-image and

individual relevance to environmental issues. This information about customers helps managers to design products and marketing policies for greater market coverage and customer satisfaction.

In addition, this research emphasizes on consumption behavior of Muslim individuals, and it examines how different factors shape the 'green' perception of mentioned consumers. This study shades light on the influence that a customer can receive by the interaction with other consumers. Individual customers may sometime consider as a part of 'greening' strategies. Using this strategy, it is expected that consumers will be more accountable in their consumption behavior- 'green' or 'non-green'. This reveals the connection between green consumption behavior and household roles; household lifecycle; & living situation. This study also explores, taking multi perspective of consumers, customers' green consumption behavior in connection to personal relationship. The managerial implication of this study would be new information on green consumption behavior which may help in examining socially constructed green consumption reality.

Finally, this study focuses on finding the effect of Muslim Religiosity as moderator on the green behavior of a Muslim consumer in Bangladesh. It is assumed that the person with a sound knowledge of Islam (a practicing Muslim) will do better pro environmental behavior or green behavior than those of non-practicing ones. The outcome of this research will be a structured comprehensive framework of green behavior of consumers in light of Muslim religiosity. The researcher of this study has worked for developing a theoretical framework which will rightly present the relationships among a set of variables influencing green consumption behavior of Muslim consumers in Bangladesh. It is believed that this framework will insist marketers to redesign their marketing campaign accommodating the religious values, particularly Islamic values which will inspire the consumers at all levels to

be more religious. The key outcomes of the research will also pose a valid and reliable measurement instrument for Muslim religiosity. This instrument will be used in judging the religiosity of people. Research of this kind is needed for different stakeholders because Bangladesh is a big and lucrative Muslim Market in Asia. It will provide inputs to the researchers, consumers, managers formulating business policies and strategies, supply chain experts who work with marketing logistics.

1.8 Definitions of the Key Terms

Understanding of any subject-matter requires proper definition of key terminologies in any study. This section contains definition of key terms used in this study. In the methodology section, definitions are given in operational manner.

1.8.1 Green

The metaphoric definition of green usually means life, resources, environment, energy conservation, environmental protection and sustainability (Dangelico & Vocalelli, 2017). McDougal (2002) denotes people, products or activities by the term 'green' which are linked to environment. By definition, green or environmentally-responsible activities minimize impact to overall ecology.

1.8.2 Green Consumption Behavior

Green consumption behavior can be defined as habits of human being who consider environment friendliness in consumption of goods and services. A green consumer takes into account energy-saving and carbon reduction, environmental resources and sustainable development (Li et al., 2016).

1.8.3 Willingness to Consume Green Product

Willingness is normally defined as the way a person shows his or her desire to do a particular behavior. If anyone wants to consume green it is very much required that the individual is willing to do so. When willingness is backed by hard determination it is called intention. An affirmative willingness may come from positive attitudes which is a relatively enduring faculty of beliefs, feelings, and behavioral tendencies towards socially significant objects, groups, events or symbols (Vaughan & Hogg, 2005).

1.8.4 Behavioral Intention towards Green Consumption

Behavioral intention is stated as a summation of willingness and commitment to respond to any object. Research shows purchase or consumption decision depends upon one's intention to buy or consume. An intention is required to respond positively towards green consumption (Peattie, 2010). Previous studies have indicated that intention exerts a positive effect on recycling behavior (Runyan, Foster, Park, & Ha, 2012) and willingness

to purchase sustainable and environmentally friendly products (Chan & Lau, 2002; Vermeir & Verbeke, 2006; Yan, Hyllegard, & Blaesi, 2012) .

1.8.5 Group Recommendation

Group recommendation is termed as the reference and motivation or inspiration come from any organized group such as family members, friends, colleagues and other acquaintances to do any particular type of behavior (Zhu, Li, Geng, & Qi, 2013).

1.8.6 Environmental Knowledge

Environmental knowledge can be termed as the collection of information an individual is equipped with about environment. It is often assumed that knowledge about environment would drive to green consumption behavior (GCB) (e.g. Bartkus et al., 1999; Schlegelmilch et al., 1996); the rationalist model illustrate that if people are educated issues about environment, they will engage in more pro-environmental behavior (Kollmuss & Agyeman, 2002).

1.8.7 Self-efficacy

Self-efficacy is a component of Bandura's (1986, 1997) social cognitive theory and it is an element or a kind of personal control belief which is mentioned in the theory of planned behavior of Ajzen (1991). In another way, it can be defined as a belief or confidence level of an individual about a particular action. In case of green consumption

one with high confidence level or high self-efficacy may think that s/he will be able to consume green facing barriers, if any (Abdel-Khalek & Lester, 2017).

1.8.8 Religiosity

It is generally defined as religious alignments and involvement. It includes ritualistic, experiential, ideological, consequential, intellectual, creedal, doctrinal, communal, cultural and moral, dimensions (Holdcroft, 2006).

1.8.9 Muslim Religiosity

Muslim religiosity indicates leading one's life in the shape of Islam. Religious Muslim person is one who has faith on Allah and His messengers, revealed books, angels, and the day of resurrection; says five times prayers, observes fasting in the month of Ramadan, and does charity as prescribed by Islam.

1.9 Organization of the Thesis

The thesis consists of six chapters. It is briefly highlighted here. Chapter one provides an overview on the background of the study followed by statement of problems, research objectives, research questions, scope of study, definition of related terms of this research and significance of the research. Chapter two focuses on the understanding of consumption behavior which reflects two frameworks that include Theory of Planned Behavior (TPB) and Theory of Reasoned Action (TRA) developed by Icek Ajzen (1985,

1987). This chapter also discusses the key variables like behavioral intention to consume green products, willingness to consume green products, Environmental knowledge, Group recommendation, self-efficacy, and religiosity. Chapter three describes the research methodology. This chapter presents the research framework of this study, hypotheses development, research design, sampling, data collection procedure and then describes as well as justifies the statistical techniques employed in the study for data analysis. The empirical data analysis and findings are presented in Chapter four. The topics included in this chapter are demography of the respondents, descriptive statistics of the constructs, quality criteria of PLS measurement model and an assessment of PLS structural model for hypotheses testing. Finally Chapter five discusses the findings of the study, implications of the findings, and it deliberates some recommendations and a conclusion.

1.10 Chapter Summary

This chapter focuses on the introductory part including research questions, problem statement, background and objectives of the study. Issues related to this study includes: Mass industrialization and uncontrolled consumptions across the globe which cause increase in the level of environmental concern which ultimately suggests the world businesses to rearrange their policies and strategies. In this process researchers engaged efforts to carry out studies to find models for an amicable solution to ensure a green or sustainable consumption behavior. In this research, it is examined that how consumers behavior is effected at different determinants. This research is important due to the increasing significance of environmental issues and their effects on business organizations. This study identifies green behaviors' status of Bangladeshi Muslim consumers who are a

large stake in the market. The attraction of this study is the moderating effects of Muslim religiosity components on some components of traditional theories like TRA (Theory of reasoned action) and TPB (Theory of planned behavior). The operational definitions of relevant variables have been furnished in this chapter. The next chapter focuses about the variables in details, proposed conceptual framework, and it is illustrated followed by the relationships between purchase intention of consumers towards green products and variables. Detail of the variables and frameworks have been discussed in the next chapter – chapter two.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

Chapter two represents the literature review relating to factors influencing green consumption behavior (GCB). This review of literature outlines the concepts and theories related to the research framework. It exhibits the concepts, beliefs, expectations, assumptions, and theories that support this research rationally and significantly. Extensive literature reviews have been done to develop the theoretical framework. Review of literature is critical where it is required to clarify the necessity for more information relating to green consumption behavior, and about religiosity. It is assumed that consumers have intention to consume green products but in case of actual consumption behavior their response is poor.

Review of literature helps find the research gap, develop the problem statement and research questions, and construct conceptual framework and hypotheses. The variables, dependent and independent and/or mediating variables of a study must be supported by relevant literatures. Literatures should be most up-to-date, timely and latest. Furthermore, this chapter adapts a conceptual framework which has been summarized and is presented graphically. The framework shows relationships of the dependent variable with independent variables. In the end, proposition of hypotheses is furnished and explained. The review is essential to find and discuss issues with previous studies or research, used theories, criticisms, arguments for and against the theories and to identify questions the answers of which were not adequate in past literatures. It finally ends with development of

opinions and arguments of the ways this research develops a treasured and an original support to knowledge in the arena of green consumption behavior with religious context.

2.2 Consumer Behavior

Consumer behavior is the study of actions and reactions of the consumers regarding making decisions and choices about purchasing or consuming any goods or services. Here the consumer may be an individual, may be a firm or any entity. This behavior of consumer alters in every moment for different reasons. The changing nature of marketing techniques or strategies can be mentioned as one of the reasons of fluctuating consumer behavior. Modern consumers are said as savvy consumers. Consumers are now competent in making purchase or consumption decisions. They consciously or unknowingly consider the green or environment friendly symbol of products for the influence of the company introduction of the product with environmentally friendly nature (Jebadurai, 2013). Consumer's quality of life depends on product's buying and consumption decisions. How a mere decision is so important? For what reason do advertisers spend a great deal to investigate the explanations for these choices? Doing research on consumer behavior is a complex process and understanding customer behavior is crucial to marketers and advertisers. This research investigates and analyzes the factors influence green consumption behavior of Muslim consumers in Bangladesh.

2.2.1 Green Consumption Behavior

Numerous social, ecological and economic crises experienced by human being have made the human development unsustainable. Firms engage them in production of goods and services as these are required by the consumers (Jongen & Meerdink, 1998). Thus consumption and production approaches are seen as the reasons of mentioned crises. To ensure balance at the social, economic, and ecological levels the trend of green or sustainable development recommends a portfolio of activities for its different forces. The sustainable behavior of consumers falls in this perspective, following an awareness of inadequate technological solutions and difficult execution of a purely regulatory approach.

Concepts of green marketing, green product, green business, green consumption, and green behavior are almost brand new ones even though the practices are age old. Now-a-days, all over the world, the consumers are becoming more environmentally concerned which leads to a green revolution and requires putting off supplementary damage to the environment. Understanding green purchasing behavior of consumers' and to know why customers respond to green products are vital for the marketers in designing their marketing programs. Purchasing behavior of the consumers vary with the country status with environmental problems. Consumers are seen more responsive to the environment when countries have high environmental problems. Nevertheless, green purchasing is still an emerging trend in response to distress for the environment in many countries. There is a range of green purchasing practices and initiatives around the world (Hải & Mai, 2013). Primarily the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1975) and later on the Theory of Planned Behavior (TPB) (Ajzen, 1991) have discussed that a person holds a positive attitude towards performing a particular behavior if s/he perceives that the results

of performing that behavior brings any benefit (Wong, Lee, Lin, & Low, 2012). The benefit may be to the individuals, groups or to the society or environment as a whole.

Green purchasing is regarded as a highly efficient tool for sustainability in production and consumption. Green purchasing comes out of a significant environmental concern (Hessami, Yousefi, & Goudarzi, 2013). Buying and consumption of products which are environment friendly, bio-degradable, and recyclable can be termed as green behavior of a consumer (Wahid, Rahbar, & Shyan, 2011). Customers consider environmental criteria or apply environmental principles to quality and price standards while purchasing or selecting goods and services actually do the green behavior (Vazifehdoust et al., 2013).

Consumers are now realizing the influence of their behavior towards environment. So, they are switching to green purchasing even paying the higher price. Green products are getting higher priority to the consumers as consumers have changed their minds to become more responsive to the environmental changes (Hessami et al., 2013). The green consumption concept includes a framework of consumption perception, objects, processes and results. Generally green consumption behavior (GCB) of consumers consists of recycling, reusing, bringing own shopping bags, the purchase and consumption of environment friendly and biodegradable products etc. (Tan, Johnstone, & Yang, 2016).

Going green contributes significantly to the bottom lines of businesses. Going green entails a paradigm move in green consumer behavior. Researches apply different terminologies to mention green behavior as pro-environmental behavior, environmental consciousness, environmental significant behavior, or sustainable behavior (Samarasinghe, 2012). Environmental concern, climate change and sustainability becomes prevalent social and political issues in interest of this planet (Bergin-Seers & Mair, 2009). A unanimous

agreement is there that the levels of consumption should continue maintaining a standard and considering the capacity of the earth (Huneke, 2005). Production and consumption of world's resources are going on at a faster rate than the abilities of regeneration. It is a significant issue to encourage citizens to embrace greener consumption habits facing policy-makers and various agencies of government in every nation. (1998) argue that:

“Sustainability is predicated on the belief that individuals and institutions can be persuaded to accept responsibility for the production of environmental problems and change their everyday practices to alleviate future impacts.”

By putting stress on the requirement to lessen consumption to a sustainable level some pressure groups and government agencies set their targets to educate consumers about the environmental issues (Peattie & Peattie, 2009). Be that as it may, some business associations present a self-driven, materialistic and unsustainable way of life and rituals, whereby assets symbolize position, power, and accomplishment (Miles and Covin, 2000). A practice of over-consumption and realism inversely affect condition and its assets (Arruda Fontenelle, 2010). Broad attention to ecological issues has offered energy to a post-present day development; and in this manner a few shoppers expect to lessen consumption and they are getting increasingly responsible with respect to natural issues holding a feeling of good commitment to the earth (Shaw & Newholm, 2002).

Deforestation, ozone exhaustion, dumping of poisonous remaining, a worldwide temperature alteration, and the draining of characteristic and non-sustainable assets have turned into a standard wonder of everyday life (McGrew, 1990). Scattering of natural qualities and fragile awareness of the social and ecological effect of purchasing choices and consumption behavior has prompted the appearance or development of composed buyer dissident gatherings and the swelling accommodation of green or condition well-disposed

items (Carrigan and Attalla, 2001). The ascent of green industrialism urges even standard customers to be socially cognizant and endeavor to "have any kind of effect" through their consumption and behavior rehearses (Tiu Wright, Shaw, Newholm, & Dickinson, 2006).

The activities and consumption behavior of buyers are heterogeneous among people (Akenji, 2014; Autio, Heiskanen, and Heinonen, 2009). The natural post-effects of buyer behavior are existing in the whole procedure of settling on choice, and the procedure of consumption and transfer of products and enterprises (Peattie, 2010). Notwithstanding, it is accepted that green consumption and behavior choices are taken by people looking for a greener way of life (Haanpää, 2007). It is additionally embraced as a choice to act in an ethically as well as socially dependable way to ensure the green earth (Moisander, 2007).

Green is consolidated inside the more extensive class of 'moral behaviors' (Carrington, Neville, and Whitwell, 2010; Grimmer and Bingham, 2013). 'Green' as a term transmits to natural issues, yet it is likewise tied with the financial and social parts of feasible advancement (Peattie, 2010). The contrast among 'green' and 'moral' writing is vague, as there is an outward cover among green and moral concerns. For example, Elkington (1994) expressed that the individuals who practice green consumption behavior goes for:

“Avoid products that are likely to endanger 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 unnecessary waste; use materials derived from threatened species or environments; involve unnecessary use of or cruelty to animals; or adversely affect other countries.”

By this time, Shaw and Newholm (2002, p. 168) opines:

“The inextricable link between consumption and ethical problems, such as environmental degeneration and fairness in world trade, has resulted in the emergence of a group of consumers commonly referred to as ethical consumers.”

These declarations describes the numerous apprehensions and interconnectivity of issues that promote green and ethical consumerism, validating ambiguity in the discrepancy between the terms ‘green’ and ‘ethical’. As ethical issues integrate green issues and as green issues include ethical considerations, ethical and green literature form the underpinning necessity for this research. While public interest has emerged noticeably in recent years, the term ‘green consumerism’ is not new to marketing. It has taken many different forms and labels including, environmental marketing (Henion and Wilson, 1976), ecological showcasing (Coddington, 1993), enviropreneurial advertising (Ajay Menon and Menon, 1997), green advertising (K. Lee, 2008; Polonsky and Rosenberger, 2001), and manageability showcasing (Belz and Peattie, 2009; Van Dam and Apeldoorn, 1996).

2.2.2 The Green Consumer

Who is actually a green consumer is not much defined clearly as yet (Kilbourne, Beckmann, & Thelen, 2002). Despite the fact that there are a wide assortments of definitions, the term can principally show customers who considers nature as essential and subsequently settle on purchasing choices and who lead exercises considering ecological benefits (Connolly and Shaw, 2006; Shrum, McCarty, and Lowrey, 1995). 'Green buyers' are the general population who show worry with the physical condition, and thus buy

behavior is impacted by natural cases. In an observational investigation which needed to psycho-graphically profile the qualities of the green buyer, specialists found that the person in question is normally a sentiment chief and cautious customer who look for data on merchandise and ventures with data from publicizing in spite of being suspicious of promoting (Shrum et al., 1995). Until further notice, an elective view is to recognize that such an extreme preservationist way to deal with consumption isn't anything but difficult to embrace in our inexorably comfort driven and consumption arranged society (Elkington, 1994; Moisander, 2007). Subsequently, green industrialism is being seen all the more generously, with a few shoppers cautiously choosing items and administrations that are the slightest dangerous to nature. The liberal perspective of green industrialism makes it conceivable to have a positive ecological effect without essentially trading off one's lifestyle (Moisander, 2007). The sorts of shoppers sketched out by Moisander (2007), aid to recognize "green" and "standard/not really green" customers. These wording shows how the two purchasers' bunch have diverse recognitions about satisfactory dimensions of green consumption behavior. It is, to some degree, astounding, that the writing has widely researched the "green purchaser," yet has ignored how the "green" discernments and encounters of "standard" (i.e., not really green) buyers may influence the reception of green consumption behavior by this shopper fragment. There are additionally inadequate comprehensions of how "green" recognitions and consumption behaviors are molded by other "green" and "standard" (i.e., not really green) shoppers in the social condition. These insufficiencies in ebb and flow research and writing are astounding, considering the significance of the "standard" (i.e., not really green) customer market to the proceeded with development of the sustainable or green business (Ibtissem, 2010).

2.3 Factors Influencing Green Consumption

Numerous elements drive purchasers to take part in green industrialism. The thought processes behind green consumption behavior have been the focal point of generous research, as specialists look to comprehend which people are bound to take part in master ecological behavior and why. Critical consideration has been given to breaking down the statistic components of an individual's experience as a clarification for environment friendly behaviors (Pettit and Sheppard, 1992). Females are observed, in a few investigations, more ecological than males in western societies (Agarwal, 2000; Autio et al., 2009; K. Lee, 2008), in light of the fact that females are commonly progressively worried for who and what is to come and assume a supporting job in the public eye (Autio et al., 2009). Be that as it may, there have been a couple of triumphs in clarifying ecological worry from statistic factors' perspective (i.e., age, occupation, social class, home, political affiliation) beside sexual orientation.

Various examinations have noticed that the demographic variables are poor indicators of green consumption behavior (Agarwal, 2000; Davidson & Freudenburg, 1996). Studies have generally concluded that the underlying determinants of pro-environmental behavior are mostly unrelated to demographic characteristics (Pettit & Sheppard, 1992). This has driven this researcher to recognize other persuasive drivers that are not totally unrelated. This is because a consumer may face different inspirations for taking part in green consumption behavior. The green literature has not analyzed how the basic inspirations of buyers may influence green qualities, viability of green consumption behavior, and recognizes distinctive kinds of customers. When all is said in done, charitable

thought processes, profound established faiths, self-situated intentions and social intentions are the essential drivers of consumption behavior.

2.3.1 Altruistic Motives

Customers having self-less thoughts are considered as consumers with Altruistic. They always give priority to others over their interests. Shaw and Clarke (1999) observed in an exploratory study that moral customers hold commitments for others that have effects on their buying decisions. Besides, Stern, Dietz and Kalof (1993) inspected the job that social-benevolence and pride played in impacting green consumption behavior. More explicitly, it investigated whether social-charitableness is a sole driver of green consumption behavior. The studies demonstrated that social-selflessness and biosphere-benevolence impact a shopper's eagerness to make political move by staying away from some specific market behaviors and items that are socially or naturally hurtful (Stern, Dietz, and Kalof, 1993).

2.3.2 Deep-rooted Beliefs

Internal ethics and personal norms regulate deep-rooted beliefs (Shaw et al., 2005). Consumers driven by beliefs of these kinds are motivated by ethical values. They think this is their way of life. Consumers oriented with deep-rooted beliefs about green consumerism are usually anti-capitalist and they discard a materialistic and high-consumption lifestyle by dipping their consumption (Shaw et al., 2005). A few studies have shown that these purchasers drop items, brands and practices that are conflicting with their basic beliefs or

personality (Connolly and Shaw, 2006; Elkington and Hailes, 1988; Moisander and Pesonen, 2002). Green issues can mentally incite people by method for blame and disgrace to add to ecological security. It is additionally found that past behavior and anticipated emotions becomes an important internal driver of an individual's desire and intention to perform green behavior (Carrus, Passafaro, and Bonnes, 2008). These findings elucidate that affective connection and introduction to the natural environment contribute considerably toward green or pro-environmental intentions.

2.3.3 Self-focused Motive

The satisfaction level of some consumers is determined by the personal benefit derived from using a product or brand (Carrigan and De Pelsmacker, 2009). Shaw et al. (2005) found consumption decisions were strongly prejudiced by the desire to maintain good health through the purchase of healthy foods. Participants linked the term "healthy" with other issues such as green produce, animal welfare and non-genetically modified foods (Shaw et al., 2005). Besides, at times the purchase of environment friendly items is less expensive or spares purchasers cash. Some green items may include higher starting or in advance expenses however are more vitality effective and hence cost-proficient in the long haul (Griskevicius, Goldstein, Mortensen, Cialdini, and Kenrick, 2006). Subsequently, a few shoppers can monetarily profit by having vitality proficient family unit frameworks by utilizing greener items and innovations (Griskevicius et al., 2006; Griskevicius, Tybur, and Van lair Bergh, 2010).

2.3.4 Social Motives

The sociological dynamism of society generates a constructive social phenomenon that inspires individuals to contribute to the protection of environmental resources (Buttel, 1987). The term 'green' related with positive images and participation to an ecological association is considered socially alluring (Pettit and Sheppard, 1992). Research by Lee (2008) into Hong Kong immature green acquiring behavior, demonstrated that social impact was the most grounded and most huge indicator of green consumption behavior, trailed by ecological assurance, worry for mental self-portrait, lastly seen natural duty. An explanation behind this is social standards are authorized by danger of blame or disgrace and advance similarity through social endorsement and acknowledgment (Argyle and Williams, 1969). The social impact and basic abstract standards in the public arena mirror the effect of straightforwardly felt desires from other individuals, in view of on the requirement for endorsement from others (Bagozzi and Lee, 2002). Indeed, Sexton and Sexton (2011, p. 1) suggest that "expensive private commitments to natural insurance progressively give status once managed just through gaudy showcases of inefficiency". This shows how society's past affirmative impression of consumption and waste is currently seen contrarily.

2.3.5 Green Standards

Standards are the mutual faiths about how we "should" act and they are upheld by the risk of disciplines or the guarantee of remunerations (Ölander and Thøgersen, 2014). Purchasers may show expert ecological behavior for individual reasons, or for social

standardizing reasons. The kind of standard and if it is close to home or social, relies upon how disguised they are. As characterized by Schwartz (1977), an individual standard is a self-desire for an explicit activity in a specific circumstance, experienced as a sentiment of good commitment. In the interim, the qualifying term "social" is utilized to express the possibility that the standard depends on gathering desires and that rewards (i.e., pride) or disciplines (i.e., blame) are remotely characterized and prone to act naturally managed (Schwartz and Howard, 1982).

Disguised individual standards urge buyers to think about the natural outcomes of consumption all through private and open consumption exercises. Flashes and Sheppard (Sparks and Shepherd, 1992) analyzed how distinguishing proof with green commercialization influenced a person's expectation to buy and devour green vegetables. The outcomes uncovered that in spite of the fact that the buy and consumption of green vegetables isn't normally performed within the sight of other green shoppers, despite everything it controls the fitting consumption behavior on the grounds that unequivocal social standards are. People carry on as per saw standards so as to pick up an ideal response from others (i.e., social endorsement, preferring, adulate) and discourage from horrible responses from others (i.e., dismissal, objection, dismay) in their social condition (Bagozzi and Lee, 2002).

In the interim, if societal standards are not disguised to the fact where they wind up close to home standards, they may just guide proper consumption behavior for open, yet not private consumption circumstances. Customers may show star ecological demeanors and behavior when in social circumstances however may not keep up green consumption behavior for private and unnoticeable consumption behavior. The buy of earth neighborly items is a socially alluring attribute to show in the present society, and the positive social

results can initiate genius natural behavior (Pettit and Sheppard, 1992). Whitmarsh and O'Neill (2010) found that behavior overflow was most noteworthy for consuming since this behavior is prominently expended and that is thusly an outflow of one's "green" behavior (Whitmarsh and O'Neill, 2010). Numerous shoppers may not successfully accomplish green industrialism all through their consumption behaviors while holding a wish to pursue the green pattern (Pettit and Sheppard, 1992).

Many quantitative studies have discovered that green behavior is related to both social and individual standards (Bamberg, Ajzen, and Schmidt, 2003; Schwartz, 1977; Thøgersen, 2006). Stern et al (1999) found that customers' professional green standards were basically vital in going before both ecologically critical consumption behavior and a feeling of 'ecological citizenship' (Seyfang, 2005). In any case, Meill and Dallos (1996) recommend that:

"Not all standards are shared, and that individuals consider standards to be requiring distinctive degrees of adherence. It is obvious that a few standards recommend what ought to be done while others are only unmistakable of what individuals for the most part do in given circumstances."

Consumption is a kind of social procedure that entails a profound comprehension of individual, social, and physical viewpoints. Consumption profoundly is interlaced to social relations and standards, making singular behavior change toward supportability an issue of changing standards and social networks (Jackson, 2005). In this manner, upgrading our insight and comprehension of the "green social standards" consumers" see in the public eye is obviously a vital scope for research.

2.4 Political Consumerism

Ecologically concerned customers want to express political worries, by choosing items dependent on political, social, or moral contemplations (Shah et al., 2007). The expression "green" exemplifies diverse articulations, issues, and concerns for an individual (Carrington et al., 2010). A few customers utilize their operation as "cast a ballot" for all the more environment friendly items through "purchase coting" (i.e., acquiring ecologically neighborly and socially dependable items and brands) (Friedman, 1996). In the interim, different shoppers participate in behavior against earth and socially destructive items by proactive activity like "boycotting" (i.e., keeping away from the buy of ecologically and socially hurtful items and brands) (Smith, 1990). Moreover, keeping away from revulsion and boycotting have turned into a reasonable and important option in contrast to customary types of political activism (i.e., challenges) (Shah et al., 2007). Customers settle on determined choices to reject items and brands with frightful or earth unfavorable business rehearses. The objective is to constrain change with the "intensity of shopper dollars" (Iyer and Muncy, 2009). A British report by Mason detailed that 44% of arbitrarily chosen respondents from the all-inclusive community had refused brands in the past (Mason, 2000).

2.4.1 Corporate Green Practices

There have been a few blacklists particularly of expansive multinationals including McDonalds, BP, Cadbury, and Shell. Not exclusively are these embarrassments hindering to mark picture and notoriety, they additionally cost the organization huge dollars in lost

deals and repairing costs. The ongoing BP blacklist in 2010, actuated by worldwide shock in connection to a serious oil slick in the Mexican Gulf, cost the organization \$41 billion (Gosden, 2012). While a few organizations are feeling the squeeze from buyers to alter their business rehearses, others have effectively adjusted to green and moral guidelines requested by shoppers and customer extremist gatherings.

The pattern toward moral acquiring and consumption behavior has empowered a few associations to take advantage of conceivably beneficial moral sections, advancing the moral and natural qualifications of their items and brands (Carrington et al., 2010). Since the late 1990's, society has progressed toward becoming progressively ecologically and socially mindful and has begun to request social and natural obligation from associations (Lee et al., 2009; Shaw et al., 2000). As of late, a few associations have actualized ecological projects all through hierarchical procedures; regularly participating with natural associations (e.g. Greenpeace) to decrease or kill the negative ecological externalities caused by business activities (Miles and Covin, 2000).

Organizations that truly consider and follow up on natural issues may build up a maintainable upper hand. Those organizations that coordinate ecological contemplations into their business rehearses (e.g. 3M's "3 P's program" (counteracting contamination pays), DuPont Corporation's duty to 70% waste decrease constantly 2000 and McDonald's push to dispose of polystyrene clamshell bundling) have been recognized for their dynamic and model strides to join star ecological practices (Menon et al., 1999). Ecological execution is turning into an inexorably imperative part of an association's notoriety, which can possibly convey an upper hand and upgrade money related execution by decreasing the natural dangers seen by buyers (Miles & Covin, 2000). The ascent of green industrialism has constrained advertisers and organizations alike, to reexamine their practices and

business theory (Prothero et al., 2010) despite the fact that Prothero (2010) brought up an issue 'Is green the new dark?.' A few organizations are thinking about their items related to different procedures, bringing about green incorporation, then advancing and empowering greener ways of life for purchasers (Prothero et al., 2010).

In any case, a few scholastics contend that ecological execution does not convey a maintainable upper hand. The business for green items keeps on developing with appraisals of over \$200 billion of every 2006 (Ozcaglar & Toulouse, Shiu, and Shaw, 2006) and it is required to develop to over \$1 trillion by 2050 (Sexton and Sexton, 2011). Be that as it may, in spite of reports of consistent development in green item deals, it stays constrained to a specialty market of "green" shoppers (Ozcaglar & Toulouse et al., 2006). Reviews demonstrate that upwards of 33% of purchasers are set up to pay a more expensive rate for items with green attributes.

2.5 The Relationship between Behavioral Intention and Consumption Behavior

Theory of Planned Behavior (TPB) describes that attitudes, subjective norms and perceived behavioral control (PBC) are involved in the decision-making processes that determine intention formation and behavioral enactment. The model has also revealed credible predictive power for several pro-environmental or green behaviors (Gatersleben, Murtagh, & Abrahamse, 2014; Sparks, Hinds, Curnock, & Pavey, 2014; Whitmarsh and O'Neill, 2010). Also, specialists have demonstrated that expectations can add to the forecast of condition related practices. For instance, Bamberg and Moser's (2007) meta-investigation showed that, all things considered, goals represented 27% of the fluctuation in quality ecological or green practices (Carfora et al., 2017).

2.6 The Moderating Effect of Religiosity on the Relationship between Behavioral Intention to Consume Green and Green Consumption Behavior

Religiosity meaning as the intensity of religious belief and practice is a sub-cultural tool that guides human behavior. The measure of religiosity is observed in numerous studies of human behavior. For instance, in general social science studies, religiosity is used as an indicator of young marriages (Uecker, Mayrl, & Stroope, 2016), mood states of those coping with cancer (Fehring, Miller, & Shaw, 1997), and also is used in contraceptive use in adolescents (Studer & Thornton, 1987). In the field of political science it has been used as an indicator of some key political traits including: conservatism (Olson & Green, 2006), authoritarianism (Altemeyer, 1996), tolerance and even good neighborliness (Putnam & Campbell, 2010). Thus, religiosity is used as an indicator of political positions on several issues including: attitudes toward homosexuals and on the issue of same-sex marriage, abortion, divorce, birth control, gambling, pornography, welfare, the environment, and attitudes toward suicide, etc. Because of its broad application, religiosity is considered as a useful tool in the field of social sciences.

A significant number of researches have been done to find the predictors of green consumption, or green purchase intention and behavior. Dozens of variable are traced having significantly positive relations with green purchase intention or green consumption behavior. Most commonly, environmental concern, environmental considerations, environmental attitude, and environmental knowledge are found which have strong positive correlation with green consumption behavior. Surprisingly, it is observed that willingness to buy and consume green items has expanded over the most recent couple of years. But, there is little proof to propose that buying of green items has been proliferated. Despite

green concern and enhancing attitude of consumers towards supportability and green items the overall industry of green items stays bound to only 1-3% of the whole market (Bray, Johns & Killburn, 2011). This suggests that environmental considerations play a minor role in consumer purchasing decisions and people generally overlook environmental impacts of their purchases (Mohr, Webb & Harris, 2001).

Just a small number of researchers have adopted religious qualities as indicator of green consumption of Muslim consumers. A religious perspective may impact environmentalism (Stern, 2000). Studies demonstrate that religiosity influence consumption (Stillman et al., 2012). Proper use of resources may ensure sustainability for future generations. In view of the clarification above, it is anticipated that otherworldliness will clarify a lot of difference of green buy aim.

The prominent figures in the history of psychology became reputed for focusing much of their interests on religion. The importance of religion to human beings in so many dimensions of daily living has made it a significant area of research to the researchers (Hamzah et al., 2007). Since psychology has the goal of understanding people's behavior, understanding religion and religiosity from the in different levels of individuals or groups has become a lucrative domain of psychologists. Psychologists study human motivation, behavior or cognition (Spilka et al., 2003).

Anthropologists and Psychologists have contemplated the connections among religion and social practices which are very little identified with natural concern. Therapists opine religion profoundly impact individuals' brain, as well as affect their social and social life (Spilka et al, 2003; Stodolska and Livengood, 2006, Shakona, 2013). Anthropologists, considering religion from an alternate heavenly attendant, pronounced that religion is rich with significance and imagery that can influence a person's social condition through

exercises, for example, custom where one is associated with the otherworldly (Howard, 1986; Stodolska and Livengood, 2006, Shakona, 2013).

In this study the researcher considers 'Muslim religiosity' to find its moderating effect on the relationship between intention to consume green and actual behavior of consumers. There have the scopes to work with religiosity in the area of Christianity, Buddhism, Hinduism and Judaism. In the west and other developed countries, there is an increase of empirical research on the role of religion on various aspects of our lives (Hamzah et al., 2007). Uses of religion in counseling (Burke & Miranti, 1995; Miller & Jackson, 1995), in psychological adjustment (Young et al., 2000) in personality (Piedmont, 1999) are remarkable. In this study, the researcher assumes that there is a positive relationship between the Muslim religiosity and green consumption behavior.

2.7 Dimensions of Muslim Religiosity

Yasemin El-Menouar (2014), in her paper, introduced another instrument to quantify Muslim religiosity. A quantitative report among 228 Muslims living in German urban communities was completed while considering Glock's multidimensional idea of religiosity. Previous studies have interpreted indicators estimating Christian religiosity into Islamic phrasing, some studies applied Glock's model considering the explicit qualities of Islamic devotion. Specifically, the capacity of his fifth dimension of mainstream outcomes was adjusted. Contrary to different sections, in Islam this measurement is viewed to be as novel and unique as the other four. This assumption is proven by empirical findings. Applying principal component analysis with rotation yields a five-dimensional structure of Muslim religiosity is found reliable indicators of measuring Muslim religiosity: 1. Essential

religiosity, 2. Religious learning, 3. Religious experience, 4. Focal obligations, and 5. Orthopraxis. In this research the questionnaire is designed in light of these dimensions.

Table 2. 1 The five dimensions of Muslim religiosity

Basic Religiosity	Knowledge	Experience	Central Duties	Orthopraxis
Religiosity on an individual level differentiates between believing and not believing Muslims contains: belief devotion sense of omnipresence of Allah	There is no fixed set of knowledge expected to be known by believers contains self-assessment of knowledge: Islam in general contents Qur'an contents Sunnah	responsive religious experience contains: sense that Allah communicates with oneself punishes behavior rewards behavior	Religiosity on a collective level differentiates between practicing and not practicing Muslims contains: ritual prayer fasting at Ramadan pilgrimage to Mecca observance of dietary rules	Counterpart to orthodoxy in Christianity contains observance of strict religious norms: gender relations music

Source: El-Menouar (2014)

2.7.1 Basic Religiosity

The first dimension contains everything of religious faith and reverential practice. This means religious faith is not possible to be hold independently. Faith is followed by practices and experiences. Also, no doubt some sort of religious experience is expected to affirm Islamic faith. Faith is joined by a sentiment of a ubiquity of Allah, which is upheld by the thing "detecting the nearness of Allah" stacking on a similar part. This thing was identified with the component of religious experience hypothetically; yet obviously it assumes an alternate part of Muslim religiosity. Hence, no unadulterated faith on an intellectual dimension could be identified. Rather, a type of religiosity exists,

communicating a general religious duty. Be that as it may, the execution of general ceremonies does not really follow from this. It speaks to religiosity on an individual dimension. Public viewpoints or aggregate religious ceremonies are not part of it. The premise of religiosity is the concurrence with the focal substance of faith of a specific religion (Glock 1969). The primary substance of religious faith inside Islam are, from one viewpoint, the unchallenged faith in the presence of Allah and, on the other, the confidence in the Qur'an as the flawless expressions of Allah (Ruthven 2000).

Following Waardenburg (2002), the focal religious ceremonies as depicted by the five mainstays of Islam have a place with the essential indications of Islam that are acknowledged by Muslims worldwide notwithstanding when they are not performed. The five columns contain more than religious ceremonies. Moreover, they incorporate the announcement of faith and the religious gift (zakat), which is identified with different measurements as indicated by Glock. Over the span of the experimental examination we will see whether these angles have a place together or not. So as to gauge the formal measurement, scientists utilized the recurrence of performing the custom petition (salat), the journey to Mecca, fasting amid the blessed month of Ramadan, and commending the finish of the fasting amid Ramadan.

As pointers to gauge the act of religious commitment, a few specialists utilized the recurrence of asking by and by to Allah (dua) and the recurrence of presenting the *bismillah* (for the sake of Allah). Each petition opens with this equation and devout Muslims for the most part discuss it before carrying out essential undertakings in regular day to day existence. Along these lines, the adherent places his activity under Allah's insurance and solicitations that they be effective (Khoury et al 1991). These are demonstrations of love

outside formalized and social customs. The adherent does them in protection and precipitously.

2.7.2 Religious Knowledge

The aspects of religious knowledge also are similar to Glock's model. Research exhibits the items measuring the degree of religious knowledge highly correlated with the same dimension. Some facts of religious contents are likely to be held by believers in all religions (Glock, 1962). As Glock (1962) signifies, it is enormously tough to resolve which religious contents matter in every denomination. This is even more difficult in Islamic perspective. In absence of a central religious authority in Islam, the focus can vary. Generally, the contents of the Qur'an and the Sunnah are the main sources of Islamic knowledge and it is expected that believers know a minimum of these contents (Waardenburg, 2002). But which knowledge really matters for individual Muslims is not fixed.

2.7.3 Religious Experience

As Glock predicts for all religions, an independent measurement estimating religious experience for the instance of Muslim religiosity could also be acquired. As suggested by Stark (1965), a separation in the middle of affirming and responsive religious encounter has been made. The matters identified with responsive religious experience make up their very own measurement. In this manner, just encounters including some sort of

perceived correspondence with the divine, which surpasses an obscure sentiment of such nearness, can be isolated precisely.

So as to predict the experiential measurement, the two subtypes of "affirming" and "responsive" religious experience as underlined by Stark and Glock (1968) have been incorporated. The affirming knowledge, portrayed as a feeling of the nearness of the heavenly on-screen character, was estimated by the accompanying thing: "Do you feel the nearness of Allah?" In request to gauge responsive religious experience, the respondents were asked the accompanying inquiries: "Have you at any point felt that Allah speaks with you?", "Have you at any point felt a feeling of being compensated by Allah?" and "Have you at any point felt a feeling of being rebuffed by Allah?"

2.7.4 Central Religious Duties

This measurement incorporates the recognition of focal religious obligations. It represents pretty much of the recognition of the "five pillars of Islam" and extra fundamental standards: the belief, the prayers, fasting on Ramadan, pilgrimage, and charity. In the same way, the adherence to solemn ceremonies runs connected at the hip with the recognition of some essential religious standards. As mentioned before, these standards concerning dietary guidelines picked up the status of general Islamic obligations. This can likewise be watched observationally. Rather than the principal part estimating Muslim devotion on an individual dimension, the second estimates devotion on a group or social dimension. The religious works on portraying this measurement share for all intents and purpose, that they are performed for the most part together with others. They have a common character. Furthermore, it contains just by and large acknowledged Muslim

practices and along these lines is independent from a customary sort of devotion. Hence, this segment is called main obligations.

2.7.5 Orthopraxis

The weighty component of religiosity has a vital and unmistakable job inside Muslim religiosity. The impact of Islam in the regular day to day existence of devotees isn't just an outcome of alternate measurements, as Glock puts it, yet a possess demonstration of love all by itself. How much Islam structures the regular daily existence of devotees past the institutionalized religious customs gives knowledge into various originations of devotion inside the Muslim people group. While a few tenets, for example, those overseeing diet, are exceedingly institutionalized and have a place with the focal obligations as talked about above, different religious standards ought to be separated, as proposed by the experimental outcomes. Rather than Glock's recommendation to bar this measurement from the model, its free status is affirmed. Inside a similar measurement we discover the thing of whether a Muslim ought to tune in to music or not. This measurement communicates the level of orthopraxis which relates with conventionality on account of Christian religiosity.

In Islam, religious law has a transcendent capacity (Schacht 1993). It doesn't just offer direction to the right execution of the religious ceremonies, yet in addition regulates the regular daily existence of the adherents. The recognition of those standards isn't to be translated exclusively as a result of religiosity notwithstanding when such standards identify with the regular day to day existence of the adherents. Their recognition is to be comprehended as religious love itself, which is a critical point. Thus, the element of

common results ought to be conceptualized as a necessary piece of religiosity in Islam. Particularly inside the gathering of devout Muslims, key contrasts ought to show up concerning explicit religious standards. The Sunni Islamic custom for the most part comprises of religious standards managing individual and public activity. This is the essential wellspring of exchange among Islamic researchers, frequently prompting diverse sentiments and standards concerning a similar issue. This is appeared for example by the diverse schools of Islamic statute. With respect to rules, it tends to be expressed that the majority of the researchers pretty much concur. The preclusion of eating pork is pretty much undeniable and the extraordinary greater part of Muslims have not been eating pig meat even on occasion when they were not performing other ceremonial obligations. Regardless of whether how much recognition of the principles disallowing the consumption of meat which isn't halal (butchered agreeing Islamic standards) and those of drinking liquor varies from one adherent to the next, these models are acknowledged in completely as religious standards among the Muslim people group. Also, the mandatory religious gift (zakat) is unchallenged as a feature of the five mainstays of Islam. On the other hand, issues concerning the most essential parts of Islamic profound quality – to be specific family and sexual orientation relations – are preceded with subjects of discussion.

2.8 Specific Factors Influencing Intention to Consume Green

As mentioned in the theory of planned behavior, Intention is a strong predictor to the actual behavior. Intention to consume green is an independent variable in this study. There are some other variables which are assumed to have influence on behavioral intention. Ling (2013) included environmental attitude, social influence, self-efficacy, store

image, roles of sales person, and willing to pay more while studying on consumers' purchase intention of green products. Azizan and Suki (2013) also worked to know the buyer's intention to purchase green products. She included health consciousness, environmental attitude, environmental labeling, and environmental knowledge.

2.8.1 Willingness to Consume Green

In this study the researcher adapted the term called attitude towards behavior and now it has been introduced as willingness to consume green products. A good number of researches have investigated consumers' willingness to pay across different product categories. The relationship of willingness to consume green products with intention to consume green products is not well conclusive in the context of emerging economies as of Bangladesh. The present research tries to postulate the drivers for green consumption behavior and willingness to consume green products (Biswas & Roy, 2016).

2.8.2 Group Recommendation

There is an understanding that people adopt diverse roles (e.g., leaders or followers) when in groups, or even across groups (e.g., in work and in family), and thus they may demonstrate substantially different behavior in comparison to them acting individually (Sacharidis, 2017). Humans are inherently social animals, and individuals greatly influence each other. A useful framework of analysis of group influence on the individual is the so called reference group—the term comes about because an individual uses a relevant group

as a standard of reference against which oneself is compared. Reference groups come in several different forms.

The aspirational reference group refers to those others against whom one would like to compare oneself. For example, many firms use athletes as spokespeople, and these represent what many people would ideally like to be. Associative reference groups include people who more realistically represent the individuals' current equals or near-equals—e.g., coworkers, neighbors, or members of churches, clubs, and organizations. Paco Underhill, a former anthropologist turned retail consultant and author of the book *Why We Buy* has performed research suggesting that among many teenagers, the process of clothes buying is a two stage process. In the first stage, the teenagers go on a "reconnaissance" mission with their friends to find out what is available and what is "cool." This is often a lengthy process. In the later phase, parents—who will need to pay for the purchases—are brought. This stage is typically much briefer. Finally, the dissociative reference group includes people that the individual would not like to be like. For example, the store literally named The Gap came about because many younger people wanted to actively dissociate from parents and other older and "uncool" people. The Quality Paperback Book Club specifically suggests in its advertising that its members are "a breed apart" from conventional readers of popular books.

2.8.3 Environmental Knowledge

Most investigations show that shoppers' learning of social and ecological issues influences their frame of mind and genuine acquiring and utilizing of green items emphatically (Smith and Paladino, 2010). Ecological learning level additionally intercede

the connection between natural behavior and green disposition (Fraj-Andrés & Martínez-Salinas, 2007). In this way, more data would prompt improved purchaser information which thus may fortify the trust of customers in green items and strengthen the relationship of mentality and behavior. Be that as it may, a few creators have contended on the endorsed impact of information. They have detailed just a weak connection between the customers' dimension of information and natural concern, demeanor, and real green buy choice (Wolsink, 2007). One explanation for this might be that an origination of environmental and social issues probably won't be adequate to persuade buyers towards receiving supportable consumption rehearse. A more profound comprehension of the outcomes of flighty consumption may turn out to be progressively viable in making the shopper move towards green consumption. These discoveries could likewise suggest the failure of current strategies for spreading data to persuade buyers about the advantages of using green items. Studies have demonstrated that buyers by and large search for basic and easy to use data while buying green items (Mondelaers et al., 2009).

2.8.4 Self-efficacy

It is a standout amongst the most empowering components in psychic research models. It is simply the positive faith in one's skill or chances that prompts effectively achieving an undertaking and backings in delivering a good result. Self-viability originates from various sources like encounters, Persuasion, and Emotion and so forth. Having a triumph will construct self-confidence here while a disappointment will undermine that viability faith. It requires involvement in defeating impediments through exertion and steadiness to have a strong feeling of self-adequacy. As to influence, powerful individuals

in our lives, for example, guardians, educators, mentors or administrators can strengthen the faiths of a person that s/he has the stuff to succeed.

2.9 The Relationship in Between Willingness to Consume Green and Behavioral Intention towards Green Consumption

The development of green consumption systems relies on consumer willingness to engage in the environment-friendly or green consumer behavior. Most research have been attempted to identify the relationship in between willingness toward green consumption and green consumption behavior (Samarasinghe, 2015). Willingness guides the intention and intention is translated into green behavior (Hartmann & Apaolaza-Ibañez, 2012).

2.10 The Relationship between Group Recommendation and Intention to Consume Green Product

Families are somewhat basic form of groups. They are the part of primary groups. Consumers encounter several groups in day to day life while making decisions to purchase and consume goods and services. One of the largest and most influential groups is religious teams. Religion plays roles while forming the intention to consume green product. Individuals who are attached to political parties or any social clubs are more likely to follow the choice or recommendation of the group they belong to than that of the others who do not have any affiliation to groups. Individualistic or collectivistic introductions have been distinguished in impacting an assortment of social practices.

2.11 The Relationship between Environmental Knowledge and Behavioral Intention to Consume Green

Higher level of subjective norm may undermine the role of knowledge in shaping willingness to consume green products since norms of the society, and referent group may dominate the knowledge in some cases (Kumar, Manrai, and Manrai, 2017). There are arguments that the relationship between attitude and purchase intention may be contingent upon a few boundary conditions which might lead to variation in the strength of this relationship. One boundary condition could be the level or degree of environmental knowledge which could vary the strength of this relationship (Kumar et al., 2017). It is likewise opined that learning has an imperative job as a forerunner to the collector's ability to process the data (MacInnis, Moorman, and Jaworski, 1991). Jaworski and MacInnis (1989) recommended that learning impacts the consideration regarding the message about an item (naturally supportable item for this situation) and aides in preparing the equivalent (Jaworski and MacInnis, 1989). There are also negative arguments and findings which show that consumers do not respond to green products remarkably in spite of having sound environmental knowledge (Carrete et al., 2012).

2.12 The Relationship between Self-efficacy and Consumption Behavior

Self-efficacy is a substitute of perceived behavior control (PBC) which has been appeared in the theory of planned behavior (TPB). Cooperation between self-efficacy and intention has been investigated in a few examinations. For example, Terry et al. (1999) detailed that PBC was all the more unequivocally identified with expectations when

assemble recognizable proof about family reusing was low contrasted with high (i.e., a negative association). Connections between self-adequacy and consumption behavior were described by Cheng and Chu (2014). Some researchers have shown the association between self-efficacy and consumption behavior.

2.13 The Relationship in between Self-efficacy and Behavioral Intention to Consume Green

Self-efficacy indicates how confident the consumers are that they can achieve the change even overcoming the obstacles of any kind. General self-efficacy is used as an important component in the cognitive theory of Bandura (1986, 1997). Many research findings have shown self-efficacy are applicable in case of consumers' green behavior. Consumers with high self-efficacy have likely been more successful in achieving prior targets (Shelton, 1990) and will expect the identical outcomes in holding a positive intention to consume green.

2.14 Consumption Lifestyle & Social Identity

Researchers presumed that the positivity of green items is guided by social impact, and consumption choices are administered by what people "ought to do" in the public arena given their social jobs and obligations (Haanpaa, 2007). Jackson (2005) additionally sees consumption as an accumulation of social practices that affect, and are affected by, way of life decisions, social standards, societal structures and establishments.

Green consumption combines shoppers to relatives, companions and the condition of the market, in this manner a buyers level of inclusion in ecological issues, depends not

just on their specific points and wanted character yet in addition their social foundation, individual history, promise to others' requirements and by and large social setting (Cherrier, 2007). Szmigin et al. (2009) suggests that adaptability in green commercialization causes shoppers to deal with the troubles and issues of pleasing their very own families' tastes, spending plans and moral concerns. As green customers have responsibilities to their accomplice, youngsters, partners and neighbors, they may arrange their qualities and now and again bargain their feeling of personality (Connolly & Prothero, 2008).

The capacity to pick a green consumption way of life and personality isn't simply an effect of self-request as it is developed in light of inside (self-character) and outside (aggregate/social character) impacts. The idea of personality is both independently and socially built, as through the connection procedure, an individual builds up the capacity to survey nature in which they live and their job inside it (Melucci, 1989). There is a requirement for further knowledge into the social and behavior elements of individual connections to challenge the predominant spotlight on the individual "green" buyer inside the writing. Further research needs to investigate being a "green" and "standard" (i.e., not really green) buyer, as a person as well as a purchaser working inside close to home connections and social encounters. In this way, it is imperative to see how consumption behavior is molded by a buyer's information and familiarity with social standards, jobs and society's desires for fitting or alluring consumption behavior.

2.15 List of Studies Contributed in the Discipline of Green Behavior

Table 2. 2 Lists of Studies Contributed in the Discipline of Green Purchase Behavior

Sl. No.	Year	Authors	Variables	
			Green Purchase Intention/Willing to Pay	Green Purchase Behavior
1	2018	Lo, LWT	√	
2	2017	Hsu et al.	√	
3	2015	Chekima et al.	√	
4	2015	Wu et al.	√	
5	2014	Kanchanapibul et al.	√	√
6	2014	Nittala	√	
7	2014	Zhao et al.	√	√
8	2013	Eze and Ndubisi		
9	2013	Gleim et al.	√	√
10	2013	Kang et al.	√	
11	2013	Kozar and Connell		√
12	2013	Ma et al.		√
13	2013	Paco et al.		√
14	2013	Ramayah and Rahbar	√	√
15	2013	Salazar et al.		√
16	2013	Tsarenko et al		√
17	2013	Vicente-Molina et al.		√
18	2013	Zhu et al.		√
19	2012	Akehurst et al.	√	√
20	2012	Chen and Lobo	√	
21	2012	Chan and Wong		√
22	2012	Chen et al.	√	
23	2012	Liu et al	√	
24	2012	Tung et al.	√	
25	2012	Samarasinghe	√	
26	2011	Aertsens et al.		√
27	2011	Lee		√

28	2011	Rahbar and Wahid		√
29	2010	Cerjak et al.		√
30	2010	Connell		√
31	2010	Niinimäki		√
32	2010	Smith and Paladino	√	√
33	2010	Young et al.		√
34	2009	Mondelaers et al.	√	
35	2009	Welsch and Kuhling		√
36	2008	Arvola et al	√	
37	2008	Krystallis and Vassallo		√
38	2008	Lea and Worsley		√
39	2008	Tsakiridou et al.		√
40	2008	Vermeir and Verbeke	√	
41	2007	Wolsink	√	
42	2006	Mostafa	√	
43	2006	Vermeir and Verbeke	√	
44	2005	Ek	√	
45	2005	Gosslinga et al.		√
46	2005	Kim and Choi		√
47	2005	Padel and Foster		√
48	2005	Tarkiainen and Sundqvist	√	√
49	2003	Magnussona et al.	√	
50	2003	Tanner and Kast		√
51	2002	Fotopoulos et al		√
52	2002	Makatouni		√
53	2001	Chan	√	√
54	2001	Magnusson et al.	√	√
55	2000	Bang et al	√	
56	2000	Chan and Lau	√	
57	2000	Follows and Jobber	√	

Source: Joshi & Rahman, 2015 and the Author

2.16 Generic Factors affecting Green Purchase/Consumption Behavior

Samarasinghe (2012) explored the impacts of Sri Lankan customers' social qualities and natural frames of mind on green buyer behavior. In her investigation, 250 purchasers (arbitrarily inspected) were studied who settle on purchasing choices of their own. The outcomes disclosed that community and long haul introduction were huge indicators for molding of natural frames of mind in Sri Lanka. Social qualities are profoundly connected with natural frames of mind. In view of a wide-extending writing survey, the referenced investigation gives an incorporated and far reaching set of guessed factors of green buyer behavior.

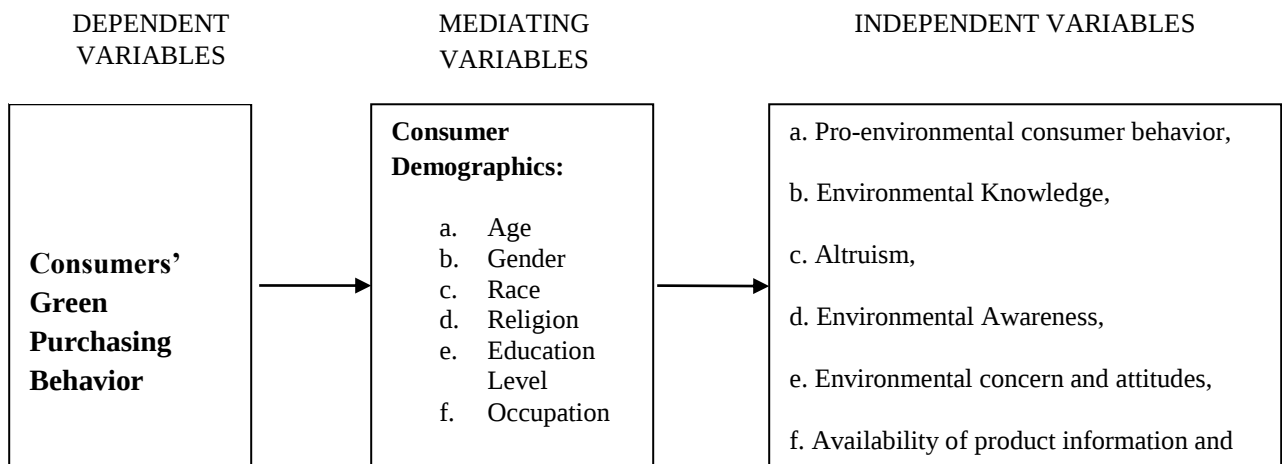


Figure 2. 1 Schematic Diagram of the Integrated Conceptual Framework

Kaufmann, et al., (2012) mentioned the above factors, in a consolidated manner, influence green consumer behavior. The components are: a. Genius ecological buyer behavior, b. Ecological Knowledge, c. Philanthropy, d. Ecological Awareness, e. Ecological concern and frames of mind, f. Accessibility of item data and faith about item wellbeing for use, g. Seen Consumer Effectiveness (PCE), h. Community, I.

Straightforwardness/Fairness on Trade Practices, and j. Statistic factors (Kaufmann, Panni, & Orphanidou, 2012). Demographic variables are considered as mediating variables. Synthesizing all these variables the authors sketched the mentioned schematic diagram which explains the consumers' green purchase behavior.

2.17 Chapter Summary

This part has stated the literature on green consumption behavior and its connections to some factors mentioned in this chapter. This chapter has shed lights on the directing role of religiosity of consumers during purchase of products and consumption. The research yields the instructive and inspirational multifaceted nature of green behavior and features the need of social goal to expend green to green behavior. The theory of planned behavior and theory of reasoned actions convey the significance of understanding the elements impact green consumptions. What's more, literature identified with gathering proposals, ecological information and self-adequacy have been analyzed so as to clarify how consumption behavior is learnt, impacted and molded by others. It is obvious from the writing audit that various holes and research addresses exist. The accompanying part will address the system that has been embraced by this investigation.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

As mentioned in previous chapters, the research problem and research question projected in this study relate to the identification of pertinent factors influence green consumption behavior. In the process of understanding green consumer behavior, both the theory of planned behavior and theory of reasoned action were considered. The factors have been revealed from these two theories. The factors have been presented as variables of different kinds in the theoretical framework shown in this chapter. This study is conducted through empirical research; therefore making this a quantitative research the researcher tends to find out a causal relationships among independent and dependent variables. This chapter describes firstly a flow chart of research process, the proposed research framework and hypotheses, secondly the research method with a portrayal of sampling procedure, thirdly the questionnaire development, fourthly the explanations of measurement scales while examining the measurement of the constructs including behavioral intention to consume green products, willingness to consume green products, environmental knowledge, group recommendation, self-efficacy, religiosity and green consumption behavior. The fifth part presents pilot test and pretest that are helpful for the main study analysis. Finally it presents the data analysis techniques.

A flow chart is shown as follows to furnish an idea about complete research process.

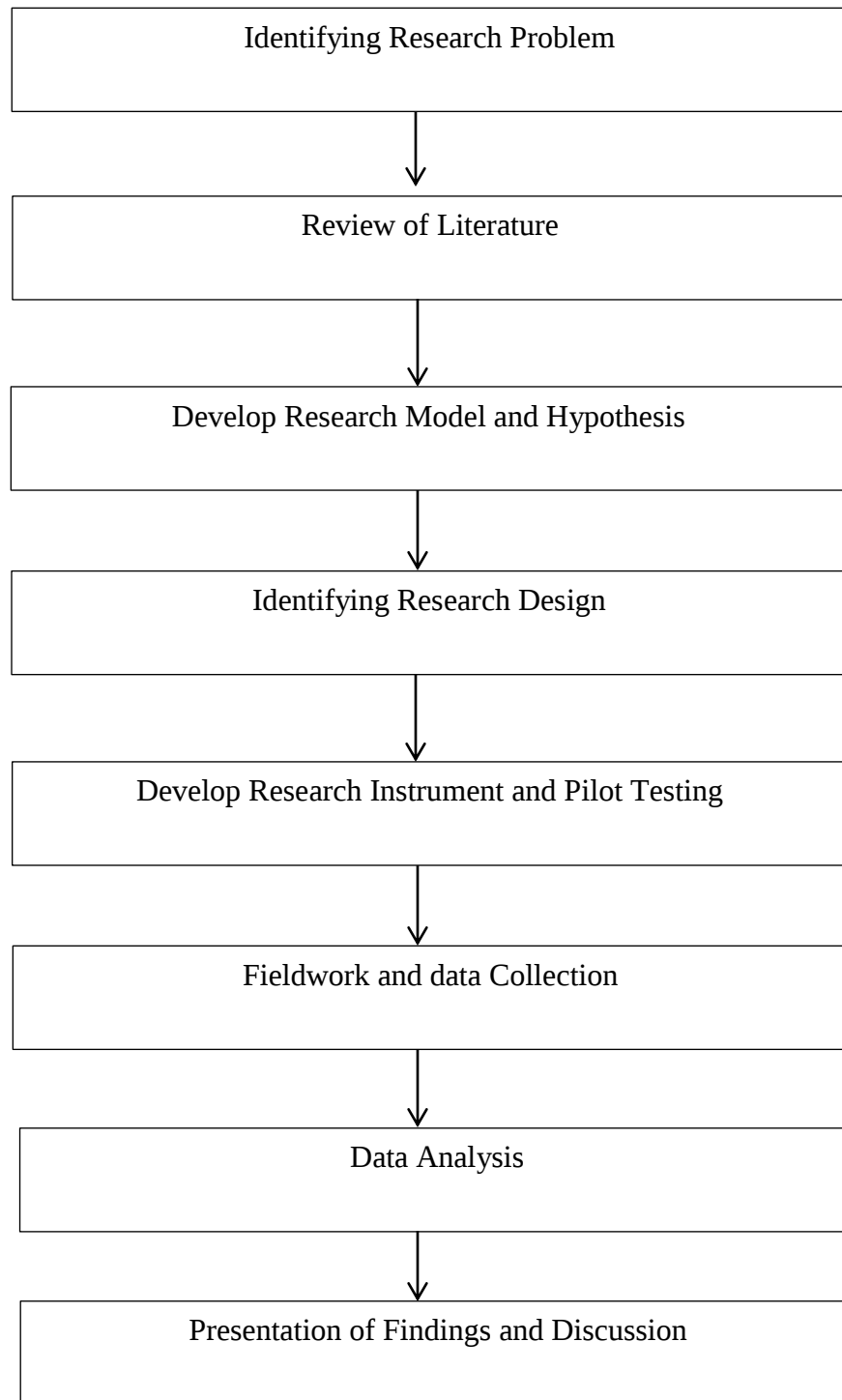


Figure 3.1 Research Process

3.2 Research Framework

A research framework is constructed based on Theory of Planned Behavior (TPB), Value Behavior Norm (VBN), and Religiosity models. TPB is an extension of Theory of Reasoned Action (TRA). Theory of Reasoned Action was first developed in 1967 by Fishbein when he introduced only two variables i) attitude toward behavior, and ii) subjective norms. Subsequently his student Ajzen added another variable perceived behavioral control to the model and then it became Theory of Planned Behavior (TPB). TPB includes three variables. In the year 1980, a theory called Theory of Planned Behavior (TPB) was introduced and it is the extended form of Theory of Reasoned Action and the goal is to predict how an individual behave in a specific time and place. It was believed that this model had explained about all the behavior that can be self-controlled by the people. Behavioral intent is the key component of this model; a possibility that outcome and the subjective evaluation of risks and benefits of it influence behavioral intention to do any act. The TPB explains behavioral achievement rests on both motivation (intention) and ability (behavioral control). Normative, behavioral and control are three types of beliefs that it distinguish between.

According to TPB, individuals are supposed to be engaged in green behavior or an environment friendly behavior if they hold beliefs that some wanted outcome which they value will be achieved by following green behavior, they should continue the behavior if they believe the values of people who follow green behavior, and if they texture that they have the necessary supports and opportunities to execute the behavior.

In this research, the attitude towards green consumption is replaced by willingness to consume green (WCG). The attitude or willingness is assumed to have positive or

negative states. Secondly, subjective norms (SN), and it contemplates and it is like as the viewpoint of family and friends which is in the surround of the consumer. So, group recommendations and environmental knowledge are used here to know about the motivation about the outcomes of green behavior of individuals. Perceived behavioral control (PBC) means for ease of completion of a particular behavior that a consumer believes to have. The subjective value which is believed outcome in direct correlation with the perceived probability of these outcomes determines the relative weight of factors within these variables. Perceived behavioral control is substituted by self-efficacy as one of the independent variables as self-efficacy individually marks behavior, cognition and health, as well as social and occupational functioning (Abdel-Khalek & Lester, 2017).

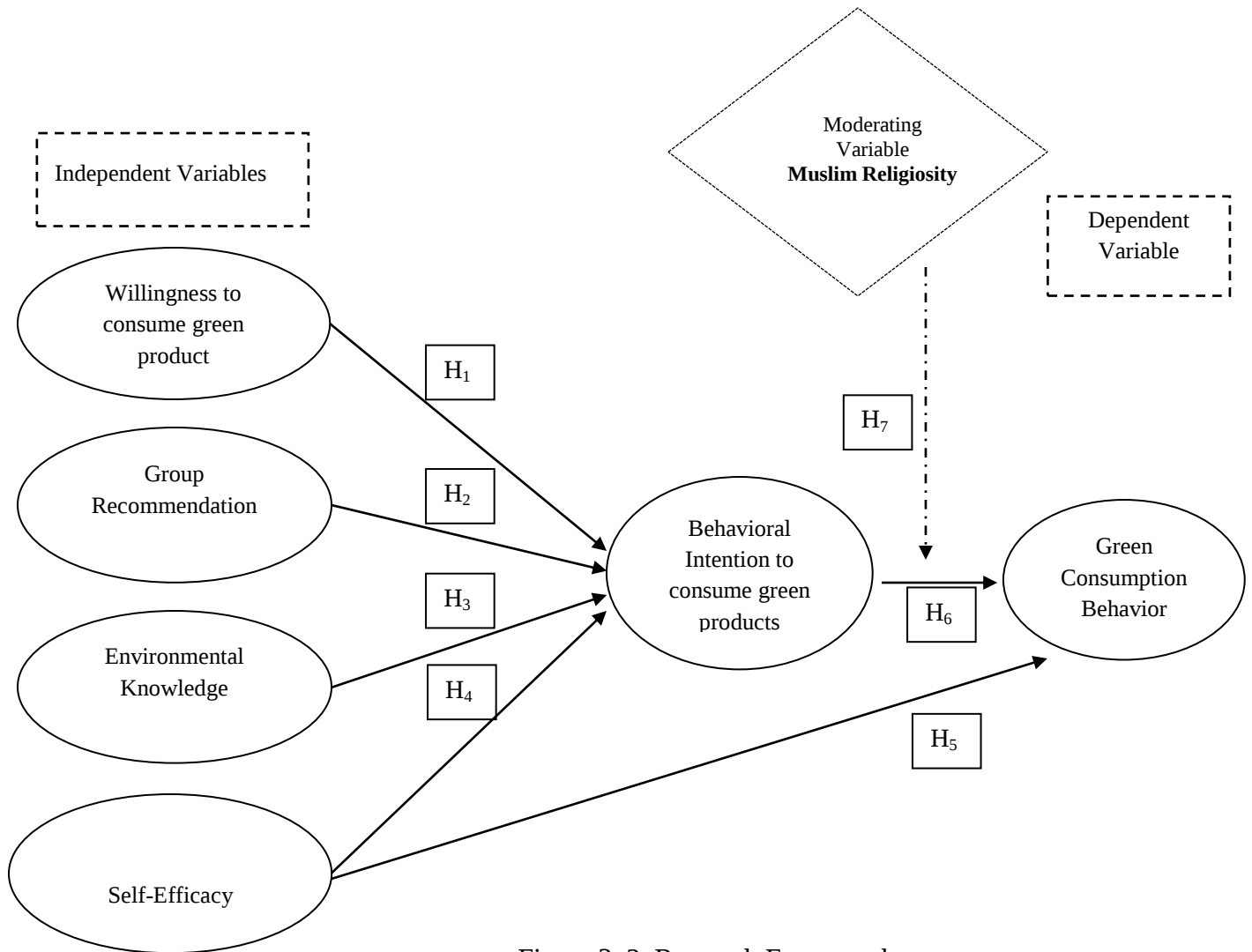


Figure 3. 2 Research Framework

Figure 3.2 portrays the research model that directs this study on finding out the role which is moderate about religiosity on the relationship between behavioral intention to consume green (BICG) products and Green Consumption Behavior (GCB). As Fig. 3.2 illustrates, the important independent variables of this research include willingness to consume green products, group recommendations, environmental knowledge and self - efficacy is thought to be independent variable; religiosity is thought to be moderating variable and green consumption behavior as the dependent variable. To study behavior from the view of Islam is necessary because secular and spiritual are excelled here and in the recent study Eid (2013) has opined it. Qur'an - the holy book of Islam prescribes on

every walks of human life and their activity. Accordingly, religion plays a vital role on individual's course of consumption among various options (Jafari & Scott, 2014). So, the evaluation of Muslim believer on consumption of green products is different from the perspective of secularism because of an Islamic *Shari'ah*. A Muslim believer accepts consumption of goods, service and surroundings which is acceptable in Islam. Therefore, if it is attempted to measure a scale of behavior of Muslim consumers, it will identify a structure where there is functional and affective dimensions and attributes according to *Shari'ah*. Islam is not merely a religion; it's a code of life. So, Islam has clear commandments what to consume and how to consume. Investigations from different dimensions opines Islam always encourage to consume green. Thus, it is assumed that religiosity has moderating effects on the relationship between behavioral intention to consume green products and green consumption behavior. As shown in Fig. 3.2, the effect of the behavioral intention to consume green products on green consumption behavior is moderated by religiosity. To observe how religiosity affects the relation, the dotted line in Figure 3.2 shows as a moderating model of the advancement of the study.

3.3 Hypotheses Development

This study will follow the methods of a correlational research using inferential statistics. As it is defined, inferential statistics infers from the sample data which are greatly identical to the thought of the population. The probability has been made by using this statics and it is observed that the difference between the groups is a reliable one which may be happened incidentally. Development and testing of hypotheses are the key requirements of the correlational research.

3.3.1 The Relationship between Willingness to Consume Green Products and Behavioral Intention to Green products

The system development of green production and consumption depends on the consumer willingness to involve in the environment-friendly behavior. Most research have been attempted to identify the relationship in between willingness toward green consumption and green consumption behavior (Samarasinghe, 2015). Willingness guides the intention and intention is translated into green behavior (Hartmann & Apaolaza-Ibáñez, 2012). Results from the multiple linear regression analysis done by Chen & Chai (2010) revealed in their study that the consumer favor to use green products highly depends on their attitude towards the government's role. In addition, as a crucial factor, the consumer personal norm also contributes towards green product consumptions (Chen & Chai, 2010).

***H₁:** Willingness to consume green product has a positive relationship with behavioral intention to consume green products*

3.3.2 Relationship between Group Recommendation and Behavioral Intention to Consume Green Products

Individuals who get enrolled with political parties or any social clubs are likely to follow the choice or recommendation of the group they belong to. Individualistic or collectivistic views influence an assortment of social behaviors. Similarly, tendencies of individualism or collectivism in person-level seemed to influence their motivations to become engaged in environmentally conscious behaviors. McCarty and Shrum (1994, 2001) found that consumers' belief on collectivism influenced positively about their behavior of recycling. That is, persons who are collective are more cooperative than others, more willing to help each other, and group goals is more important to them than to individual, so, they are more engaged in recycling behavior (Kim, 2005). In Bangladesh,

there is a collectivistic culture. There are different religious groups where there may have recommendations to consume green products or to behave in an environment friendly manner.

Social norms manifest the behavior more in a collectivistic culture (Bontempo and Rivero, 1992). So, environmental friendly issue may add into the behavior. Pro-environmental behavior like saving of energy could be more effective in such a society (Sweeney et al., 2014).

H₂: *Group recommendation has a positive relationship with his/her behavioral intention to consume green products*

3.3.3 The Relationship between Environmental Knowledge and Behavioral Intention to Consume Green Products

Growing policies towards environmental friendly product may be undermined by subjective norm which is in higher level and the group which is referent may supersede the knowledge sometimes (Kumar et al., 2017). It is argued that based on some conditions the relationship between purchase and attitude may lead to variation of it. The degree or level of environmental knowledge may be based upon on one condition and the strength of this relationship vary (Kumar et al., 2017). It is also opined that to process the information, knowledge is important as an antecedent to the receiver's capacity (MacInnis et al., 1991). Jaworski and MacInnis (1989) and the attention to the message is suggested by the impact of knowledge (environmentally sustainable product in this case) and helps to process in the same way (Jaworski & MacInnis, 1989).

H₃: *Consumer's knowledge on environment is positively related to his/her behavioral intention to consume green products.*

3.3.4 The Relationship in between Self-efficacy and Behavioral Intention to Consume Green Products

Self-efficacy indicates how confident the consumers are that they can achieve the change even overcoming the obstacles of any kind. General self-efficacy is used as an important component in the cognitive theory of Bandura (1986, 1997). Many research findings have shown self-efficacy are applicable in case of consumers' green behavior. Consumers with high self-efficacy have likely been more successful in achieving prior targets (Shelton, 1990) and will expect the identical outcomes in holding a positive intention to consume green products.

***H₄:** Self-efficacy has a positive connection with behavioral intention to consume green products.*

3.3.5 The Relationship between Self-efficacy and Green Consumption Behavior

Self-efficacy is a part of personal control beliefs that is the latest addition in the theory of planned behavior. Self-efficacy shows how confident the consumers are that they can achieve the change even overcoming the obstacles of any kind. General self-efficacy is used as an important component in the cognitive theory of Bandura (1986, 1997). Many research findings have shown self-efficacy is applicable in case of consumers' green behavior. Consumers with high self-efficacy have likely been more successful in achieving prior targets (Shelton, 1990) and will expect the identical outcomes in green behavior.

***H₅:** Self-efficacy has a positive relationship with green consumption behavior.*

3.3.6 The Relationship between Behavioral Intention to Consume Green Products and Green Consumption Behavior

In the Theory of Planned Behavior (Ajzen 1991), the direct antecedent of behavior is intention because the consumer's desired behavior is intention. The best predictor of behavior is intention (Ajzen 1991; van Hooft, Born et al. 2005). ; The following question will exemplify that the predictor of behavior is intention: If anyone answer of the question ‘Are you going to buy organic food?’ positively, he will purchase organic food and on the other case opposite answer will be negative. It is clearly illustrated that 40% attitude and 4% actual behavior is related to purchase green food and for some reason it is not always work (UN 2005). Intention and behavior develop this mention gap, but as intention originates in some degree from attitude there is reason to believe that other forces come into play. The model contains the factor to illuminate this gap and it is derived from ABC model (Guagnano, Stern et al. 1995).

H₆: Behavioral Intention to consume green products has a positive relationship with green consumption behavior

3.3.7 The Role of Religiosity as a moderator explaining the Relationship between Behavioral Intention to Consume Green Products and Green Consumption Behavior

Religious orientation suggests people to make value based, ethical, rational, and pro-environmental decision making. Being an integral part of one's life, religion meaningfully influences the society through shaping human behaviors (Nwankwo & Gbadamosi, 2013). So, it is assumed that the religious knowledge, religious faiths, and religious practices of every human being increase his or her behavioral intention to consume green products. Among the religions, Islam has superiority in furnishing commandments for each and every

behavior of human being. Islam permits legitimate enjoyment of divine blessings and do not permit waste and extravagance. These rules have been set for all Muslim so that they can realize their responsibility for society from their social position and wealth. People would harm the society, if they were wasteful and extravagant. In addition, development of their negative personal characteristics would be destructive on their individual level.

Martin (2014) conducted a research. The goal of the research is to test the role of a specific form which is antecedent like specific environmental worldviews, intrapersonal religious commitment, religiosity, six wide ranging and ecocentric attitude of behavior of consumer from a psychological point of view. As a categorical variable, the study indicated the religion by religious affiliation; this study utilizes a multi-item measure. Moreover, the study found that consumers who are highly religious are less likely to involve in environmentally friendly behaviors than the other consumers which is consistent with previous study, ecocentric attitudes (Martin & Bateman, 2014). Here, Martin considered Judeo-Christian faith as religious groups. The case may not be same for Muslim consumer. So, it is needed to do a study considering the Muslim faith. It may be assumed that the individuals who have pretty good experience in Islam will show proneness to go green and will hold a positive attitude towards green consumption.

There has been a general conclusion that association is a fact and it is found after several investigations on the relation between religiosity and behavior of consumer. After a research with 602 mostly Protestant consumers, it is found by Wilkes et al. (1986) that consumer's lifestyle, choice or choice behavior is affected by religiosity. People who follow their religious commitment strictly, are satisfied with their lives when age, income and sex were controlled. The study also indicates that consumers who follow their religious commitment were likely to prefer products of national brands than credit. According to

Ganassali et al. (2006), individuals' behavior of buying also influenced by social rewards, social perceptions, peer pressure, social influence, social sanctions, social cues and it is argued by the social psychology concepts (Shah Alam, Mohd, & Hisham, 2011).

Religion keeps sanctity of different rituals and acts, such as, religion prohibit the use of certain method of contraception. Religious laws do restrict the influence on the usage of goods and services. In this situation, individual's emotional experience, cognition, psychological wellbeing is shaped by religious values and religion affects making the choice of consumer (Shah Alam et al., 2011). For example, Individuals who believe that going green is supported by Islam and green behavior has a spiritual benefit are assumed that they will do green consumption spontaneously. Religion is one of the salient aspects in Muslim culture, and thereby puts a stress on consumer behavior of Muslim individuals. In the shape of code of conducts, Islam directs Muslims in every matters of life, not only in particular acts of prayer but also in how and what way to trade, how to interact with others and what can be consumed (Shah Alam et al., 2011). However within the Muslim market, the degree of religiosity differs and influences the behavior of Muslim consumers and making decision of purchasing to various extents (Khayruzzaman, 2016).

An individual having sound knowledge on Islam or Muslim religion should do pro-environmental behavior. Islamic values come from reasonable religious studies teach a human being to be rational. Apart from the religious knowledge, the knowledge about environmental issues makes ones to behave green. A study shows that environmental attitude and behavior are influenced positively by knowledge of environment (Blocker & Eckberg, 1997; Singh & Bansal, 2012). In addition, a lot of research found that knowledge about green or pro-environmental inspire the behavior of consumer who are ecologically or environmentally responsible (Fisher, Bashyal, & Bachman, 2012; Moisander, 2007). Some

consumers have perfectly knowledge on environmental issues and they are ready to bear value for the green products. The study of Haron et al. (2005) conducted in Malaysia found that respondents who have more knowledge about environment are more positive in case of attitude of environment and they have expanded their participation and environmental behavior.

Religious experience gives birth of Rationalism. Islam defines Rationalism in behavior as ‘achieving the end result through moderation in consumption’. A Muslim believer who is rational would try his best to behave by following the Islamic norms (Siddiqi, 1992). A consumer who is Muslim would never let him to follow anything which clashes with the demands of Islamic spirit. Islam allows the following four objectives in case of consumption. They are as follows:

- Everyone can consume economic goods sufficiently so that he can maintain a efficient life.
- Goods which are prohibited by Islam is not allowed to consume.
- Islam never inspire to consume goods extravagantly and having the luxurious living.
- Individual’s ultimate objective should not be the consumption of goods and the result of satisfaction. It should dish up as a way to achieve the higher ends of a life which will be very much purposive.

The conventional model is modified by Hamouri (1991) to adapt to Muslim consumers. They take the teaching of Islam on individual’s behavior. According to Hamouri, consumers who are Muslim will choose following the Islamic guideline and it is the most preferred item. Prohibited items (unlawful item or haram) should not be liked by a

Muslim individual. Glock (1969) thought that a religious person will experience the religious attitude as an emotion one day.

As Stark (1965) stresses, the aspect of a perceived communication with a supernatural agency is a characteristic of religious experience. The followers of Islam from orthodox tradition show a rational approach to Islam, especially younger generation. The more rational the consumers are, there is a possibility that they become more ready to consume green products and they become pro environmental. Thus, it can rightly be hypothesized as,

H₇: *Religiosity moderates the relationship between Behavioral Intention to consume Green Products and Green Consumption Behavior*

3.4 Research Methods

This study is correlational in nature. This type of research refers to a kind of researcher's tools to conceive an issue more meticulously before bidding to quantify mass responses into statistically inferable data. Primary data has been collected from selected respondents using the self-administered questionnaire. Respondents (samples) are chosen using probability sampling which includes multi-stage sampling including systematic sampling. Before sampling, the population is divided into characteristics of importance for the research. However, systematic sampling can be defined as a sampling in which the samples are collected from large population with a sampling interval- a difference between random starting and a fixed periodic point. Factor analysis is done for investigating variable relationships and to find the valid constructs. Several variable which is observed, have

similar patterns of response. It's because latent variable is associate with them (i.e. not directly measured).

There are a number of variables in every factor analysis. A certain extent of variance are observed and captured by each variable. How much of the variance are explained by the observed variables is measured by the eigenvalue. If the eigenvalue of one factor is more than one, it means more variance than a single observed variable. 2.3 of the three variables is explained by the eigenvalue of 2.3 of a factor. This factor could be used in other analysis which captures most of the variance in those three variables. The factors are discarded generally which explains the least amount of variance. Principal Component Analysis (PCA) under Exploratory Factor Analysis (EFA) helps to decide how many factors are useful to be retained for further analysis. SPSS version 22 may facilitate the analysis. It will be required to use AMOS for Confirmatory Factor Analysis (CFA) as the researcher holds ambition to draw a neural network on the basis of the relationships among the variables.

3.5 Research Design and Strategy

An outline for carrying out the marketing research which fine points the procedures needed for solving the marketing research problem can be indicated as Research design. For connecting the conceptual research problems to the relevant empirical research, research design is the overall plan. Thus, appropriate research design has been used to avoid error in collecting relevant data. The success of any research project depends on the soundness of strategy for that particular research. As a part of research strategy, the researchers need to review extensive literature which is closely related to the objectives or

discipline of the study. It is very much possible, from a reasonable literature review, to develop a conceptual framework which shows the variables both dependent (DV) and Independent (IVs). When the framework is constructed it is required to plan a method to conduct the study. In this study we have planned go for survey method. Survey empowers researchers to obtain data about practices, habits, situations, or views of consumers at one point in time through questionnaire or interviews; and permits to study more variables at once.

This research follows the process of a correlational research. The correlational research goes beyond much of description and aims at establishing cause-and-effect relationship in between the IVs and DV and explains the reason for phenomenon. So far as the research approach is concerned, this research will fall in the category of basic research. Basic research focuses on the search for truth or the development of theory. Basic research deals with the questions that are intellectually interesting and challenging to the investigator. It focuses on refuting or supporting theories that explain how this world operates, what makes things happen, why social relations are in a certain way, and why social matters changes over time.

Mall intercept survey method is used to collect the data and to examine the relationships in the research framework shown at the beginning of this chapter. The scope of research is in Bangladesh, which is a developing country. The country has got an assortment for her sustainability of environment for domestic and international retailers. The content validity of the questionnaire was determined before serving the questionnaires to the respondents. And it has been discussed with 40 respondents. The respondents had previously purchased any green products and it is because of removing obscurity of questions. The questionnaire was then administered through a mall intercept survey to a

sample consisting of 400 consumers in Dhaka – the capital city of Bangladesh and Chittagong – the commercial capital of Bangladesh. The reason to select consumers is that they buy a portfolio of products every day from market place and they have the ability to make buying decision. They may carry forward their product consumption habit regularly and lead the trend towards green consumptions (Seegebarth, Peyer, Balderjahn, & Wiedmann, 2015). The questionnaire shall cover the demographic profile of the respondents. It is expected that a remarkable response shall be obtained. The incomplete questionnaires have not been considered for analysis.

3.5.1 Quantitative Research

A structured mode of collecting and analyzing data acquired from a portfolio of sources is called quantitative research. Qualitative data offers a subjective overview of managerial or marketing problems, while quantitative outlines a structured cause-and-effect relationship between the problem and factors. The numerical representation and manipulation of observations for the purpose of describing and explaining the phenomenon that those observations reflect in is possible by quantitative research (Sukamolson, 2007). Hence, it would generalize on the result from the sample of population if it is used in research. Additionally, the result of quantitative research is enough to treat as conclusive. It is also used to recommend a final course of action (Malhotra, 2006).

3.5.2 Correlational Research

This research is correlational in nature. Quantitative research technique will be used as the research approach supported by literature review. Correlational research design is used in this study. Correlational research can rightly investigate the effect of one thing. Also the effect of one variable on another can be investigated (DJS Research Ltd, 2009). There is a correlational explanation of a dependent variable and an independent variable. In terms of nature, if one variable produce specific values of another, two variables are related. the relation is called correlation if one variable produce the values of another (Lawrence, Suddaby, & Leca, 2009).

The independent variables (IVs) are: a) Behavioral intention to consume green products; b) Willingness to consume green products, c) Group recommendation, d) Environmental knowledge e) Self-efficacy, and the dependent variable (DV) is Green consumption behavior (GCB) of consumers in Bangladesh in this study.

3.6 Research Approach

There are two types of approaches upon which the researches rest. One is deductive approach or deductive reasoning and the other is inductive approach or inductive reasoning. This study follows the deductive approach as this one organizes a valid reasoning with which it is impossible to accept the premises but reject the conclusion (Soiferman, 2010; Zalaghi & Khazaei, 2016) and deductive reasoning begins with premises, which, if true, must lead to a true conclusion (Worster, 2013). The deductive approach, in forming the theory of social sciences or psychologies, starts with defining or setting an objective. When

objective is specified, the assumptions and definitions should be explained. Logical structure will be developed by the researcher based on the assumptions and definitions with a view to reach the objective.

The methodology is turning out to be specific from general to specific and a logical structure needs to be developed by the researchers based on the assumptions and definitions. The ability of researcher affects the validity of process in case of identifying various components of behavioral process and their interrelations in a logical way. In this approach premises lead to a certain conclusion (Zalaghi & Khazaei, 2016).

On the other hand, one of the reasoning methods is induction. A general principle would be inferred through observing a definite case by this method. The inductive approach focuses on deriving and observing conclusions through observation. It normally moves to general from specific, since the researcher generalizes his or her observations which is limited of general conditions to specific circumstances (Zalaghi & Khazaei, 2016).

3.7 Data Collection Method

The merit of this research suggests collection of data from both primary and secondary sources. Primary data is needed to test hypotheses which involve survey method of data collection. Secondary data is required to formulate research framework and to develop the hypotheses. Published or unpublished research works, books, magazines, newspapers are good origins of secondary data. Extensive literatures related to the topic have been studied using online forms of prominent Journals.

3.7.1 Primary Data

The data directly collected from the field or from first hand-experience are called primary data. Therefore, it is more authentic, objective and reliable in data collection. Developed or collected information by the researchers particularly for the research work at hand is referred to as primary data. Usually, the instrument like questionnaire is used to generalize from a sample to a population to make inferences about the traits of the population.

There are some popular ways of collecting data. Such as Interviews, surveys and focus groups. It can exhibit the direct relationship between customers' religious status and their green consumption patterns or habits. In this study, a self-administrated survey using a structured questionnaire will be conducted to gather primary data. Data will be collected through multi-stage sampling. Questionnaires will be distributed among the consumers visiting prominent shopping malls in Dhaka and Chittagong districts. Dhaka is the capital city and Chittagong is prominent as because it is a commercial capital city or port city. The status of religiosity and green consumption habits and the nature of their relationships will be possible to trace and track with the designed questionnaires. Questionnaire is shown to two experts for their expert opinion.

3.7.2 Secondary Data

Secondary data related to different theories will be collected from different relevant journals, books, and periodicals. Latest works are found in reputed journals published from

various groups like ELSIVIER, SAGE, JSTORE, EMERALDS and Google scholar helps a lot to find them conveniently.

3.8 Sampling Design

The process how the required identical number of items or portion of major population are chosen is called sampling (William, 2003). Sampling design is necessary for researchers to collect precise information from the due people, due time and due location for research questions. Sampling process encompasses five steps that specify target population, establish sampling location and sampling frame, select appropriate sampling technique, determine sampling size and execute sampling process.

3.8.1 Target Population

Target population is referred as an entire group of people, things or events of interest that are surveyed and investigated in a study. The process starts with focusing the appropriate target population. Thus, the participator of this study will be Muslim Consumers in Bangladesh; and they will be selected from among the visitors in the Marketplaces and Supermalls in Dhaka and Chittagong City. Dhaka is the capital city of Bangladesh which is the busiest in terms of population and Chittagong is familiar as port city. Around 30 million people rush to these cities every day from different parts of the country. People from almost every other cities visit Dhaka and Chittagong for versatile necessities. There are shops in the shopping malls that sell green products like energy saving electronic equipment and products made of bio degradable raw materials etc. People

who visit those shops will be selected as samples. This group of people represents the potential consumers that have interests on purchasing green products which they think will minimize threats to the environment. This can help to analyze the intention influencing them in purchase green products more accurately. One constraint may be the status of religiosity of the respondents. Bangladesh is a country where there are 90% Muslims. The consumers are culturally sound and are prone to growth and development. Biasness to the progress, development, and culture sometimes make the people materialist. But it is a matter of hope that there are some Islamic institutions that provides people with the orientations of quality and morality; encourage spirituality and religiosity. Dhaka City is also called the city of Masjids. So, the status of religiosity of the consumers may conveniently be tested.

3.8.2 Sampling Frame and Sampling Location

Sampling frame is the list of all suitable sampling units (Hair Jr, 2006). Here in this study, sampling units are the enlisted shopping malls in Dhaka and Chittagong city. Sampling location is chosen to distribute questionnaires. They are different areas in both cities.

3.8.3 Sampling Elements

The respondents for this study will be Muslim consumers who purchase various products. It includes products which are green. The ideal elements which are for research will include information about demography such as age, education level, gender, marital

status, monthly income and occupation. Even though there are around 12% non-Muslims in Bangladesh. Data will be collected from Muslim consumers.

3.8.4 Sampling Technique

The process of sampling involves any modus operandi by using a numbers of items or parts of the whole population to make conclusion. As a matter of intercept survey and multistage sampling, probability sampling and particularly the cluster sampling technique will be used in this research. A method of sampling called probability sampling method utilizes some forms of random selections. In order to have a random selection method, one must set up some process or procedure that assures the different units in population that have equal probabilities of being chosen (William, 2003).

Cluster sampling can be defined as a category of sampling method where the researcher divides the population into separate groups, called clusters. Then, a cluster is selected from the population using systematic sampling (every tenth of the customers getting exits after shopping has been served with questionnaires for their opinion). The researcher conducts his analysis on data from the sampled clusters.

3.8.5 Sampling Size

It is known that the rule of thumb of selecting appropriate sample size is at least 30 and below 500 (Roscoe, 1975) in multivariate analysis. Sample size can maintain the sample error at an acceptable level. Sample is called a subset of population (Sekaran and Bougie, 2013). There are several different methods in determining the sample size. Some

researchers opine five respondents should be interviewed per variable to be analyzed as lower limit but the most acceptable one is 10:1 ratio that is ten samples for one variable (Hair et al., 2010). Similarly, Schreiber et al. (2006) also opined that each parameter should have at least 10 participants. Threadbare opinions and discussions continue on finding the techniques of sample size determinations. Collis and Hussey (2011) discoursed sample size. It is based on analysis of structural equation modeling (SEM) that again analyze confirmatory factor analysis (CFA), causal modeling with latent variables, structural path analysis, and multiple regression analysis must be treated carefully.

A formula proposed by Cochran (2009) can be used in determining sample size. If the population is larger, the standard sample size may be 360. The formula is as follows:

$$n_0 = \frac{Z^2 \times p(1 - p)}{e^2}$$

Where, n_0 is the number of items in the sample

Z is the square of the confidence interval in standard error units (two tailed area under the normal curve where alpha (α) is 0.05, and 1.96 is the value of z)

e^2 is the acceptable sampling error

The population of the proportion is p and it is with attribute which is desired (assumed to be 0.5 which maximized the sample size to be determined)

Providing these values and an acceptable sampling error of 6% the sample size is found as 360. Some studies suggest the sample size to be 300 for factor analysis to be effective. Hair et al. (2010) stated the sample size should be five times greater (minimum) and or ten times greater (maximum) than the items needed to be analyzed if the research is concerned to factor analysis. Comrey and Lee (1992) coined the idea like sample size 50 is

very poor, while 100 is poor, 200 is reasonable, 300 is good, 500 is very good, and 1000 is brilliant for structural equation modeling.

This study aims at interviewing consumers to know about their behavior relating to green consumption in Bangladesh. The population comprises consumers visit shopping malls in Dhaka and Chittagong. Dhaka is the capital city and Chittagong is the port city. These two cities have been chosen on the basis of a study conducted by Boston Consulting Group (BCG). The report of BCG says ‘Through the country, buying power will be spread, in Dhaka and Chittagong around 80 percent of Bangladesh’s middle-class and affluent consumer (MAC) populations concentrated.’ BCG also mentioned that the development which is happening in Bangladesh have significant implications for business. It also opines that companies of consumer product need to focus on few points: they have to scaling up their operations and services capability in those two cities (Dhaka and Chittagong) to attain economies of scale and to meet surging demand. There are 59 shopping malls in Dhaka and 32 shopping malls in Chittagong. But the questionnaires were distributed in 48 malls in Dhaka and 9 malls in Chittagong. This has been found considering the Muslim population in these cities. 400 questionnaires were distributed in Dhaka and Chittagong City. The distribution is as follows:

Table 3. 1 Breakdown of Samples

No.	City	Number of Population	Number of questionnaires to be distributed in each City (n)	Number of brand show rooms where the questionnaires were sent (outlets)
1	Dhaka	21800223	334	48
2	Chittagong	4309423	66	9
Total		26109646	400	57

The above table 3.1 shows that the maximum number of questionnaire distribution is in Dhaka city which is the capital city of Bangladesh. It is to be noted that this city is full of diversity as people from almost all parts of Bangladesh come and reside for the purpose of business and services. Since this city has the biggest number of population, a larger number of respondents should come from this city to make the data representative.

Mall intercept survey method was used in this study to select respondents and they were surveyed just after buying products. The method of interception of the mall has been frequently used by the researchers for data collection as it provides an in depth response (Tih & Lee, 2013). A mall interception is a survey and respondents are intercepted in stores in shopping malls. Stopping the shoppers are involved by the process, tracking them for relevance and administering the on-site investigation or inviting them to a research facility located in the mall to complete the interview. Although they are not representative of the mass, shopping center customers account for a significant portion of the market for many products (Rice, 2004). Shopping center interceptions furnishes a relatively quick and cost-effective way of interviewing, particularly when it is difficult to reach to the mass of population.

3.9 Research Instruments

To collect the primary data, self-administrated questionnaire is used in this research. The review of chapter 2 about literature describes the statements of questionnaire are constructed.

3.9.1 Questionnaire Design

English is an appropriate language and so that the language of the questionnaire in English. One type of question (close ended questions) were used in questionnaire. Close ended questionnaire is easier than open ended questionnaire. Because it less lengthy and easy to complete. In the layout of questionnaire, there is a brief introduction about the research and its purpose of conducting and it is attached in the cover page. There is two part of the questionnaire. Section A contains demographic profile of society and section B contains about construct measurement.

The first part of section A is social demographic profile of respondents; the questions will include about respondents' gender, age, occupation, level of education, allowance or income. This part helps identifying the profiles of the consumer and it also helps identifying the survey easily. In the next part, general questions about dependent variable will be asked. It consisted of ten questions such as "I usually do not waste water", "I am concerned about switching off Lights, Fans, PCs or other electric devices after use", "I am aware of wasting paper", "I do like to recycle stuffs", "I prefer organic food to conventional food" and so on.

Five independent variables in construct measurement in section B (Intention to consume green, Attitude towards green consumption, Social influence, Group Recommendations, Environmental Knowledge) and 1 (One) Moderating Variable viz. Islamic Religiosity will be done. The effect of these variables on the dependent variable (Green Consumption Behavior) will be tested so that the relationship among the mentioned variable can be examined. To answer questions shall be requested to the respondents about each variable so that they can get information that is needed by using seven point Likert

Scale. One for strongly disagree, two for disagree, three for slightly disagree, four for neutral, five for slightly agree, six for agree, seven for strongly agree are the examples of seven point Likert Scale.

There will be 400 copies of questionnaires to distribute to the target respondents. The respondents will be asked on their willingness to participate in questionnaire prior to the questionnaire to increase the validity and reliability of the information gathered.

3.10 Operationalization of Variables

For any type of researches, questionnaire design carries importance as to collection of data. There are two purposes of questionnaire design. Questionnaires are designed so that answers to questions are counted and scores summed to obtain an overall measure of the attitudes and opinions of the respondent. In this part, the process of operationalization of variables will be discussed.

Table 3. 2 Operationalization of Variables

Variables	Operational Definition of Variables	Items/Number of Items	Sources
Green Consumption Behavior	“Green consumption behavior consists a total range of activities in both the fields namely production and consumption, including green products, the recycling of materials, the efficient use of energy, the protection of the environment, and the preservation of species.”	10	(Pagiaslis & Krontalis, 2014; Peattie, 2010)

Table 3.2 Continued

Behavioral Intention to Consume Green	“Intention to consume green refers to consumers’ willingness to purchase green products. Intentions capture the motivational factors that influence green purchase behavior of consumers.”	03	(Ramayah, Lee, & Mohamad, 2010)
Willingness to Consume Green	“Willingness to consume encompasses individuals’ maximum desire to availing a particular product or service for consumption.”	05	(Ajzen, 2011; Biswas & Roy, 2016)
Group recommendations	“Group recommendation is an important information exploration paradigm that retrieves interesting items for users based on their profiles and past activities.”	04	(Amer-Yahia, Roy, Chawlat, Das, & Yu, 2009)

Table 3. 2 Continued

Environmental knowledge	“Environmental awareness is interpreted as the state of concepts and knowledge and views on the role of the environment in human life, depletion of natural resources, the impact of man on the environment and the extent of environmental degradation, existing and potential threats, and protection of the environment including the state of knowledge about the ways and instruments for controlling the use of environmental resources.”	07	(Niezgoda, 2011)
Self-efficacy	“Perceived self-efficacy represents an individual’s appraisal of their capability to perform the actions that are necessary to achieve an outcome in a given situation.”	05	(Garlin & McGuiggan, 2002)
Religiosity	“Religiosity as a sub cultural element consists of beliefs and practices of religious groups which influences several aspects of their lifestyle, which eventually may affect choices and/or choice behavior.”	12	(Shah Alam et al., 2011)

3.11 Constructs Management/Development

3.11.1 Origins of Construct

The construct measurement source that has been used in this research project is as follows.

These are adapted from few literatures.

Table 3. 3 Origins of Construct

Constructs/ Latent Variables	Sources
Independent Variables (IVs) or Predictors	
Behavioral intention to consume green products	Boulding et al.(1993)
Willingness to consume green products	Ajzen (2008)
Group recommendations	Fishbein and Ajzen (1975; 1980) Shrum (1994, 2001); Kim, 2005
Environmental knowledge	Kollmuss & Agyeman, 2002; Chan & Lau, 2002
Self-efficacy	Fishbein and Ajzen (1975; 1980), Bandura (1986, 1997)
Moderators	
Religiosity	El-Menouar, 2014; Stark & Glock, 1968. El-Gohary, 2015, D. Gursoy et al., 2017
Dependent Variables (DV)	
Green consumption behavior	Elena and Eva (2007); Hassan, 2014; Samarasinghe, 2012

3.11.2 Construct and Components

Table 3. 4 Behavioral Intention to Consume Green

Construct	Measurement Items
Behavioral Intention to Consume Green Products (Boulding et al., 1993)	I will purchase and consume green products for personal benefits
	I am willing to consume green products to save environment
	I think green consumption is a part of my social responsibilities

Table 3. 5 Willingness to Consume Green

Construct	Measurement Items (As Suggested)
Willingness to Consume Green products (Ajzen, 2008)	I think practicing green consumption is righteous.
	I think practicing green consumption is valuable.
	I think practicing green consumption will increase my honor
	I think it is wise to practice green consumption.
	It is very important to stage a vigorous drive for the green consumption

Table 3. 6 Group Recommendation

Construct	Measurement Items (As Suggested)
Group Recommendation (Fishbein and Ajzen, 1975, 1980; Shrum, 1994, 2001; Kim, 2005)	I consume green as I belong to a particular social group and they suggest me to do so
	I consume green as it is suggested by my institution
	I consume green as it is promoted in my area where I reside.

Table 3. 7 Environmental Knowledge

Construct	Measurement Items (As Suggested)
Environmental Knowledge (Kollmuss & Agyeman, 2002; Chan & Lau, 2002)	I can easily recognize green brands.
	I am aware of the carbon emission.
	I know about greenhouse effect and global warming.
	Energy saving devices can reduce energy consumption effectively
	I can define green consumption.
	I have academic learning on green consumption

Table 3. 8 Self-efficacy

Construct	Measurement Items (As Suggested)
Self-efficacy (Bandura, 1986, 1997)	I am sure I will buy and consume green products
	I will consume green even if there are difficulties to buy or consume green
	I am ready to pay more price to consume green
	I will not consume green if there are much barriers to consume

Table 3. 9 Muslim Religiosity

Construct	Measurement Items
Muslim Religiosity (Eid & El-Gohary, 2015)	In my personal life, religion is very important.
	Islam helps me to have a better life.
	The Dua'aa (supplication) supports me.
	The Prophet Muhammad (peace-be-upon-him) is the role model for me.
	Performing Hajj is one of my main priorities.
	I believe that Allah (God) helps me.
	I perform all my prayers.

	I perform my prayers always on time.
	I perform my daily prayers in the mosque regularly.
	I perform the obligation of Zakat.
	I read the Qur'an regularly.
	I fast the whole month of Ramadan.

Table 3. 10 Green Consumption Behavior

Construct	Measurement Items
Green Consumption Behavior (Sharma & Jha, 2017)	I prefer using organic food than that of traditional ones.
	I travel via bus to work or shopping.
	I turnoff TV, music system etc., when not in use.
	I turnoff light when not in room.
	I turnoff water while brushing.
	I use environment friendly shampoo.
	Dispose-off batteries at a recycling place.
	I take own bag to shopping.
	Use recycled pad for writing.
	I prefer energy saving bulb than that of traditional bulb.

3.11.3 Primary Scale of Measurement

As mentioned earlier, a questionnaire is developed with a number of questions which will be used from respondents to collect data. To collect information for a research question is relevant. It will help the decision maker addressing about the problems of current business. There are two parts in the questionnaire of this research: Demographic Profile and General Information is in section and Construct Measurement is in Section B which includes nominal scale, interval scale, and ratio scale.

3.11.3.1 Nominal Scales

The most elementary level of measurement is represented by nominal scale. Its values assigned to an object. It is because of identification and classification of an object (Zikmund, 2003). Stevens (2008) explained the most unrestricted assignment is represented by nominal scale. On the other hand, for type number or label and letters or word, the numerals are used. Two kinds of nominal assignments which are sometimes classified, as illustrated (a) by the 'numbering' of green consumers and their opinions for the identification of the individuals their status of green consumption, and (b) by the 'numbering' of classes or types. Same numeral assign to each member here. In the part one of section a nominal scale is used. Here most of the questionnaire is about demographic profile of respondents. For instance: Gender- Male or Female.

3.11.3.2 Interval Scales

It includes ordinary and nominal property in terms of interval scale. It also capture information of difference among the quantities of concepts and it is from one observation to the next (Zikmund, 2003). In addition, (Malhorta et al., 2006) explained that interval scale refers about a scale. It is the numbers which are used to rank objects. It is like that equal distance in the characteristic is represented by equal distance on the scale. Also, the difference between objects is allowed by it. The difference of 2, 3 are same as difference of 1 and 2.

The questionnaire for this study provides 7 alternatives which are “Strongly Agree”, “Agree”, “Slightly Agree”, “Neutral”, “Slightly Disagree”, “Disagree”, and “Strongly Disagree” on Section B to analyze the degree of agreement or disagreement on the dependent variable (Green consumption behavior), and independent variables (Willingness to consume green, Group recommendation, Environmental knowledge, Self-efficacy).

3.11.3.3 Ratio Scales

The highest form is represented by ratio scales if they have all the properties of interval in that measurement with additional attributes of representing quantities which is absolute zero. Cardinal number is in the ratio scale. In case of counting things like pennies, apples and eggs, we use that scale (Stevens, 2008). There is question in the questionnaire about the scale of ratio is like- “What is your gross income per month?” Or “ Write our age”

3.12 Data Collection Procedure

For data collection, a structured set of questionnaire was used. The questionnaires were distributed to respondents and their participation in answering questions was voluntary, with no force to respond. A self-administered questionnaire was used in the process. Every questionnaire was sent out with a consent form briefing the purpose of the study, the confidentiality assurance along with the approach to answering the questionnaire. Quantitative research was conducted by distributing the questionnaires according to the importance of consumption behavior, behavioral intention to consume, willingness to consume, environmental knowledge, group recommendation, self-efficacy, and religiosity. Questionnaires are the most ideal way to get consumer feedback and opinions in order to quantify the relationships among independent variables, dependent variables and other variables in the study. The questionnaires are adapted from relevant sources and are developed in an understandable way to ensure that consumers are able to answer all the questions and provide a precise view on the most influential factors that lead to the actual green consumption behavior.

As it was mentioned earlier that mall intercept survey was conducted for collecting data from the respondents. The respondents were surveyed immediate after buying the products and getting exit of the shops. The researcher and four of his assistants approached the questionnaires to the respondents. As it is mentioned in the table 3.1, the questionnaires were distributed among 57 outlets. Each of the outlets got 7 questionnaires evenly. The data collection started on 15th May 2018 and ended on 30th July 2018.

The questions were divided into different segments including the demography and the different variables in this study. The questionnaire includes close-ended fully blocked

questions with convenient selection options where the respondents only need to choose from a ready range of options whereby checkboxes and fixed ranking are utilized (Penwarden, 2013). This approach helps the respondents to conveniently and comfortably choose their response which saves time in comparison to open ended type of questions that require more time as the respondents have to generate their own words and sentences. The items measured are adapted from previous studies relevant to this study since they are reliable in comparison to formulating a new questionnaire. The rationale for the questions posed by previous studies was due to the fact that they were proven statistically. The choice of response was made on 7-point Likert scale.

3.13 Pilot Study

According to Graham, Van Teijlingen, Rennie and Rennie (2001), researchers generally conduct a study of pilot which is for developing and verifying appropriateness of research instruments, detecting logistics problems that might arise during the data collection period and validating whether effective is technique and sampling frame. The questionnaire was distributed to a respondent to achieve the research objectives and increase the accuracy of the result and the respondents resemble the target of population.

Using the data of pilot test of reliability for each construct was done. Items for the constructs were taken from previous studies as their internal consistency or reliability coefficients were above 0.70. The comments and suggestion of the respondents and the result of pilot test helped to improve the item of final questionnaire survey. After that the adapted questionnaire was shown to the supervisors to provide their comments for further clarity and better meanings of the items. After getting their comments and suggestions, the

items were finalized for pilot study. For pilot test, 40 copies of questionnaires were distributed among the respondents. The results of the pilot study are shown in table 3.11.

Table 3.11 Cronbach's alpha values of the variables from pilot test.

Variables	No of items deleted	Cronbach's alpha
Willingness to consume green product	None	0.811
Group Recommendation	None	0.899
Self-efficacy	None	0.774
Environmental Knowledge	None	0.769
Religiosity	None	0.897
Intention to consume green	None	0.817
Green consumption behavior.	None	0.877

The table 3.11 exhibits that all the variables obtained Cronbach's alpha values of more than 0.70 which supports acceptable reliability (Hair et al., 2014). Thus, the final survey items in the questionnaire remain the same as were used in pilot study.

3.14 Techniques of Data Analysis

The collected data are needed to be analyzed by a statistical method. Here also the data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) technique using SmartPLS 3.0 M3 software. Partial least squares (PLS) path modeling is widely used not only in management research but also in virtually all social sciences disciplines (Hair et al., 2012; Lee, et al., 2011). Researchers are using the PLS-SEM

method in order to measure the estimation. It relates to the relationship in the field of path models which involves constructs which are latent. Structural model and measurement model are two steps of PLS SEM analysis. Validity and reliability of data are measured in the measurement model. The findings for hypothesis testing are provided by the structural model. A detailed description of data analysis technique is given below.

3.15 The Partial Least Square (PLS) Path Model

The PLS path model was broadly used for its suitability in determining the complex relationship (Hair et al., 2012). Hence, PLS path model has been the common choice to the researcher for a study in complex models having a latent variable. There are two models in the description of PLS model. The first model is measurement model. It links the latent variables (LVs) manifest variables (MVs) to their manifest variables (MVs). The outer model attributes this model. The second model is a structural model. It relates endogenous LVs to other LVs. In PLS, this model is termed as the inner model. A number of criteria suggested by Chin (1998) are commonly used to measure partial model structures. All these criteria are applicable for assessing both the outer model and the inner model. The next section discusses both of these models and their assessment criteria.

3.16 The PLS Measurement Model (Outer Model)

Researchers have to test the measurement model first in PLS-SEM analysis. A test of measurement model includes the reliability test, outer loadings calculations and validity test. Details are discussed in below.

3.16.1 Reliability

Reliability analysis is used to study the properties of measurement scales and the items that make them up. It is used to measure the consistency and stability of the variable (Sekaran, 2006). The study shows the properties of measurement scales and the items in the study. The reliability analysis procedure calculates a number of commonly used measures of scale reliability and also provides information about the relationships between individual items in the scale (Teng, 2011).

Cronbach's alpha reliability coefficient was obtained for the dependent and independent variable through the Likert scale designed questionnaires. Cronbach's alpha indicates how well the items in the set are positively correlated to one another. The closer the reliability coefficient gets to 1.00, the better the instruments in general, while reliability less than 0.6 are considered to be poor and those over 0.8 are good (Sekaran, 2006). Below is the summary of the reliability coefficient need to get good results.

Table 3. 12 The Reliability Coefficients of Variable.

Reliability Coefficient	Remarks
Less than 0.6	Poor
0.6 - 0.7	Acceptable
0.7 - 0.8	Good
0.9 or more	Excellent

3.16.2 Validity

Validity is the degree to which a measure accurately represents the characteristics being measured (Zikmund & Babin, 2013). Stated differently, a scale's validity makes it possible to determine if the scale is actually measuring what it is supposed to measure (Pallant, 2010). Validity as a measurement process ensures that scales are free from both random and systematic error (Feinburg et al., 2013). There are two types of validity in PLS-SEM analysis. Convergent validity is the first one and discriminant validity is the second one. Convergent validity identify whether corresponding factors is being effectively reflected by its item (McDaniel & Gates, 2010a), on the other hand, discriminant validity identify the difference of two factors (Zikmund & Babin, 2013). Criteria of these (2) classes are discussed below. Detail description is given on both of these types of validity.

3.16.3 The Convergent Validity of the Measurement

Validity of convergent is defined as a degree. Here in measuring a concept which is particular is converged by a set of variable (Hair et al., 2010). One and the same underlying construct is represented by the set of indicators. Unidimensionality can demonstrate and it is signified by convergent validity. Fornell and Larcker (1981) suggest to use for a criterion of convergent validity from the average variance extracted (AVE). If the value of AVE is minimum 0.5, it means convergent validity is sufficient. And in case of more than half of the variance, a latent variable is able to explain (Malhotra, 2010). PLS measurement model also gives the loadings for each item of a variable for convergent validity. Hair et al., (2010) also suggested for ensuring convergent validity some criteria. These are composite

reliability (CR), factor loading and average variance extracted (AVE). Hair et al. (2010) suggested that 0.5 is acceptable in the multivariate analysis literature for the item's loading in the measurement model. Composite reliability is the second aspect of convergent validity. It indicates the degree and it is a set of items which indicate the latent construct consistently (Hair et al., 2010). Examining the values of composite reliability is the process. The convergent validity of the outer model will be confirmed by these results.

3.16.4 The Discriminant Validity of the Measurements

Establishing the discriminant validity is necessary to ensure the construct validity of outer model. To testing the hypothesis, this step is compulsory on basis of priority. The degree is shown by the discriminant validity and its item differentiates among the constructs. Different construct used by the item, do not overlap. Therefore, measure distinct concept, construct correlated. Discriminant validity is established if the correlation between a particular construct and other constructs is not greater than the square root of the AVE (Hair et al., 2010; Malhotra, 2010; McDaniel & Gates, 2010b).

3.17 Assessing the Structural Model (Inner model)

The assessment of structural model is the second step in PLS-SEM analysis. Once the measurement model (outer model) confirms the reliability and validity of data, it is necessary to analyze the inner path model estimates. The necessary criterion for this assessment is the coefficient of determination (R^2) of effect size (f^2) calculation and

predictive relevance (Q^2), latent variable, hypothesis testing, predictive ejaculation. These issues are covered by the next discussion.

3.17.1 Coefficient of Determination (R^2)

The manifest variables which is caused by the exogenous variables or variation in the endogenous is represented by the coefficient of determination (R^2) value. Chin (1998) describes R^2 values of 0.67, 0.19, 0.33 in PLS path models as moderate, weak, substantial respectively. According to Cohen (1998) approach, on the other hand, value of R^2 for latent variable of endogenous are assessed like: substantial is for 0.26 and above, moderate is in the range of 0.13-0.25, weak variance is for 0.02-0.12 and it is by exogenous variables.

3.17.2 Hypotheses Testing

In PLS-SEM, the structural model output is used for hypotheses testing. Usually, the t-statistics is the criteria for hypotheses testing. If the t-statistics of a particular variable is higher than 1.96, it is assumed that the value is significant at 5percent level. However, the present study also calculated the p-value for testing hypotheses and significance level. A p-value less than 0.05 signify 95 percent confidence level and a p-value less than 0.001 signifies 99 percent confidence level.

3.17.3 Predictive Relevance (Q^2)

Another assessment of structural model is Predictive Relevance (Q^2). It involves the ability of the model to predict. Stone-Geisser's Q^2 is the most used measure for predictive relevance (Stone, 1974; Geisser, 1975), and by using blindfolding procedure, it can be measured (Tenenhausetal, 2005). The model should have a capability and it is to provide the prediction of endogenous latent variable and it is suggested by the Stone Geisser criterion. A synthesis of cross-validation and function fitting is denoted by the technique. As Chin (1998) points out, “the estimator of what are often construct parameter which is artificial are not greater than the prediction of potential observable or the prediction of observable”. For applying to endogenous latent variable, only procedure is blindfolding. It has a measurement model which is reflective. If value of certain endogenous variable is larger than zero, the explanatory variable provides predictive relevance. The relative effect of the predictive relevance can be measured by means of the measure in analogy to the effect-size f^2 evaluation Q^2 . The Q^2 is small for the value of 0.02, medium for the value of 0.15, large for the value of 0.35. The endogenous latent variable is under evaluation in this way.

3.18 PLS-SEM Justification

PLS-SEM technique is one of the second generation structural equations modelling (Wong, 2012). This relatively new technique goes fine with structural equation models that contain latent variables and a series of cause-and-effect relationships (Gustafsson & Johnson, 2004). For the statistical model building, PLS-SEM approach is a flexible and an

ideal tool (Ringle, Wende, & Will, 2012). PLS technique was used in this research for the following reasons. The equation of this model is better than the regression and have been demonstrated to be superior model (Iacobucci, Saldanha, & Deng, 2007; Preacher & Hayes, 2004).

This model is appropriate for complex and real-world application (Hulland, 1999; Hwang et al., 2010). PLS technique which is soft modelling assumption, gives advantages for complex and large models (Akter, D'Ambra, & Ray, 2011). A complex model is applied by the current research with several variables. For this reason, PLS SEM technique is appropriate to use in this research.

Data tends to have the problem of normality in the social science study (Osborne, 2010) and Data for to be normal, PLS path modelling does not require necessarily (Chin, 1998). Non-normal data is treated relatively well by PLS. This research use PLS path modelling for avoiding normality problems.

PLS SEM offers more accurate results than other methods (Bollen, 1989). Additionally, it has also been stated that PLS SEM is one of the powerful statistical tools in case of behavioural and social science, and it has the ability to test parallel relationship (Tabachnick & Fidell, 2007).

This modelling is used for establishing structural and measurement model in this research (JF Hair, Black, Babin, Anderson, & Tatham, 2010). In case of structural equation modelling, PLS is well known. PLS path modelling is more appropriate for calculating moderating effects, mediating effects, hierarchical construct with a complete disaggregation method (Chin, Marcolin, & Newsted, 2003). In the initial stage of theoretical development for validate and assessment exploratory model, PLS modelling has to be employed. Its prediction-oriented research is one of its powerful features. And to concentrate on the

explanation of endogenous construct is helped for researcher by this methodology. In addition, PLS determines the measurement models and structural models through multiple regressions, whose estimates can be vulnerable to issues of multicollinearity.

3.19 Data Processing

The primary plan of data analysis backs data processing. And it was formulated in the phase of research design. To process raw data into form a suitable position, there are five steps. Data cleaning, data editing, data recording, data checking, data transcribing are the five steps for data processing.

3.19.1 Questionnaire Checking

As Malhorta (2006) explained, the first step in case of checking of questionnaire and here interviewing quality, completeness is involved. When distributed questionnaire to respondents are returned, these data were checked. Therefore, error detects in the earlier stage and can made correction.

3.19.2 Data Editing

Due to increase precision and accuracy, questionnaire is reviewed and edited. This process checks incompleteness, illegibility, ambiguous responses and inconsistent to increase precision and accuracy (Malhorta et al., 2006). This process prevents inconsistency and incompleteness of questionnaire. The values which are missing will be

rejected and treated as incomplete responses. If the respondents forget to answer, they would be requested to prevent values which are missing in this survey.

3.19.3 Data Coding

Data coding means assigning a code, usually a number, to each possible response to each question (Malhotra, Hall, Shaw and Oppenheim, 2002). Responses which are unsatisfactory were discarded in this research. The responses which were unsatisfactory may be discarded, if the size of the pre-set sample is large (Malthorta, 2002). Numbers will be assigned by the researchers for the categories which is used in questionnaire. Such as, in section A (In the option of Gender), one is for male and two is for female. This makes data entry more convenient. 7-point Likert scales is used in section B of the questionnaire to described with anchors of (1) “strongly disagree” to (7) “strongly agree” to give respondents to make choice of their answers.

3.19.4 Data Transcribing

Data transcribing is the next step. It means to transfer the coded data from questionnaire or directly into the computer or in coding sheet (Malthorta, 2006). In this research, the Statistical Package for the Social Sciences (SPSS) software will be used. It is because of running all the data once and it get from the questionnaire and transcribed into the computer.

3.19.5 Data Cleaning

According to Malhorta et al. (2006), treatment of missing responses and consistency is included by data cleaning. The last step of the data processing is data cleaning. For checking logically inconsistent, extreme values, out range of data, this process has been done. To reveal the respondent codes, identify out range of data, the SPSS software package is used. It sustains the consistency of data.

3.20 Data Analysis

The objectives of data analysis are getting a feel for the data (descriptive analysis), testing the goodness of the data (scale measurement) and testing the hypotheses develop for the research (inferential analysis) (Sekaran, 2003). 400 sets of questionnaires were distributed to the respondents from which 276 were collected and finally 255 sets of questionnaires were selected for analysis. After the data was collected from the field, SPSS 22 was used to convert information to SmartPLS. The data have been analyzed by using inferential analysis, reliability, and descriptive analysis.

3.20.1 Descriptive Analysis

Statistical techniques which are used to describe data are referred to as descriptive statistics. It summarizes sets of numerical data (Robert and Richard 2008). Descriptive statistics will be instrumental in helping to interpret and understand the sample data and provides the first step in the data analysis (Aaker et al., 2007). Descriptive statistics

comprises frequencies, measures of central tendency (mean, median, and mode), and measures of dispersion (range, standard deviation, and coefficient of variation).

3.20.1.1 Frequency Distribution

It is stated by Frederick and Larry (2009) that the organized tabulation of the number for individual is frequency distribution. And it is located on the scale of measurement on each category. To demonstrate the value like percentage and number is the purpose of frequency. There is one categorical variable in this measurement. And it is ordinal or nominal scale(Zikmund, 2003). In case of variable, frequency division would generate a table of percentages, cumulative percentages and counts for the values (Malhotra, Kim, & Patil, 2006).

3.20.1.2 Descriptive Statistic

A tool that is used by researcher to summarize the frequency table is called descriptive statistic. A frequency table, sometimes, provides information that is too detailed. Therefore, researcher is required to put efforts to summarize the information. In this research, descriptive statistics measurements have been used on the independent variables that consist of behavioral intention to consume green products, willingness to consume green products, group recommendations, environmental knowledge, and self-efficacy. Results have been shown in mean and ranked in position of 1 to 7. The result which is highest in Mean determine that more likely to agree into a particular variable in case of purchasing green product intentionally.

3.20.2 Reliability Test

Malhotra et al. (2006) opines reliability test is necessary to find the stability and consistency with which the construct is measured by the research instrument. Additionally, the relationship between individual items in the scale also is possible to be determined appropriately. The higher degree of association between the scores derived through this repeated measurement, the scale gets more reliable. The scale items in this study were evaluated using Cronbach's Alpha. It is calculated by averaging the coefficient that the result from all possible combinations of split halves. As Malhotra (2006) stated, the coefficient varies from 0 to 1, and value of 0.6 or less generally signifies unsatisfactory internal consistency reliability.

3.20.3 Inferential Analysis

Burns and Bush (2006, p.426) opines inferential analysis is employed to generate conclusion about the population's characteristics based on information sleep in the data matrix furnished by the sample.

3.20.3.1 Pearson's Correlation Analysis

Person's correlation coefficient is used by researcher so that the strength of linear relationship between 2 variables can be measured. -1.00 to 1.00 is the range of correlation coefficient. Here 0 represent no systemic association between two variables. A perfect relationship between two variable is -1.00 to 1.00 (J Hair, Bush, & Ortinau, 2006). In

addition this method of analysis is taken. It is because without the amount of variation which is exhibit by each variable, the correlation can be compared.

3.21 Chapter Summary

Chapter three described a detail of methodology of this study. Correlational research methodology was used to analyze the influence of behavioral intention to consume green products on the green consumption behavior of individual Muslim consumers in Bangladesh. The samples from mall intercept survey conducted at fifty seven outlets in different shopping malls in Dhaka and Chittagong districts. Field interview using structured questionnaire was conducted. The data were studied against the literature and evolving themes. The data were examined in terms of their credibility, conformability, dependability, and transferability through research process transparency, source and method triangulation. This research will contribute to a understanding of the interactions within personal relationships, with regard to the practice of green consumption behavior. Furthermore, the findings of this research will offer new information regarding the religious motivations of Muslim consumers that they use in their desired consumption behavior. It will also identify attitudinally incongruent behavior and behavioral concessions the consumers undertake for the benefit of environment now and in future.

CHAPTER 4: DATA ANALYSIS

4.1 Introduction

Analyzing data of the present research is the main theme of this chapter. The collected data have been analyzed using PLS SEM technique to investigate the relationships between exogenous and endogenous variables; and to examine moderating effect of religiosity. After analyzing the data, the findings of PLS measurement and structural models have been documented sequentially. The topics include response rate, respondents' profile, frequency analysis, descriptive statistics analysis, missing value analysis, normality test, multicollinearity, reliability and validity analysis. Moreover, this chapter also contains the synopsis of hypothesis testing results obtained from the data analysis. In the appendix of the thesis, there are some straight outcomes retrieved from the Smart PLS M2.0 software.

4.2 Response Rate

The response rate basically means the percentage of the people who reacted to the study. A quality feedback must reflect from the survey, for the purpose of producing precise and convenient results. A total of 400 sets of questionnaires were distributed among the respondents for the intention of this research. The set of questions were handed out among the respondents through mall intercept survey. A request letter was also added and conveyed to the respondents mentioning the purpose of the study, how the results would be

used, and the terms of anonymity and confidentiality. The table below shows the details of the response rate of this study.

Table 4. 1 Results of questionnaire survey

Description	Response
Number of questionnaires distributed	400
Number of questionnaires returned	276
Number of excluded questionnaires	21
Number of usable questionnaires	255
Questionnaires not returned	145
Response rate	69%
Valid response rate	63.75%

Table 4.1 shows that out of 400 distributed questionnaires, 276 were collected back giving a response rate of 69 percent. On the other hand, 21 sets of returned questionnaire were rejected because some of them were incomplete, i.e., there were missing data in most of the cases. The 21 sets of questions from discussion are excluded as they do not show the examples (Hair, et al., 2010). Lastly, a total of 255 filled in questionnaire made up the valid responses for this study and the response rate was 63.75 percent. Thus the response rate of 63.75 percent achieved in this study is adequate as per the suggestions of Sekaran and Bougi (2010) who recommended a minimum of 30 percent response rate in a survey research.

4.3 Respondents' Profile

Respondents' profile is a section where the demographic characteristics of respondents are shown, which includes their age, education level, occupation and monthly income. In market research, demographic profile of consumers is an important output of data analysis (Lambin & Schuiling, 2012). Demographic data furnish a clearer picture of consumers who are practicing green consumption behavior and how the market segment may be visualized based on these buyers' profile. Table 4.2 shows that 75.7% participants are male and the rest 24.3% are female. Regarding the age of the respondents, 29.8 percent are within the age of 20 to 24 years; 33.3 percent of total respondents are within the age of 25 to 29 years ; 11.4 percent are within the age of 30-34 years; 3.4 percent are within the age of 35-39; 5.5 percent are within the age of 40-44 years; 2.4 percent are within the age of 45-49 years; 4.7 percent are within the age of 50-54 years; 5.1 percent are within the age of 55-59 years; 2.4 percent are within the age of 60-64 years and the remaining 1.2 percent are above 65 years. Among the 255 respondents, 4.3 percent have primary education, 14.5 percent have diploma degree, 7.1 percent have SSC level education, 3.9 percent respondents have higher secondary (HSC) level education; 41.6 percent have bachelor degree (graduates), 7.8 percent have postgraduate education, 9.4 percent have master's degree, 10.19 percent have doctoral degree, and the remaining 1.21 percent has no formal education.

Table 4. 2 Demography of the respondents

Demographics		Percent
Gender	Male	75.7
	Female	24.3
Age	20-24 years	29.8
	25-29 years	33
	30-34	11.4
	35-39	4.3
	40-44	5.5
	45-49	2.4
	50-54	4.7
	55-59	5.1
	60-64	2.4
	65 and above	1.2
Education Level	Primary Education	4.3
	Diploma	14.5
	Doctoral	10.2
	SSC	7.1
	Bachelor's degree	41.6
	Post-doctoral	7.8
	HSC	3.9

	Masters	9.4
	No formal education	1.2
Occupation	Service Holder	34.5
	Self-employment	18.4
	Unemployed	5.5
	Housewife	6.7
	Student	31.8
	Retired	3.1
Monthly income	Under Tk 10000	9.8
	Tk 10000-20000	28.2
	Tk 20000-30000	33.7
	Tk 30000-50000	14.5
	Tk 50000-100000	9.4
	Tk 100000 and above	3.5

Table 4.2 also shows the occupations of the respondents, where 34.5 percent are service holders; 18.4 percent are self-employed, 5.5 are unemployed, 6.7 are housewife, and 31.8 percent are students, while the remaining 3.1 are retired person. In terms of income of the respondents, 9.8 percent have monthly income of less than TK. 10000; 28.29 percent have monthly income of TK. 10000-20000; 33.7 percent respondents have monthly income of TK. 20000-30000; 14.5 percent have monthly income of TK. 30000-50000; 9.4 percent have monthly income of TK. 50000-100000 while the remaining 3.5 percent have

monthly income of TK. more than 100000. It is known from the statistics that the consumers are learned and solvent enough to respond to a research questionnaire.

4.4 Descriptive Statistics Analysis

Descriptive analysis audits the common numerical definition of variables in the study, including the minimum, mean, maximum and standard deviation of all the components. Here, the minimum, mean, maximum and the standard deviation represents the lowest, average, highest and the amount of variability responses from the respondents respectively. The recent study collected all the responses with a seven-point likert scale that ranges from 1 for strongly disagree to 7 for strongly agree. Table 4.3 explains the expressive numerical analysis of the factors applied in the survey. The statistics include minimum, maximum, mean and standard deviation of the research variables which are willingness to consume green, self-efficacy, environmental knowledge, intention to consume green, religiosity and green consumption behavior.

Table 4. 3 Descriptive Statistics of Variables

Variables	Mean	Std. deviation	Maximum value	Minimum Value
Willingness to consume green	5.895	0.501	7	2
Self-efficacy	5.275	0.416	7	2
Environmental knowledge	5.633	0.607	7	2
Religiosity	5.846	0.684	7	3

Intention to consume green	5.561	0.452	7	2
Green consumption behavior.	5.538	0.530	7	2

The descriptive statistics shown in table 4.3 represent that a maximum response of 7 has been achieved by all the variables while in case of minimum response; religiosity has got a minimum response of 3 and all other variables have got a minimum response of 2.

The mean column portrays the average answer whereby the mean value for all the variables are higher than 5 and some are close to 6. It depicts the affirmative action of the respondents to the statements in the questionnaire. Moreover, variability can be evaluated by analyzing the outcomes from the column assigned for the standard deviation considering which it calculates the variability range of distributing a certain variable. Data concentration around the mean is generally calculated by standard deviation values. Higher concentration of data stands for smaller deviation value. Also, high amount of similarity between points indicates a small range of standard deviation. According to table 4.3, the standard deviation for all the variables is below 1. In reference to the obtained results, it can be concluded that the standard deviations for all the variables are relatively small considering high amount of similarity existing between data points.

4.5 Missing Value Analysis

Missing values, also commonly known as missing data, explain a condition where there is a lack of authentic outcomes on one or more factors for analysis (Hair et al., 2010),

for a multivariate analysis, this is a very common situation. Considering the adverse effect of missing values, primary precautionary steps were taken by the researcher right from the field by investigating for any absence of data while retrieving the questionnaire from respondents. He also mentioned to the respondents for providing any observation regarding any absence of data. There is a possibility that this approach can explain the reduction in the amount of missing values. According to Sekaran and Bougie, (2010), a number of factors are responsible for absence of data such as respondents failing to understand certain questions or unwillingness to answer. Deletion of values by the researcher during data entry can also explain missing value (Pallant, 2011). As it is a common occurrence in data analysis, different approaches for missing value are available. According to the suggestion of (Tabachnick & Fidell, 2007), this research applied 'drop the case method'. As discussed earlier, the researcher dropped 21 cases of questionnaires for missing value while it has been dealt with very carefully that in case of any more analysis; data entry is done with proper measures.

4.6 Normality Test

As an important supposition of multivariate analysis, normality paints a picture of the circulation of outcomes of a metric variable and its correlation with the conventional circulation (Hair et al., 2010). Over the course of time, it has been proved that PLS-SEM works effectively with abnormal data by a number of investigators namely, Cassel, Hackl, & Westlund, 1999; Qureshi & Compeau, 2009; Reinartz, Haenlein, & Henseler, 2009; Wetzels, Odekerken-Schröder, & van Oppen, 2009. In spite of that, it is taken into account as a suggestion from the research of Hair et al., (2012) as well as Hair et al., (2014) that

data distribution should be considered by the researchers. They have argued referring to the fact that bootstrap standard errors get increased because of extremely skewed data (Chernick, 2008) which might be a factor behind the underestimation of the numerical importance of path coefficient (Dijkstra, 1983; Hair et al., 2012).

The research also applied multivariate normality as a process to evaluate the data distribution by applying Kurtosis (i.e., the asymmetry considering factors like peakedness or flatness of the distribution in comparison to the general circulation) and Skewness (i.e., the equilibrium of circulation at centered or symmetrical with about the same shape on both sides) (Hair et al., 2010). Hair et al., (2010) further provided facts to establish that both the Skewness and Kurtosis have factual calculations in various numerical programs. Nevertheless, as per the outcomes of Table 4.4, both the Skewness and Kurtosis of metric variable were less than critical value of 2.58 (Bhatti et al., 2012) that supports the normality of data for the study.

Table 4. 4 Normality test results

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Religiosity	-.666	.153	.877	.304
Green Consumption Behavior	-1.086	.153	1.909	.304
Willingness to Consume green	-1.082	.153	1.233	.304
Intention to Consume green	-1.045	.153	2.134	.304
Self-efficacy	-.439	.153	-.054	.304
Environmental Knowledge	-.748	.153	1.676	.304

4.7 Multicollinearity

Before assessing the model, it is inevitable to examine the calculative model for multicollinearity problem. To detect multicollinearity, variance inflation factor (VIF) and tolerance level for external factors were checked. As a rule of thumb, VIF values of 5 or lower and tolerance level of 0.2 or higher are required to circumvent the collinearity crisis (Hair et al., 2011). It was found in the research that the variance inflation factor (VIF) values for all exogenous variables were lower than 5 and tolerance for all the variables were also higher than 0.20. This indicated that there were no multicollinearity problems in the data (Hair et al., 2013).

4.8 PLS-SEM Analysis Results

The estimates of accuracy test, authenticity test and path transmittance also with the coefficient of determination are shown in Partial Least Square Structural Equation Modeling (PLS-SEM) analysis, the PLS measurement. The direction of affair between exogenous and endogenous variables are shown in structural equation model based partial least square analysis, where all the variables are linked in one figure. In the PLS measurement model figure, there are three kinds of values. These are the path coefficient, item loadings and coefficient of determination (R^2). The recent survey has six exogenous variables, one mediator, one moderator and one endogenous variable. The findings of measurement model are also documented in table 4.5.

In PLS SEM analysis, reliability test is performed by observing the Cronbach's alpha values, also the composite reliability. On the other hand, two types of validity are

measured in PLS-SEM analysis. The criteria of reliability and validity tests are discussed below. The PLS SEM measurement model figure (4.1) is shown below.

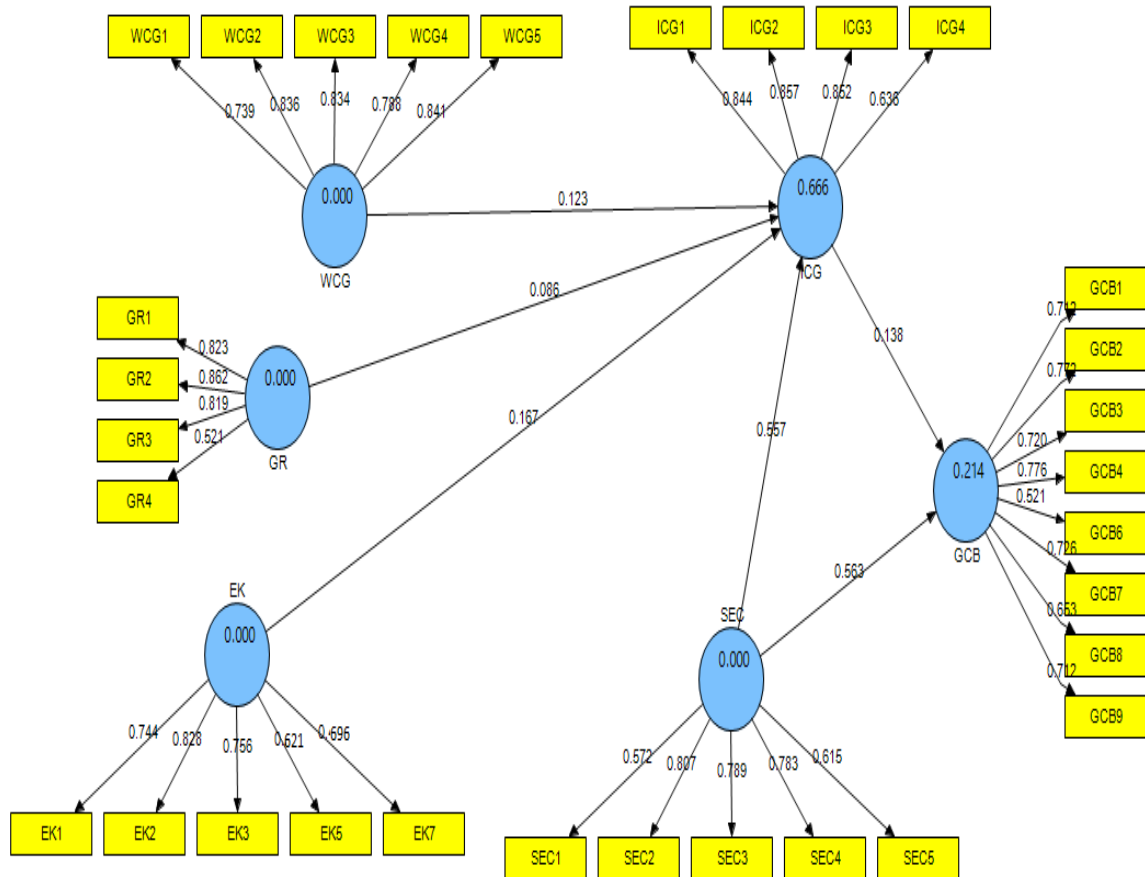


Figure 4. 1 The PLS SEM measurement model

4.8.1 Reliability Test

The first step is to assess the reliability and validity of the constructs in the measurement model (outer model). Reliability refers to the internal consistency of data (Hair et al., 2014). Cronbach's alpha and Composite reliability values are used to evaluate

reliability of constructs. For reliability, all constructs should have Cronbach alpha values above the threshold of 0.70 (Hair et al. 2012)' and the composite reliability values of the all constructs should be greater than the threshold of 0.70 (Bagozzi & Yi, 1988). As per table 4.5, all the Cronbach's alpha and composite reliability values are above 0.70 which indicates better internal consistency of data (Hair et al., 2012) and the reliability of all constructs are established in this study.

Table 4. 5 Measurement Characteristics of Constructs

Variables	Items	Loadings	Cronbach's alpha	Composite Reliability	Average Variance Extracted(AVE)
Environmental knowledge (EK)	EK1	0.744	0.742	0.792	0.521
	EK2	0.828			
	EK3	0.756			
	EK5	0.621			
	EK7	0.696			
Willingness to Consume Green (WCG)	WCG1	0.739	0.867	0.904	0.653
	WCG2	0.835			
	WCG3	0.834			
	WCG4	0.787			
	WCG5	0.840			
Group Recommendation (GR)	GR1	0.822	0.765	0.848	0.590
	GR2	0.862			
	GR3	0.819			
	GR4	0.521			
	R2	0.663			
	R3	0.621			
	R4	0.714			
	R5	0.698			
	R6	0.701			
	R7	0.648			

Table 4.5 Continued

	GR2	0.862			
	GR3	0.819			
	GR4	0.521			
Self-efficacy (SEC)	SEC1	0.572	0.762	0.840	0.518
	SEC2	0.807			
	SEC3	0.789			
	SEC4	0.782			
	SEC5	0.615			
Intention to Consume Green (ICG)	ICG1	0.844	0.811	0.877	0.643
	ICG2	0.857			
	ICG3	0.852			
	ICG4	0.636			
Religiosity	R1	0.737	0.812	0.895	0.638
	R2	0.663			
	R3	0.621			
	R4	0.714			
	R5	0.698			
	R6	0.701			
	R7	0.648			
Green Consumption Behavior	GCB1	0.711	0.852	0.885	0.594
	GCB2	0.772			
	GCB3	0.719			
	GCB4	0.776			
	GCB6	0.521			
	GCB7	0.726			
	GCB8	0.653			
	GCB9	0.711			
	GCB1	0.711			

4.8.2 Convergent Validity

According to (Urbach & Ahlemann, 2010), Convergent validity is a parameter that indicates the level of individual items reflecting a construct converging compared to items

calculating different constructs (To assess convergent validity, factors like construct's average variance extracted (AVE) and factor loadings are applied.. Convergent validity is supported when all constructs have an average variance extracted (AVE) value higher than 0.50 (Fornell and Larcker, 1981). As shown in table 4.6, all the values of AVEs are more than 0.50 which confirms the convergent validity of constructs. The utter systematized external loadings of objects are above 0.50. Chin (1998) believes that loadings over 0.5 still be acceptable while Hair et al., (2014) suggests loading 0.40 and above if there exists other indicators in the block for comparison. Table 4.5 shows that all the item loadings are greater than 0.50 and also the items are significant which confirms convergent validity at indicator level. Therefore, 0.50 and above AVE values of all the constructs and 0.50 and above values of item loading support the convergent validity of constructs in this study.

4.8.3 Discriminant Validity

The range of significant difference between particular construct and other latent construct is known as discriminant validity (Duarte & Raposo, 2010). Discriminant validity is satisfied when the indicators loadings on their calculated construct are greater than the cross-loadings on other constructs and the square root of each construct's average variance extracted (AVE) is higher than its relationship with other constructs (Chin, 1998). The first evaluation of discriminant validity is to assess the predictors' loadings regarding all construct relationships. The cross loadings of all items is deduced by applying SmartPLS algorithm function. As shown in table 4.6, all the items are well loaded on their constructs much more than the cross loadings on other construct which satisfies the primary analysis of the calculative structure's discriminant validity (Chin, 1998).

Table 4. 6 Factor Loadings and Cross-Loadings

	GCB	R	ICG	SEC	WCG	GR	EK
GCB1	0.711	0.482	0.247	0.341	0.229	0.222	0.217
GCB2	0.772	0.256	0.249	0.334	0.289	0.248	0.235
GCB3	0.719	0.509	0.194	0.291	0.207	0.161	0.174
GCB4	0.776	0.241	0.247	0.347	0.358	0.250	0.247
GCB6	0.521	0.500	0.076	0.158	0.235	0.152	0.206
GCB7	0.726	0.313	0.199	0.328	0.265	0.181	0.256
GCB8	0.653	0.393	0.214	0.313	0.213	0.109	0.241
GCB9	0.711	0.459	0.242	0.376	0.320	0.267	0.357
R1	0.412	0.737	0.106	0.441	0.412	0.512	0.445
R2	0.403	0.663	0.199	0.203	0.473	0.302	0.409
R3	0.399	0.621	0.312	0.442	0.399	0.322	0.403
R4	0.307	0.714	0.398	0.327	0.367	0.207	0.369
R5	0.334	0.698	0.388	0.347	0.314	0.299	0.319
R6	0.346	0.701	0.296	0.445	0.300	0.496	0.401
R7	0.412	0.648	0.358	0.358	0.358	0.303	0.458
ICG1	0.268	0.312	0.844	0.305	0.412	0.427	0.332
ICG2	0.274	0.421	0.857	0.195	0.473	0.318	0.374
ICG3	0.199	0.261	0.852	0.129	0.399	0.212	0.262
ICG4	0.246	0.249	0.636	0.473	0.367	0.297	0.240
SEC1	0.188	0.334	0.398	0.572	0.314	0.273	0.294
SEC2	0.275	0.239	0.263	0.807	0.396	0.313	0.363
SEC3	0.306	0.292	0.362	0.789	0.358	0.346	0.282
SEC4	0.409	0.277	0.206	0.782	0.398	0.338	0.279

Table 4.6 Continued

SEC5	0.434	0.409	0.463	0.615	0.376	0.407	0.299
WCG1	0.184	0.289	0.297	0.272	0.739	0.170	0.199
WCG2	0.319	0.438	0.424	0.412	0.835	0.262	0.338
WCG3	0.414	0.325	0.444	0.454	0.834	0.347	0.390
WCG4	0.261	0.452	0.452	0.480	0.787	0.441	0.471
WCG5	0.319	0.554	0.435	0.410	0.840	0.317	0.340
GR1	0.250	0.369	0.365	0.320	0.386	0.822	0.434
GR2	0.232	0.388	0.260	0.302	0.366	0.862	0.326
GR3	0.217	0.301	0.472	0.469	0.241	0.819	0.361
GR4	0.194	0.298	0.235	0.348	0.146	0.521	0.241
EK1	0.407	0.359	0.457	0.342	0.351	0.332	0.744
EK2	0.226	0.314	0.308	0.275	0.406	0.178	0.828
EK3	0.211	0.402	0.475	0.481	0.312	0.491	0.756
EK5	-0.041	0.309	0.061	0.107	0.055	0.096	0.621
EK7	0.178	0.199	0.249	0.231	0.134	0.248	0.696

Next, a comparison was made between the square root of the AVE of each construct along with the relationship existing between that construct and others. As per table 4.7, the square root of the AVEs exceeds the greatest correlation of construct and the others, providing another support of discriminant validity (Chin 1998; Fornell & Larcker, 1981) of the constructs in this study.

Table 4. 7 Discriminant Validity Assessments

	GCB	EK	GR	ICG	SEC	WCG	R
GCB	0.770						
EK	0.348	0.721					
GR	0.568	0.568	0.768				
ICG	0.549	0.549	0.525	0.801			
SEC	0.534	0.534	0.580	0.490	0.719		
WCG	0.442	0.442	0.392	0.516	0.512	0.808	
R	0.356	0.356	0.423	0.123	0.123	0.236	0.798

*Square root of the AVE on the diagonal.

4.8.4 Predictive Relevance (Q²)

For the purpose of conducting predictive relevance, an approach named predictive sample relevance is taken as an effective measure. (Fornell & Cha 1994; Chin 2010). Q² assesses the predictive authenticity of a complicated structure by applying PLS, as per as the blindfolding procedure, Under this procedure, as a process of estimation of parameters for a model, data omission takes place for a certain group of predictors and then prediction of the deleted portion occurs on the basis of measured standards. Thus, Q² explains the process reconstruction of the acquired result empirically done effectively by the structure and the PLS indicators (Fornell & Cha 1994). Q² > 0 establishes the structure has predictive relevance while Q² < 0 represents absence of predictive relevance. A recommendation is made to assess the predictive relevance of an individual's conceptual/factual structure by adopting cross validated redundancy measure. (Chin, 1988).The blindfolding procedure is

used to assess the cross-validated redundancy of constructs (Henseler et al., 2009). This study has got a Q^2 value of 0.129 for green consumption behavior and 0.201 for intention to consume green products which are higher than zero and establishes the predictive relevance of the model (Henseler et al., 2009).

4.8.5 Coefficient of Determination (R^2)

The coefficient of determination (R^2) value is a key output that indicates the proportion of the variance in endogenic factor which is made by the external factors. The current survey has got a R^2 value of 0.213 for Green Consumption Behavior which indicates that intention to consume green and self-efficacy can explain Green Consumption Behavior 21.30%.

Table 4. 8 Coefficient of Determination (R^2)

Endogenous variable	Coefficient of Determination (R^2)
Green Consumption Behavior	0.213
Behavioral Intention to Consume Green Products	0.666

On the other hand, the present study reveals that Behavioral Intention to Consume Green (R^2 , 0.666) is 66.60 percent influenced by group recommendation, self-efficacy, willingness to consume green and environmental knowledge while the remaining 33.40 percent might be affected by other elements that is not contemplated in this study.

4.9 Structural Model Assessment for Hypotheses Testing

Hypotheses testing can be performed in the structural model of PLS analysis. The primary factors that are taken into consideration here are path coefficient, t statistics, p values and error. Table 4.9 shows the findings of the structural model for hypotheses testing. The structural model is evident in the Figure 4.2

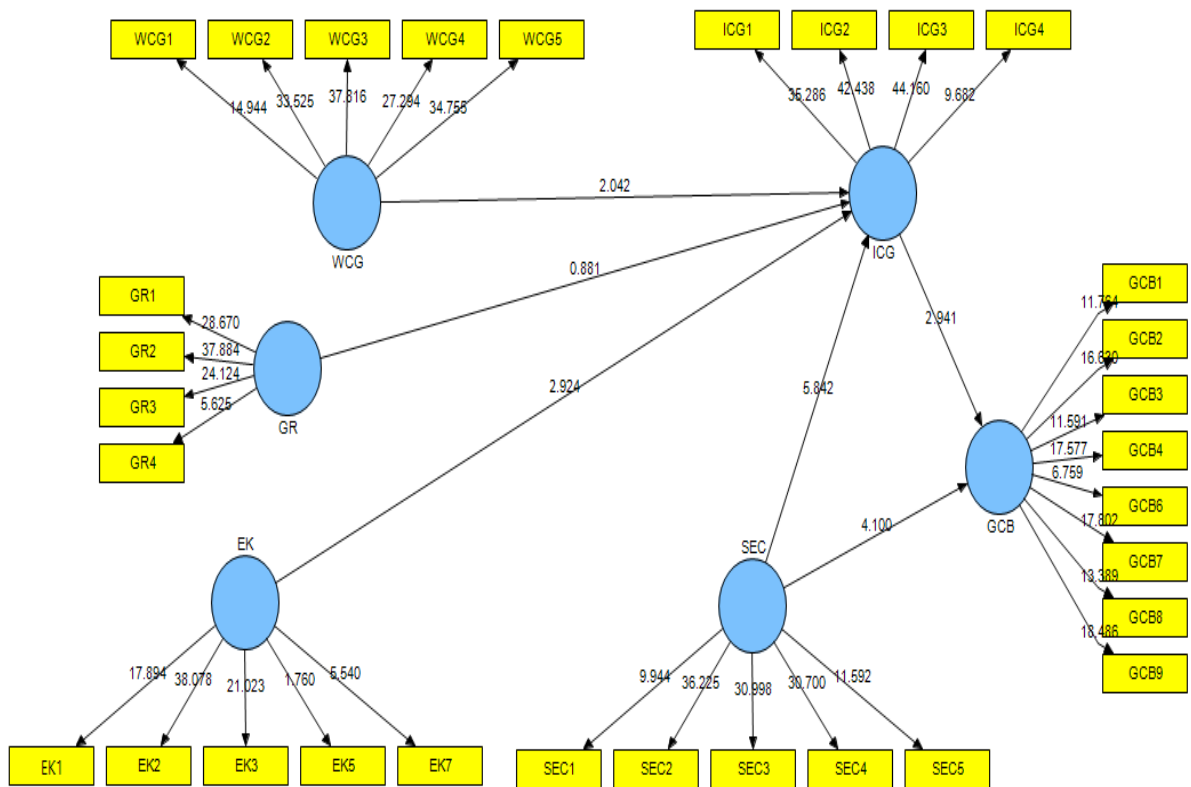


Figure 4. 2 The Structural Model

The path coefficient between latent factors and their importance is evaluated for testing the proposed hypotheses. Estimates are supplied for the path coefficients that represent the linker of the latent constructs which is hypothesized relationships, once a PLS model is conducted. In order to examine the main hypotheses, the bootstrap approach was

used to evaluate the importance of hypothesized relationships in the path model. The bootstrap was conducted by using 5000 resamples (Chin, 1998). The number of bootstrap cases indicates the original number of observations to produce standard errors and gain t-statistics (Hair et al., 2013). A hypothesis can be accepted if it is significant at 5 percent ($p < 0.05$) level of significance or if the t statistics is higher than 1.96 (Hair et al., 2014).

Table 4. 9 The Structural Estimates

Hypotheses	Hypothesized Path.	Path Coefficient	Standard Error	T-Value	P-Value	Level of Significance
H1	WCG->ICG	0.123	0.060	2.041	0.042	**
H2	GR-> ICG	0.086	0.098	0.881	0.379	----
H3	EK -> ICG	0.167	0.086	2.923	0.003	***
H4	SEC-> ICG	0.557	0.095	5.842	0.000	***
H5	SEC-> GCB	0.563	0.137	4.100	0.000	***
H6	ICG ->GCB	0.138	0.146	2.941	0.003	***

Note: ** $P < 0.05$; *** $P < 0.01$.

Hypothesis 1: Consumers who are willing to consume green products possess behavioral intention to consume green products. This hypothesis is proven considering the findings of the recent study. The path coefficient here is 0.123 with a positive sign and this value is significant at 5 percent (t , 2.041; P , $< .05$) level. So it is accepted that consumers who are willing to consume green products possess behavioral intention to consume green products.

Hypothesis 2: Consumer's group recommendation has direct relationship with his/her behavioral intention to consume green products. The findings of this hypothesis testing show that group recommendation is not significantly correlated with intention to consume green products. The path coefficient of this factor is 0.086 and the t statistic is 0.881 ($P > 0.05$). So the results reveal that Consumer's group recommendation has direct relationship with his/her behavioral intention to consume green which leads to the decision that hypothesis 2 is not accepted.

Hypothesis 3: Consumer's knowledge on environment directly affects his/her behavioral intention to consume green products. From the table 4.9, it is seen that environmental knowledge has a path coefficient value of 0.167 and the corresponding t statistics is 2.923 which is significant ($p < 0.05$). Therefore, hypothesis 4 which posits that Consumer's knowledge on environment directly affects his/her behavioral intention to consume green products is supported.

Hypothesis 4: Self-efficacy has direct and positive relationship with behavioral intention to consume green. This hypothesis is supported as the path coefficient has got a positive value of 0.557 and the corresponding t statistics is 5.842 which is significant at 1 percent level ($p < 0.01$), the hypothesis is considered valid.

Hypothesis 5: Self-efficacy has direct and positive relationship with green consumption behavior. This hypothesis is supported as the path coefficient value is 0.563 with a positive sign and the corresponding t value is 4.100 which is significant at 1 percent level ($p < 0.01$). Hence, proving that through this empirical study that Self-efficacy has direct and positive relationship with green consumption behavior.

Hypothesis 6: Behavioral intention to consume green products has a positive relationship with green consumption behavior. This hypothesis is supported based upon the

outcome of table 4.9 as it depicts that the path coefficient value is 0.137 and the complementary t statistics is 2.941 ($P < 0.01$) that shows 1 percent significance level. So it is accepted that behavioral intention to consume green products has direct and positive relationship with green consumption behavior.

4.10 Moderating Effect Analysis

A moderator is assumed to be the third variable that regulates the relationships between the independents and dependent variables. A moderator variable means the variable that influences the relationship between two variables and the effect of the factors setting the criteria in accordance to the level or values of the moderator. The present study is designed to test the moderating effect of Muslim religiosity in the correlation of behavioral intention to consume green products and green consumption behavior. Therefore, in testing the moderating effect of religiosity, intention to consume green products became the independent variable and green consumption behavior became the dependent variable.

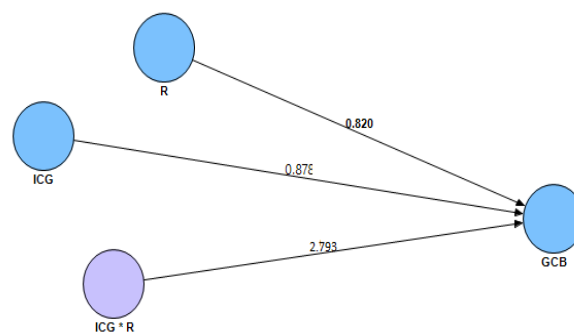


Figure 4. 3 The moderating effect

The R^2 for main effect model is 0.203 while the R^2 for interaction effect model is 0.349. The change in R^2 values is 0.146 which indicates that the addition of religiosity exerts more influence on green consumption behavior and there is moderating effect. The moderating effect size can be computed by following the formula; R^2 include - R^2 exclude / $1 - R^2$ include as suggested by Cohen's (1988). Using the formula the present study got an effect size (f^2) of 0.224 which falls in the medium effect size range (Cohen's, 1988).

To test the interaction of religiosity, bootstrapping procedure was carried out in smart PLS with a sample of 5000. It is found from Table 4.10 that the path coefficient of interaction is 0.817 and the corresponding t statistics is 2.793 that is significant at 5% level. Therefore it is supported that religiosity moderates the correlation of intention with consumption of green products and green consumption behavior. Therefore, hypothesis 7 is supported.

Table 4. 10 Moderating effect

Hypothesized path	Path coefficient	Standard error	T value	P value	Decision
R*ICG->GCB	0.817	0.356	2.793	0.004	Supported

4.11 Importance-Performance Map Analysis (IPMA)

Standard PLS-SEM analyses offer information on the relative importance of constructs in explaining other constructs in the model. Information on the importance of constructs is pertinent to portrayal of conclusions. The importance-performance map analysis (IPMA)

encompasses the results of PLS-SEM by taking each construct's performance into consideration. Here the effects of Muslim religiosity are more deliberately shown.

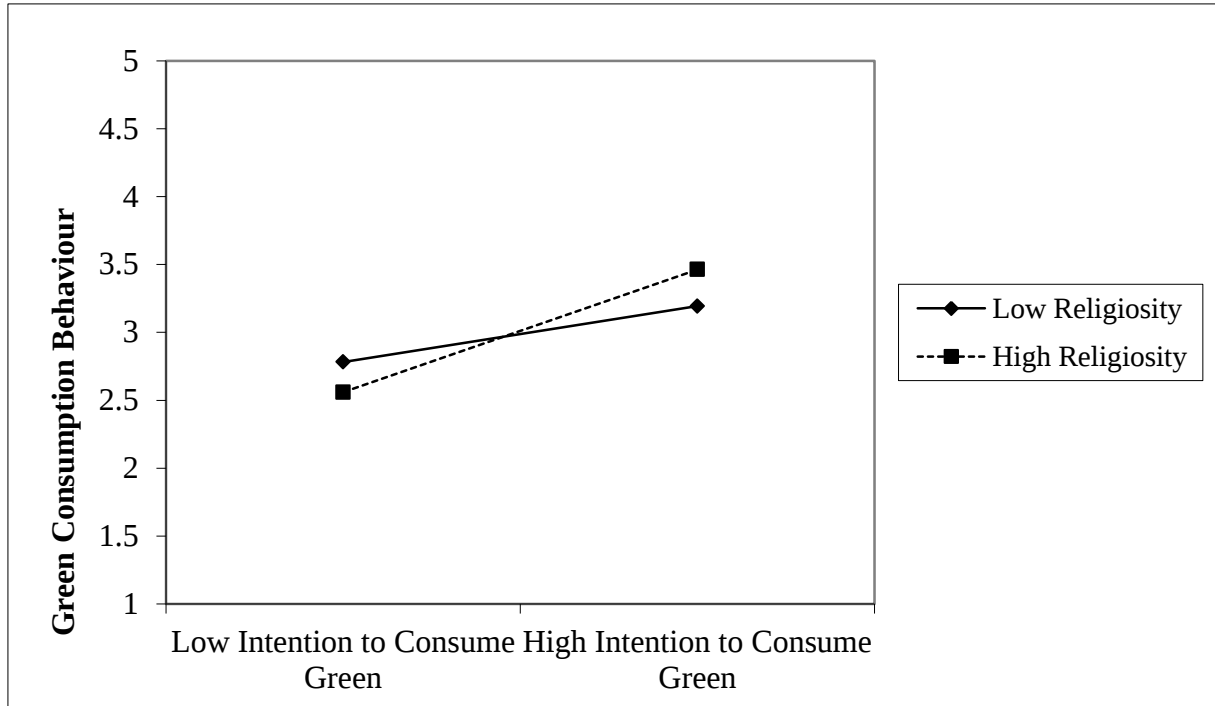


Figure 4.4: Moderating Effect of Religiosity on Intention to Consume Green and Green Consumption Behavior.

For plotting the moderating effects of Muslim religiosity on the relationship between intention to consume green products and green consumption behavior the path coefficient values were used following the method suggested by Dawson (2013). As exhibited on the above figure, the relationship between intention to consume green products and green consumption behavior is stronger for high religiosity and it is weaker in case of low religiosity.

4.12 Summary of Findings

Having presented all the outcomes including main and moderating effects in the earlier sections, the gist result of every concerned hypothesis is discussed in table 4.11 below.

Table 4. 11 Summary of Hypotheses Testing Findings

Hypotheses	Description	Comments
H1	Consumers who are willing to consume green products possess behavioral intention to consume green products.	Supported
H2	Consumer's group recommendation has a positive relationship with his/her behavioral intention to consume green products.	Not Supported
H3	Consumer's knowledge on environment directly affects his/her behavioral intention to consume green products.	Supported
H4	Self-efficacy has a positive relationship with behavioral intention to consume green products.	Supported
H5	Self-efficacy has direct and positive relationship with green consumption behavior.	Supported
H6	Intention to consume green has direct and positive relationship with green consumption behavior.	Supported
H7	Religiosity positively moderates the relationship between intention to consume green products and green consumption behavior.	Supported

4.13 Chapter Summary

This chapter draws a picture of the findings obtained from data analysis of the study. The structure of the survey is based according to the analysis of the data collected from 255 respondents. . The Analysis has two sectors as the recent study used PLS SEM method for data analysis. Firstly, the partial least squares measurement model assured the reliability and validity of data as well as the overall model fit. The reliability of the data has been ensured based on the fact that the value of The Cronbach's alpha values more than 0.70 and value of composite reliability is higher than 0.80 of all the constructs. On the other hand, the acceptable values of item loadings (0.50 and above), AVE (0.50) and square root of AVE demonstrated the convergent and discriminant validity of the data. The predictive relevance (Q^2) values indicated good predictive capability of the model. The structural model output was used to test the hypotheses of the study. The hypotheses testing results reveal that out of seven hypotheses developed in this study, six were supported and one was not supported. The next chapter discusses the findings of this study.

CHAPTER 5: FINDINGS AND DISCUSSION

5.1 Introduction

In the previous chapter data analysis were presented. This chapter discusses the findings of the present study in details. It starts with reviewing the key findings. Then an in depth discussion has been done on the determinants of green consumption behavior along with the moderating effect of religiosity on the relation between behavioral intention to consume green products and green consumption behavior. After that the contributions (implications) of this study focus on three key dimensions which include contribution to the body of knowledge, practical contribution and methodological contribution. Some recommendations have been given on the basis of the findings.

5.2 Discussion

This section discusses the findings of the research by analyzing the influence of willingness to consume green products, group recommendation, environmental knowledge and self-efficacy on behavioral intention to consume green and green consumption behavior. It also includes the moderating effect of religiosity in the relationship between behavioral intention to consume green and green consumption behavior. All the discussion is on the basis of the findings of this study and those of previous findings.

5.2.1 Determinants of Green Consumption Behavior

Over the past few decades, marketers and researchers have paid much attention to the underlying factors influencing green consumption behavior. Through extensive literature review, the present study extracted behavioral intention to consume green, willingness to consume green products, group recommendations, environmental knowledge, and self-efficacy as the influencing factors of actual green behavior. The findings of this study reveal that the mentioned factors altogether can explain green consumption behavior significantly while behavioral intention to consume green products, willingness to consume green product, environmental knowledge and self-efficacy have been found to be important factors influencing green consumption behavior of Muslim consumers in Bangladesh. It reveals that behavioral intention to consume green plays an important role in green consumption behavior of Muslim consumers in Bangladesh. It might be due to the fact that behavioral intention guides human being to do a particular behavior. These findings received much supports from previous researches where they found that behavioral intention encourages actual behavior (Li & Zhong, 2017).

The first hypothesis of this study was associated to the relationship between willingness to consume green products and behavioral intention to consume green products. Willingness is a driving force to the functions of behavioral intention in consumers' memory and can be reflected by how well the consumers willing to consume green products under various conditions (Biswas & Roy, 2016). Willingness to do a particular behavior makes strong claim in the literature of behavioral science as it is one of the most important factors marketers can utilize to track consumer behavior. Willingness and intention to buy and consume green products lead consumers to go for green consumption.

In this research attitude towards green products is substituted by willingness to consume green. Once customers hold positive attitude about green products, the possibility of making a positive decision about green consumption becomes higher. The consumption decision of a particular type of products highly depends on the extent to which customers are intending or willing to consume. Therefore, creating motivation to generate willingness to consume green products has become central to the marketers to address. It is proved in this study that willingness to consume green product is a strong predictor of behavioral intention to consume green products. It is found in this study that willingness to consume green products has a positive influence on behavioral intention to consume green products as we have seen hypothesis 1 is supported. Previous studies also evidenced that willingness is a vital factor for behavioral intention (Tobler, Visschers, & Siegrist, 2011).

The second hypothesis of this study was developed to investigate the relationship between group recommendation and behavioral intention to consume green products. As found in earlier researches that group recommendation is significantly linked to behavioral intention (Vermeir & Verbeke, 2008). In literature related to consumer behavior, group recommendation includes bundle of benefits that generate positive feelings in the mind of customers regarding making a buying decision. It was assumed that the consumers' intentions to consume were formed and finally consumption decisions were driven by group recommendation. But, the present study reveals that the relationship in between group recommendation and behavioral intention to consume green product is negative and thus the positivity of their relationship is not supported. In TPB and in many researches the group recommendation is termed as subjective norms or social norms and they claimed this factor does have influence on behavioral intention to consume green products (Aertsens, Mondelaers, Verbeke, Buysse, & Van Huylenbroeck, 2011; Lada, Harvey Tanakinjal, &

Amin, 2009; Zagata, 2012). With the improvement of civilization, proliferation of media activities particularly convenience of social media coverage, consumers are becoming more savvy or educated. This may cause that they are being less reliant on group recommendations. This is one of the significant findings of this research that the relationship is found negative.

The third hypothesis of this study was developed to examine the relationship between environmental knowledge and behavioral intention to consume green products. In pursuit of the determinants of green consumption behavior, the present study found environmental knowledge as an important factor influencing the behavioral intention of consumers for consuming green products. The statistical findings revealed that environmental knowledge is significantly associated with behavioral intention to consume green products. In fact, knowledge plays an important role for customers' cognitive evaluations. These cognitive evaluations make positive attitudes and intentions in the customers' minds. Therefore, customers can differentiate their behavior from others (Claudy, Peterson, & O'Driscoll, 2013; Vermeir & Verbeke, 2006). Often it is accepted by the researchers that understanding about the nature is effected by range of data, ecological ethnocentrism, previous attitude and viewpoint about all green products (Aman, Harun, & Hussein, 2012; Lee, 2010). In this regard, environmental knowledge makes priority to build strong intention to consume green products. The results of this study suggest that the higher the understanding of the consumers is, the higher the chances for them to be pro-environmental or green.

So far as the fourth and fifth hypotheses are concerned, the present study also examined the relationship respectively between self-efficacy and behavioral intention to consume green products; and then the relationship in between self-efficacy and green

consumption behavior. The statistical findings of this study have revealed that self-efficacy is a significant predictor of behavioral intention and it also has a positive relation to green consumption behavior. It is opined in many studies that perceived behavioral control and or self-efficacy has a control over an individual's behavior (Schwarzer, 2014; Terry & O'Leary, 1995). In this research it is revealed that self-efficacy does have a positive relationship with behavioral intention to consume green products and with green consumption behavior. Two hypotheses were developed relating to self-efficacy and both are found supported.

Behavioral intention to consume green products is influenced by willingness to consume green products, environmental knowledge, and self-efficacy. In this study the respondents agreed that they give value to the green consumptions. The green behavior always focuses on less materials and energy consumption; and generates less pollution. Environmentally-conscious consumers prefer purchasing ecological products that use natural ingredients and do less harm to the environment (Suki, 2013). A good number of customers are willing to pay more to support environment friendly products (Lung, 2010) that generate positive bottom line consequences. Therefore, based on the findings of this study, marketers need to focus on motivating the consumers for green consumption for total sustainability. Behavioral intention is one's propensity to take a specific action toward a specific person or object (Ajzen, 2011; Liu, Hong, & Li, 2016).

The sixth hypothesis of this study was developed to find out the relationship between behavioral intention to consume green products and green consumption behavior. Behavioral intention to consume green products is deemed to be an influential factor in enhancing green consumption behavior. Green consumption focuses on consumption patterns that have less or no negative impact on environment, society and economy (Wong,

2012). The present study also revealed that willingness to consume green products exerts a significant influence in increasing green consumption behavior. This is in line with the findings of Liu et al. (2016) who found that behavioral intention to consume green is one of the top influencing factors of green consumption behavior. This is because of the fact that the behavioral intention to consume green is significant to green consumers. Behavioral intention to consume green can be understood in terms of the level of environmental knowledge and willingness to consume green products. Therefore, it is proved through this study that intention to consume green product is a significant predictor of green consumption behavior.

It is often believed in an eco-friendly fraternity that to be concerned about the environment and nature and work accordingly for the betterment of it is a futuristic and improved method of leading life (Grier & Deshpande, 2001). If not, the habitants might be considered old-fashioned by the fraternity. It bears an underlying significance of ethics, altruism, environmental adaptation and eco-aspirations. So, the consumers are typically willing to consume green products. Therefore willingness to consume green products becomes an important matter to green behavior. It can accelerate the process of catering demand in the market for environmentally responsible products or services (Fletcher, 2006; Tapurica, 2012). The present empirical study also revealed that willingness to consume green products is positively and significantly related to green consumption behavior.

Generally dismissive viewpoint, associations and experiences with 'green' works as an obstacle to pro-environmental behavior change, along with what motivates greener consumption behavior among consumers (Hooper, 2012). Pagiaslis and Krontalis (2014) showed that environmental knowledge has a positive and direct impact on behavioral intention. The findings of this study give evidence that religiosity accrues to increased

green consumption behavior. The most common justification for religiosity as a moderator is advantageous as it guides consumers positively to behave like green ones. Therefore, religiosity is also important in green consumption behavior.

5.2.2 Moderating Effect of Muslim Religiosity

To date, there is an insufficiency of studies regarding Muslim religiosity as a moderator in the relationship between behavioral intention to consume green products, and green consumption behavior. Inclination towards religion signifies the aim of an individual for pursuing a religion. Researchers asserted that this idea may be an important standard for evaluating the impacts of religions on the behavior of an individual. Inclination towards religion draws the purpose of a person behind being loyal to their religion and later distinguishes as either intrinsically motivated or extrinsically motivated (Allport & Ross, 1967; Mas'od & Chin, 2014). Some researchers have investigated the religious impact towards reuse and solid waste management activities in Malaysia and have proved that integration with religion and ethnic groups can motivate one's moral factors in nature (Mohamad, Idris, Baharuddin, Muhammad, & Sulaiman, 2012). Mohd et al. also discovered that aspects related to religion works as powerful factors in controlling the buying motive about all natural substances considering the religious acceptance. Environment friendly behavior is usually considered as a moral attitude and correlated with the ethics and norms that is derived from one's own religious belief. According to Syed, Rohani and Badrul (2011), religiosity affects consumer behavior and buying motive. For instance a practicing Muslim shall never have pork and wine in his/her meal. Similarly,

Hindus always avoid having beef. Hence, to profile customer in marketing, factors related to religion are popular considerations.

Therefore, the present study aims at investigating the moderating effect of religiosity is correlated with behavioral intention to consume green products, and green consumption behavior. The results based on empirical data, indicate that moderating effect of religiosity is present in the correlation of behavioral intention to consume green products, and green consumption behavior. It means that the relationship between behavioral intention to consume green products, and green consumption behavior can be strengthened with the presence of religiosity of consumers. It is identical to the findings of Button, Hewitt, Rhee, Corley, and Stallings (2010), who identifies strong relation of religiosity to the behavior. Therefore, religiosity along with behavioral intention to consume green products increases the chances of doing more environment friendly (green) behavior. This finding also furnishes some insights regarding the importance of religiosity for green consumption behavior in developing countries.

5.3 Implications of the Findings

5.3.1 Theoretical Implications

The findings of the present study have manifold theoretical contributions. This study advances the knowledge of green consumption behavior, intention to consume green products and environmental knowledge, self-efficacy and group recommendation by examining the impacts of religiosity on the relationship in between intention to consume green products with green consumption behavior in Bangladesh. Since prior studies

generally mentioned that willingness have relationship with intention and intention does have relationship with actual behavior but those studies did not show the relationship statistically in respect to consumption behavior in case of green products (Chiou et al., 2011; Tseng et al., 2013), A huge research gap is observed regarding the relationship between intention to consume green products and green consumption behavior. This study fills this gap by providing an empirically validated approach taking a factually proven method that figures out the correlation of willingness to consume green products, environmental knowledge, group recommendation and self-efficacy with the behavioral intention to consume green products and the relationship of behavioral intention to consume green products with green consumption behavior. Exceptionally, this study contributes to the knowledge of religiosity and consumption behavior. In this study it is shown that religiosity does have moderating effects on the relationship between behavioral intention to consume green products and green consumption behavior.

It is superficially accepted in wide literature that behavioral intention directly influence actual behavior but there was very few evidence that behavioral intention to consume green products tends to influence green consumption behavior. The present study empirically proved that behavioral intention to consume green products can help consumers accelerate their process of green consumption. Thus this finding enriches the existing body of knowledge on the behavioral intention to consume green products in enhancing green behavior. Therefore, these findings might be a valuable asset for the organizations wishing to introduce and expand their green products and market.

The current survey establishes factual proofs that propose undeviating result of willingness to consume green products, environmental knowledge, self-efficacy, and behavioral intention to consume green products on green consumption behavior. Therefore,

this is an important addition in the literature that Muslim religiosity is a vital matter for enhancing green consumption behavior.

Previous studies indicate the insufficiency of information regarding the linkage between behavioral intentions and consume green products, willingness to consume green products, environmental knowledge, group recommendation, and self-efficacy to green consumption behavior. This study adds to the literature by examining how mentioned independent variables affect the dependent variable of this study. The findings reveal that behavioral intention to consume green products, willingness to consume green products, environmental knowledge, self-efficacy have a positive and significant impact on green consumption behavior. On the other hand, most studies on the effect of behavioral intention and attitude towards green purchase have been conducted in the different industries while very few attempts have been made to test the moderating effect of religiosity on the link between behavioral intention and actual green consumption behavior. Considering this aspect, the study adds new dimension to the previously done studies by creating a combinatory conceptual structure that focuses on how the religiosity can moderate the relationship between behavioral intention and green behavior.

It contributes by furnishing empirical evidence on how the green consumers act and react in the way of their consumption habits. The findings exhibits that variables used in the framework of this study can contribute to performance of a green firm quite well. Therefore this study adds new insights in the process of green supply chain by substantiating the use of the appropriate policy considering the psychology of the green consumers.

Another major theoretical implication of this study is the confirmation of the significant and moderating role of religiosity in the relationships between the behavioral intention to consume green products and actual consumption behavior. This finding implies

that firms operate in green industry can gain considerable performance improvement considering the matter of religiosity of the consumers. Multinational companies like Unilever have already started promoting their products avoiding objectionable advertisements and accommodating religious copy points. Therefore this is an important finding which adds some effects in the existing body of literature.

5.3.2 Practical Implications

This study bears a deep practical significance in the sense that it gives empirical evidence on how Bangladeshi green marketers can design and redesign their strategies considering religiosity and green consumption behavior. Hence it might pave the ways to boost up the market share of green industry of Bangladesh in the world market. The study's findings may also help increase the competitiveness of green industry of Bangladesh. Moreover, It works as a framework for the supervisors of green industry of Bangladesh as to how they can benefit from materializing green practices and securing government support for developing their affirmative impression towards the export market expansion, improving idea and increasing the dedication towards export market so that worldwide success can be achieved. The policy makers of green industry of Bangladesh may use this finding as a reference to influence other industries to adopt green practices in the operations or manufacturing process mentioning that it will enhance organizational production.

This study also draws a picture about the moderating impact of religiosity on the correlation of behavioral intention and consumption of green products, and green consumption behavior. Manufacturers or marketers seeking performance improvement in

their business require the information of buyers' decision making process and consumption behavior and whether the consumers think in an environment friendly manner. The study findings recommend managers to conduct business on the basis of environmental evaluation on regular basis, lessen the impact of natural factors in the production method, establish environmental evidence of the result, and develop connection with business associates regarding ecological management. As the present study empirically proved that religiosity can help consumers thinking about and consuming of green products, this finding might be a valuable asset for the marketers wishing to expand their market among pro environmental consumers in a developing country like Bangladesh and where people nurture religiosity in their minds.

Green industries and green products are emerging. Managers from those industries might be benefitted through this study as it has been possible to identify the factors influencing green consumption behavior. Along with the decision of entering into the market, they should think of the factors in the overall operations of the organization because this study's findings reveal behavioral intention to consume green products, willingness to consume green products, self-efficacy, and environmental knowledge are the prerequisites for green consumption behavior in Bangladesh. Since the findings indicate a direct and significant relationship between mentioned factors and green consumption behavior, the green promoting industries might focus on those factors first and consequently it leads to substantial bottom line consequences. Now it is more cemented through this empirical evidence that behavioral intention to consume green products precede and religiosity moderates green consumption behavior.

The environmental considerations in marketing and consumer behavior are of great importance to both the manufacturers and customers since they contribute significant

suggestion about production. This study suggests that marketers might enhance their performance through the above mentioned issues particularly addressing the religious issues. The results will let the industry to predict the ever-changing customer likings and place all natural substances ingestion with customer utility and hence, letting them to successfully fulfill the consumer want for attaining an edge in competition. Moreover, knowing customer psychology in advance might help the marketers and manufacturers to realize the complicated links among behavioral intention, environmental education, self-efficacy and actual green consumption behavior. Therefore, the present empirical study generates a lot of novel ideas which are essential for the industry, policy makers and also for the government.

5.3.3 Methodological Implications

The current research also consists of a tactical augmentation from various viewpoints. In the first place, this study adds value to the body of knowledge on consumer behavior in existing marketing research. Furthermore, the theoretical framework is developed through the items of willingness to consume green products, group recommendation, environmental knowledge, self-efficacy, behavioral intention to consume green products, and religiosity from this study that will be valuable tools by which consumption behavior relating to green products might go through a process of examination and evaluation. It is also important to have a proper structure that enables the researchers to obtain correct and simultaneous outcomes from the survey. Hence, analyzers in the business and social science area will have a support to figure out the impact and importance of behavioral intention on consumption behavior by applying a proper framework. Thus,

the research provides tactical outcomes by factually establishing the taken steps in accordance to green consumption.

Secondly, this study has used PLS-SEM to define the factors influencing green consumption behavior. Consequently, latent constructs' composite reliability, Cronbach's Alpha reliability, convergent validity and discriminant validity were all calculated and the results were more than the proposed least threshold. . Convergent validity was assessed by examining the AVE value for each latent construct, while discriminant validity was determined by comparing the correlations among latent constructs with the square roots of AVE. Cross-loadings matrix results were assessed to find support for discriminant validity of the conceptual framework. Therefore, this study has managed to apply one of the robust approaches (PLS path modeling) to examine the psychometric properties of latent constructs as described in the research model and test the predictive power of the tool in a study that explores the relationships between willingness Hence, the research applied a significant approach (PLS path modeling) to evaluate the psychometric characteristics of latent constructs according to the description of study model and examined the prediction capability of the method in a study that inspects the correlation between desire to consume green products, group recommendation, environmental knowledge, self-efficacy, behavioral intention to consume green products, and religiosity.

5.4 Recapitulations

As mentioned earlier, this research is designed to investigate the factors affecting green consumption behavior of Muslim consumers in Bangladesh, and to examine the effect of religiosity as a moderator. Here the theory of planned behavior and theory of reasoned actions are considered as a basic platform from where it is easy to find the factors influence human behavior. Behavioral intention to consume green products, willingness to consume green products, group recommendation, environmental knowledge and self-efficacy have been used as the factors influence green consumption behavior; religiosity is used as a moderator in between the one prominent IV (behavioral intention to consume green products) and the DV (green consumption behavior). This chapter discusses the key findings generated from the primary data collected to satisfy the purpose of this study.

This research initiative is undertaken with a view to investigate the factors influencing green consumption behavior. In addition to that religiosity was tested as the moderator in the relationship between behavioral intention to consume green and green consumption behaviors.

Data from 255 respondents have been analyzed which were collected with a structured questionnaire. In Bangladesh, there is no clear database of companies selling green products. But some super shops or retail stores in megacities like Dhaka (Capital City of Bangladesh) and Chittagong (Commercial and Port City of Bangladesh) are engaged in selling and promoting green products. There are some electronic companies who produce and promote energy saving devices. Among all those stores, 57 superstores have been selected in two mega cities for the survey using systematic method which is a type of probability sampling. Respondents of this research were referred to visitors of those stores.

Total number of distributed questionnaires was 400. Questionnaires were distributed among the respondents for the purpose of this study. Out of the total number, 276 were

returned giving a response rate of 69 percent. On the other hand, 21 sets of returned questionnaire were rejected because some of them were incomplete, i.e., there were missing data in many cases. Finally, a total of 255 filled in questionnaire made up the valid responses for this study and the response rate was 63.75 percent. Afterwards, the data were keyed in into Statistical Package for Social Science (SPSS) software version 22.0. Formerly the data were converted to comma delimited form (csv) for the conformity to PLS SEM analysis. Smart PLS was employed to make the analysis of data. The output obtained from measurement model (outer model) was used for testing reliability and validity of the data, for getting path coefficient values and observing variance in endogenous criterion variable explained by the exogenous variables. Results from the structural model exhibit the significance of the test (for hypotheses testing).

From PLS analysis it was found that loadings of all items were greater than 0.60 and were significant at 1% level, signifying convergent validity at the indicator level. All AVE values are found greater than 0.50 which suggest convergent validity at the construct level. All CR values are found greater than 0.70 that indicates acceptable reliability. The square root of each construct's AVE is greater than the related inter-construct correlations in the construct correlation matrix, indicating adequate discriminant validity for all of the reflective constructs. Items cross loadings also demonstrated discriminant validity of the data. For hypothesis testing, then, the bootstrapping technique was used.

The hypotheses testing results show that behavioral intention to consume green was found to have positive and significant relationship with green consumption behavior. Four other IVs (willingness to consume green, environmental knowledge, group recommendation and self-efficacy) were again tested to see their influence on behavioral intention to consume green. Willingness to consume green, environmental knowledge, and

self-efficacy were found to have positive and significant relationship with behavioral intention to consume green that leads to the acceptance of H1, H3, H4, H5, and H6. Hypothesis 2 that is H2 was not supported.

Results of moderating effect test findings reveal that religiosity moderates the relationship between behavioral intention to consume green products and green consumption behavior. Therefore, hypothesis 7 (H7) was supported.

5.5 Recommendations

On the basis of the findings of this research, a number of recommendations have been made which are essential for the stakeholders of this research in Bangladesh and in other countries of the world. The recommendations are as follows:

The first recommendation for the marketers or business persons is that they should put emphasize on motivating consumers so that they can hold intention to consume green products. Behavioral intention is also backed by attitudes towards green products or willingness of to consume green products, by environmental knowledge or education, and self-efficacy. Therefore, managers should put enough stress on initiatives which help consumers building favorable or positive attitude towards green products.

Firms should promote their products by launching managerial efforts to contribute in increasing consumers' education or knowledge on environmental affairs. It is evident that the knowledgeable consumers are eager to do green behavior.

Bangladesh is a Muslim intensive country and densely populated country. So there are potentials for green products. If managers can address the matters of consumers

considering religious values, there are huge potentials that consumers will do pro-environmental or green behavior.

It is found from this study that group recommendation does not influence the behavioral intention and consumption behavior. So marketers may patronize further research in this regard and they need not to care much of group recommendation in case of promoting green products.

Even though this study is done in Bangladesh, the concerned of other countries with similar socio economics status may implement the findings of this research. Through this process it will be possible to know about the factors influence green consumption behavior of those countries.

This study works as a guiding research of the students of social sciences or business conducting researches in the same area. They will find a readymade research framework from this study.

5.6 Limitations and Directions for Future Research

Even though this study generates lots of insightful findings, it is not without any limitations. The study is conducted in the context of Bangladesh considering its social and geographical background. Thus, the results of this study may only be applicable in Bangladesh, unless further cross country studies are placed in. Cross country studies are encouraged to examine whether different geographical contexts may have different structures and different performance outcomes.

The present study only considered the Muslim consumers in Bangladesh to investigate the influence of religiosity in relation to behavioral intention and actual

behavior. In addition, this study is cross-sectional study in which data are only collected at one point of time. But in order to generalize the findings of this study, more longitudinal studies should be carried out within the Muslim consumers as well as to compare with consumers from other religion. Therefore, future researchers might conduct more studies with a specific time interval and compare the findings with the previous ones and other consumers holding different religious beliefs. Moreover, both qualitative and quantitative studies may be aimed at identifying new approaches of green behavior of consumers.

5.7 Conclusion

Due to environmental degradation and world competitiveness, industries and environmentalists have realized the importance of green consumption behavior to save natural resources and to ensure a sustainable economy of the countries. From that ground the present research initiative was undertaken to investigate how the factors like behavioral intention to consume green products, willingness to consume green products, group recommendation, environmental knowledge and self-efficacy influence the green consumption behavior of Muslim consumers in Bangladesh. Religiosity was also included in the study to examine to what extent it can moderate the relationship in between behavioral intention to consume green and green consumption behavior. Focus is given on religiosity since it guide individuals minimizing waste and necessarily leads to the utilization of limited resources around the globe. The factors mentioned here are the prominent ones which greatly influence the pattern of green or sustainable consumption behavior. And these green behaviors like use of organic and biodegradable goods, use of energy savings electronic devices, use of bicycle for travelling to short distance, keeping

the electronic devices switched off while not in use are essential for sustainable development and achievements of Millennium Development Goals (MDGs). Corporations need to understand the relationships in between the variables to design their strategies for product or process innovation towards sustainability.

. As a growing field of research, this study revealed a significantly positive impact of IVs on DV. This supports the results of previous studies claiming that willingness or attitudes, group recommendation, self-efficacy and intention essentially influence behavior (Bock, Zmud, Kim, & Lee, 2005; Gibbons, Gerrard, Blanton, & Russell, 1998; Han, Hsu, & Sheu, 2010; Hansla, Gamble, Juliusson, & Gärling, 2008). Practically, individuals who consume green and environmental products widely believe to reduce environmental damage. And this belief creates a distinctive image in their minds regarding green brands. Then it is easier for the brand to build and cultivate long term profitable relationships with the customers which consequently leads to the steady growth of the organization. Hence it is of great significance for the firms producing green products to maintain a competitive position in the world market.

This study examined the moderating effects of religiosity in the relationships of behavioral intention to consume green and consumption behavior of an individual consumer in Bangladesh. The empirical results support that religiosity bring forth substantial effects in the said relationship. In explanation, the religiosity can lead to an individual becoming friendlier to the environment. The statistical findings reveal that the more practicing a consumer is in the context of religion the more environment friendly behavior one is doing. In the summary it can be suggested that the Bangladeshi firms producing green products and services should design their marketing strategies keeping the religious values of consumers in mind. This study has got some limitations as this study

has been conducted considering only the Muslim consumers in Bangladesh. There are around 10% people in Bangladesh who hold different religious beliefs. Their opinions have not been possible to identify and incorporate. Future researchers may address the issue.

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APPENDIX A: SURVEY QUESTIONNAIRE

Universiti Malaysia Perlis (UniMAP)
School of Business Innovation and
Technopreneurship

Doctor of Philosophy (PhD) Title of the Research:

**Factors Influencing Green Consumption Behavior of Muslim Consumers in
Bangladesh: Religiosity as a Moderator**

Dear Respondents, Assalamu Alaikum.

I am pursuing Ph.D. at Universiti Malaysia Perlis (UniMAP). The purpose of this survey is to find out the influence of factors to the green consumption behavior of Muslim consumers in Bangladesh. Your answers will be kept **PRIVATE** and **CONFIDENTIAL** and will be used solely for academic study purpose. Please answer all questions in all sections. Completion of this form will take you approximately 10 to 15 minutes. For your kind information, green consumption is an environment friendly consumption. Islam has proposed consumption rules which are fully in compliance with the ideas of green consumption.

Thank you for your cooperation.

Md. Shariful Haque
PhD Candidate, PPIPT,
UniMAP

Part – 2: Green Consumption Behavior

The following statements relate to your observation and judgment towards the Religious issues and green behavior. Please indicate the degree to which you agree or disagree with each of the following statements:

Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1	2	3	4	5	6	7

1. Behavioral Intention to Consume Green

		1	2	3	4	5	6	7
ICG1	I would like to purchase environmental friendly products.							
ICG2	I would like to consider purchasing environmental friendly products first.							
ICG3	I would like to practice green consumption.							
ICG4	I would like to recommend others to purchase environmental friendly products.							

2. Willingness to Consume Green Products

		1	2	3	4	5	6	7
WCG1	I think practicing green consumption is righteous.							
WCG2	I have every desire to use green products.							
WCG3	Practicing green consumption will increase my honor.							
WCG4	I remain aware of green products which are appearing in the market newly.							
WCG5	I am confident that if I want to, I can buy and consume green product at place of conventional or non-green product.							

3. Group Recommendation

		1	2	3	4	5	6	7
GR1	My families think I should practice green consumption.							
GR2	My friends think I should practice green consumption.							
GR3	I value the opinion and feeling of my family on my green consumption.							
GR4	I value the opinion and feeling of my friends on my green consumption.							

4. Environmental Knowledge

		1	2	3	4	5	6	7
EK1	I can easily recognize green brands.							
EK2	I am aware of the carbon emission.							
EK3	I know about greenhouse effect and global warming.							
EK4	Energy saving devices can reduce energy consumption effectively.							
EK5	I can define green consumption.							
EK6	I don't think green consumption will bring any benefit to the earth.							
EK7	I have academic learning on green consumption.							

5. Self-efficacy

		1	2	3	4	5	6	7
SEC1	I am sure I will buy and consume green products.							
SEC2	I will consume green even if there are difficulties to buy or consume green.							
SEC3	I am ready to pay more prices to consume green.							
SEC4	I have sufficient resource to support green consumption.							
SEC5	I will not consume green if there are many barriers to consume.							

6. Religiosity

		1	2	3	4	5	6	7
IsR1	In my personal life, religion is very important.							
IsR2	Islam helps me to have a better life.							
IsR3	The Dua'aa (supplication) supports me.							
IsR4	The Prophet Muhammad (peace-be-upon-him) is the role model for me.							
IsR5	Performing Hajj is one of my main priorities.							
IsR6	I believe that Allah (God) helps me.							
IsR7	I perform all my prayers.							
IsR8	I perform my prayers always on time.							
IsR9	I perform my daily prayers in the mosque							

	regularly.							
IsR10	I perform the obligation of Zakat.							
IsR11	I read the Qur'an regularly.							
IsR12	I fast the whole month of Ramadan.							

7. Green Consumption Behavior

		1	2	3	4	5	6	7
GCB1	I like to use organic food.							
GCB2	I travel via bus to work or shopping.							
GCB3	I turnoff TV, music system etc., when not in use.							
GCB4	I turnoff light when not in room.							
GCB5	I turnoff water while brushing.							
GCB6	I use environment friendly shampoo.							
GCB7	Dispose-off batteries at a recycling place.							
GCB8	I take own bag to shopping.							
GCB9	Use recycled pad for writing.							
GCB10	I prefer energy saving bulb than that of traditional bulb.							

Thank you for your cooperation.

APPENDIX B: SURVEY QUESTIONNAIRE (BENGALI TRANSLATION)

ইউনিভারসিটি মালয়েশিয়া পারলিস (ইউনিম্যাপ)
স্কুল অব বিজনেস ইনোভেশন এন্ড টেকনোলজি
ডক্টর অব ফিলসফি (পিএইচডি)

গবেষণার বিষয়ঃ

বাংলাদেশের মুসলমান ভোক্তাদের পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহারের অভ্যাসে প্রভাব রাখে এমন

সূচকসমূহঃ ধার্মিকতা যখন নিয়ামক

জরিপ প্রশ্নমালা

সুপ্রিয় জবাবদানকারীগন,
আসসালামু আলাইকুম।

আমি ইউনিভারসিটি মালয়েশিয়া পারলিস (ইউনিম্যাপ)-এ পিএইচডি'র করছি। এই জরিপটির উদ্দেশ্য হল বাংলাদেশের মুসলিম ভোক্তাদের পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহারের সূচকসমূহের উপর প্রভাব বিস্তারকারী বিষয়সমূহ খুঁজে বের করা। আপনাদের উত্তরসমূহ গোপন ও ব্যক্তিগত রাখা হবে এবং মূলত শিক্ষাগত গবেষণার ক্ষেত্রে ব্যবহার করা হবে। দয়া করে প্রতিটি বিভাগের প্রতিটি প্রশ্নের উত্তর প্রদান করুন। এই ফর্মটি পূরণ করতে আপনার প্রায় ১০ থেকে ১৫ মিনিট সময় লাগবে। আপনার সদয় অবগতির জন্য জানানো যাচ্ছে যে, পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার একটি পরিবেশ-বান্ধব ব্যবহার। ইসলাম ভোগ করার নিয়ম প্রদান করেছে যেগুলো সম্পূর্ণভাবে পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার চিন্তাধারার সাথে সামঞ্জস্যপূর্ণ।

আপনার সহযোগিতার জন্য আপনাকে ধন্যবাদ।

মোঃ শরিফুল হক

পিএইচডি ছাত্র, পিপিআইপিটি, ইউনিম্যাপ

পর্ব-১ : জবাবদানকারীগণের ডেমোগ্রাফিক (জনমিতি সংক্রান্ত) তথ্য

এই পর্ব শুধুমাত্র শ্রেণীবদ্ধকরণের উদ্দেশ্যে ডেমোগ্রাফিক (জনমিতি সংক্রান্ত) প্রশ্ন ধারণ করে। নিম্নে দেওয়া প্রতিটি প্রশ্নের জন্য, দয়া করে শূন্যস্থান পূরণ করুন বা আপনাকে সর্বোত্তমভাবে বর্ণনা করে এমন উত্তরটিতে টিক চিহ্ন (✓) দিন।

১. লিঙ্গ:

- ☐ পুরুষ
- ☐ নারী

২. জবাবদাতার বয়স:

- ☐ ২০-২৪
- ☐ ২৫-২৯
- ☐ ৩০-৩৪
- ☐ ৩৫-৩৯
- ☐ ৪০-৪৪
- ☐ ৪৫-৪৯
- ☐ ৫০-৫৪
- ☐ ৫৫-৫৯
- ☐ ৬০-৬৪
- ☐ ৬৫ বা তার উপরে

৩. বৈবাহিক অবস্থা:

- ☐ অবিবাহিত
- ☐ বিবাহিত
- ☐ তালাকপ্রাপ্ত
- ☐ বিধবা
- ☐ আলাদা বসবাসকারী

৪. চাকুরী সংক্রান্ত অবস্থান:

- ☐ বেতনভোগী চাকুরিজীবী
- ☐ আত্ম-কর্মসংস্থানে নিযুক্ত
- ☐ বেকার
- ☐ গৃহিণী
- ☐ ছাত্র
- ☐ অবসরপ্রাপ্ত

৫. কর্মজীবী হয়ে থাকলে, দয়াকরে আপনার মাসিক মোট আয় (টাকার অংকে) নির্দেশ করুনঃ

- ☐ ১০,০০০ এর কম
- ☐ ১০,০০০-২০,০০০
- ☐ ২০,০০০-৩০,০০০
- ☐ ৩০,০০০-৫০,০০০
- ☐ ৫০,০০০-১০০,০০০
- ☐ ১০০,০০০ এর অধিক

৬ আপনার সর্বোচ্চ শিড়ার স্তরঃ

- ☐ প্রথমিক শিড়া
- ☐ এসএসসি
- ☐ এইচএসসি
- ☐ ডিপেন্সার
- ☐ স্নাতক (ব্যাচেলর)
- ☐ স্নাতকোত্তর (মাস্টার্স)
- ☐ ডক্টরাল
- ☐ পোস্ট-ডক্টরাল
- ☐ শিড়া বিহীন

পর্ব-২ : পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার আচরণ

নিম্নোক্ত বিবৃতিসমূহ পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার আচরণ এবং ধর্মীয় বিষয়সমূহের প্রতি আপনার পর্যবেক্ষণ ও বিচারবোধের সাথে সম্পর্কযুক্ত। দয়াকরে নিম্নের প্রতিটি বিবৃতির আপনার একমত বা দ্বিমত পোষনের মাত্রা নির্দেশ করুন।

দৃঢ়ভাবে দ্বিমত পোষন করি	দ্বিমত পোষন করি	কিছুটা দ্বিমত পোষন করি	নিরপেক্ষ (একমত বা দ্বিমত পোষন করি না)	কিছুটা একমত	একমত	দৃঢ়ভাবে একমত
১	২	৩	৪	৫	৬	৭

১. পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার করার ক্ষেত্রে আচরণগত ইচ্ছাঃ

		১	২	৩	৪	৫	৬	৭
আইসিজি১	আমি পরিবেশ-বান্ধব দ্রব্য সামগ্রী ক্রয় করতে ইচ্ছুক।							
আইসিজি২	আমি প্রথমে পরিবেশ-বান্ধব পণ্য কেনার ব্যাপারে বিবেচনা করি।							
আইসিজি৩	আমি পরিবেশ-বান্ধবভাবে প্রস্তুতকৃত দ্রব্য ব্যবহার চর্চা করতে চাই।							
আইসিজি৪	আমি অপরকে পরিবেশ-বান্ধব দ্রব্য ক্রয় করতে পরামর্শ দিতে চাই।							

২. পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার করার ব্যাপারে ইচ্ছা

		১	২	৩	৪	৫	৬	৭
ডব্লিউসিজি১	আমি মনে করি পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার অনুশীলন করা পুণ্যের কাজ।							
ডব্লিউসিজি২	পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহারে আমার পূর্ণ আগ্রহ রয়েছে।							
ডব্লিউসিজি৩	পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার অনুশীলন আমার মর্যাদা বৃদ্ধি করবে।							
ডব্লিউসিজি৪	পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য যেগুলো বাজারে নতুনভাবে আত্মপ্রকাশ করেছে সেগুলো সম্পর্কে আমি সচেতন।							
ডব্লিউসিজি৫	আমার দৃঢ় আস্থা আছে যে যদি আমি চাই, আমি গতানুগতিক বা পরিবেশগত দিক বিবেচনাবিহীনভাবে যেসকল পণ্য উৎপাদিত হয় সেগুলোর পরিবর্তে পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ক্রয় এবং ব্যবহার করতে পারি।							

৩. দলগত সুপারিশ

		১	২	৩	৪	৫	৬	৭
জিআর১	আমার পরিবার মনে করে আমার পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার চর্চা করা উচিত।							

জিআর২	আমার বন্ধুবান্ধব মনে করে আমার পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার চর্চা করা উচিত।						
জিআর৩	আমার পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার নিয়ে আমার পরিবারের মতামত এবং অনুভূতিকে আমি মূল্য প্রদান করি।						
জিআর৪	আমার পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার নিয়ে আমার বন্ধুবান্ধবের মতামত এবং অনুভূতিকে আমি মূল্য প্রদান করি।						

৪. পরিবেশগত শিড়্গা

		১	২	৩	৪	৫	৬
ইকে১	আমি সহজেই পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্যের ব্র্যান্ড শগাক্ত করতে পারি।						
ইকে২	আমি কার্বন নির্গমন সম্পর্কে সচেতন।						
ইকে৩	আমি গ্রিনহাইজ এফেক্ট এবং বৈশ্বিক উষ্ণায়ন সম্পর্কে জানি।						
ইকে৪	শক্তি সঞ্চয়কারী যন্ত্রগুলো শক্তি ব্যয় কার্যকরভাবে কমাতে পারে।						
ইকে৫	আমি পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহারকে সংজ্ঞায়িত করতে পারি।						
ইকে৬	আমি মনে করি না পরিবেশবান্ধবভাবে উৎপাদিত সামগ্রী ব্যবহার পৃথিবীর জন্য কোন সুফল বয়ে আনবে।						
ইকে৭	পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্যের ব্যবহার করা নিয়ে আমার প্রাতিষ্ঠানিক জ্ঞান আছে।						

৫. আত্ম-কর্মদক্ষতা

		১	২	৩	৪	৫	৬	৭
এসইসি১	আমি নিশ্চিত আমি পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য কিনব এবং ব্যবহার করব।							
এসইসি২	পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার করা বা ক্রয় করা কষ্টকর হলেও আমি পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার করবো।							
এসইসি৩	পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহারে আমি আরো বেশী মূল্য পরিশোধ করতে প্রস্তুত আছি।							
এসইসি৪	পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার সমর্থন করতে আমার যথেষ্ট সম্পদ রয়েছে।							
এসইসি৫	ব্যবহার করতে খুব বেশি বাধা থাকলে আমি পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার করব না।							

৬. ইসলামিক ধার্মিকতা

		১	২	৩	৪	৫	৬	৭
ইসধা১	আমার ব্যক্তিগত জীবনে, ধর্ম খুবই গুরুত্বপূর্ণ।							
ইসধা২	ইসলাম আমাকে অধিকতর উন্নত জীবন পেতে সাহায্য করে।							
ইসধা৩	দোয়া (প্রার্থনা) আমাকে সাহায্য করে।							
ইসধা৪	নবী মুহাম্মদ (সাঃ) আমার জীবনের প্রধান অনুসরণীয় ব্যক্তি।							
ইসধা৫	হজ্জ সম্পাদন করা আমার আমার অন্যতম প্রধান লক্ষ্য।							
ইসধা৬	আমি বিশ্বাস করি আল্লাহ (সৃষ্টিকর্তা) আমাকে সাহায্য করেন।							
ইসধা৭	আমি আমার সকল প্রার্থনা সম্পাদন করি।							
ইসধা৮	আমি আমার প্রার্থনা সবসময় সময়মতো সম্পাদন করি।							
ইসধা৯	আমি আমার দৈনন্দিন প্রার্থনা নিয়মিত মসজিদে সম্পাদন করি।							
ইসধা১০	আমি জাকাতের আবশ্যিকতা পালন করি।							
ইসধা১১	আমি নিয়মিত কুরআন পাঠ করি।							
ইসধা১২	সম্পূর্ণ রমজান মাস আমি রোজা রাখি।							

৭. পরিবেশবান্ধবভাবে উৎপাদিত দ্রব্য ব্যবহার আচরণ

		১	২	৩	৪	৫	৬	৭
জিসিবি১	আমি জৈব খাবার খেতে পছন্দ করি।							
জিসিবি২	আমি বাসে করে কাজে বা কেনাকাটা করতে যাই।							
জিসিবি৩	যখন কাজে লাগে না তখন আমি টিভি, মিউজিক সিস্টেম ইত্যাদি বন্ধ করে দিই।							
জিসিবি৪	রন্ধনে না থাকাকালে আমি লাইট বন্ধ করে দিই।							
জিসিবি৫	ব্রাশ করার সময় আমি পানি বন্ধ করে দিই।							
জিসিবি৬	আমি পরিবেশ বান্ধব শ্যাম্পু ব্যবহার করি।							
জিসিবি৭	নবায়নযোগ্য জায়গায় আমি ব্যাটারি অপসারণ করি।							

জিসিবি৮	কেনাকাটায় আমি আমার নিজস্ব ব্যাগ নিয়ে যাই।							
জিসিবি৯	লেখার জন্য নবায়নকৃত প্যাড ব্যবহার করি।							
জিসিবি১০	আমি প্রচলিত বাবের চেয়ে এনার্জি সেভিং বাব পছন্দ করি।							

আপনার সহযোগিতার জন্য আপনাকে ধন্যবাদ।

APPENDIX C: PLS SEM MEASUREMENT MODEL OUTPUT

	AVE	Composite Reliability	R Square	Cronbachs Alpha	Communality	Redundancy
EK	0.521383	0.792359		0.742070	0.521383	
GCB	0.594495	0.885503	0.213868	0.852329	0.594495	0.050630
GR	0.590948	0.848378		0.765543	0.590948	
ICG	0.643746	0.877007	0.666349	0.811640	0.643746	0.120800
SEC	0.518627	0.840895		0.762737	0.518627	
R	0.638032	0.895687		0.812512	0.638032	
WCG	0.653733	0.904009		0.867858	0.653732	

Latent Variable Correlations

	GCB	EK	GR	ICG	SEC	WCG	R
GCB	1.000000						
EK	0.348001	1.000000					
GR	0.568123	0.568012	1.000000				
ICG	0.549147	0.549300	0.525125	1.000000			
SEC	0.534325	0.534251	0.580111	0.490214	1.000000		
WCG	0.442012	0.442145	0.392121	0.516123	0.512123	1.000000	
R	0.356036	0.356003	0.423112	0.123235	0.123214	0.236124	1.000000

Cross Loadings

	EK	GCB	GR	ICG	SEC	WCG	R
EK1	0.744035	0.407766	0.532305	0.457491	0.342143	0.351531	0.359254
EK2	0.828295	0.226913	0.578726	0.608401	0.275649	0.406110	0.314012
EK3	0.756170	0.211935	0.491622	0.475249	0.481171	0.312149	0.402125
EK5	0.221687	-0.041217	0.096463	0.061813	0.107208	0.055219	0.309991
EK7	0.496304	0.178643	0.248036	0.249433	0.231198	0.134773	0.199812
GCB1	0.217013	0.711848	0.222265	0.247030	0.341892	0.229107	0.482012
GCB2	0.235803	0.772099	0.248586	0.249710	0.334990	0.289197	0.256036
GCB3	0.174811	0.719891	0.161178	0.194255	0.291021	0.207159	0.509124

GCB4	0.247784	0.776068	0.250550	0.247166	0.347870	0.358897	0.241012
GCB6	0.206737	0.521247	0.152987	0.076477	0.158287	0.235836	0.500521
GCB7	0.256602	0.726105	0.181005	0.199819	0.328207	0.265857	0.313012
GCB8	0.241939	0.653431	0.109957	0.214418	0.313540	0.213514	0.393112
GCB9	0.357191	0.711807	0.267742	0.242572	0.376564	0.320810	0.459036
GR1	0.534125	0.250651	0.822895	0.565601	0.320776	0.386157	0.369112
GR2	0.626831	0.232340	0.862312	0.560434	0.302296	0.366628	0.388012
GR3	0.561541	0.217475	0.819487	0.472304	0.469583	0.241571	0.301325
GR4	0.241829	0.194962	0.521054	0.235851	0.348498	0.146349	0.298125
ICG1	0.532650	0.268935	0.527783	0.843503	0.305429	0.412694	0.312332
ICG2	0.674491	0.274804	0.618688	0.856548	0.195890	0.473204	0.421306
ICG3	0.562735	0.199552	0.512317	0.851810	0.129032	0.399419	0.261028
ICG4	0.240858	0.246539	0.297477	0.635793	0.473769	0.367239	0.249036
SEC1	0.294296	0.188792	0.273006	0.398358	0.572044	0.314062	0.334258
SEC2	0.563213	0.275358	0.513481	0.663027	0.807235	0.396421	0.239361
SEC3	0.582785	0.306598	0.646277	0.662649	0.789477	0.358334	0.292012
SEC4	0.579793	0.409728	0.538015	0.606334	0.782617	0.398671	0.277235
SEC5	0.299953	0.434035	0.407982	0.463297	0.615230	0.376479	0.409014
WCG1	0.199202	0.184573	0.170624	0.297226	0.272976	0.739276	0.289001
WCG2	0.338990	0.319063	0.262194	0.424997	0.412469	0.835595	0.438012
WCG3	0.390389	0.414735	0.347711	0.444937	0.454042	0.834436	0.325421
WCG4	0.471038	0.261724	0.441547	0.452354	0.480663	0.787927	0.452312
WCG5	0.340087	0.319910	0.317677	0.435996	0.410566	0.840716	0.554001
R1	0.445221	0.412412	0.512014	0.106102	0.441012	0.412012	0.737124
R2	0.409522	0.403325	0.302123	0.199521	0.203541	0.473125	0.663003
R3	0.403110	0.399012	0.322332	0.312369	0.442012	0.399213	0.621425
R4	0.369102	0.307112	0.207121	0.398011	0.327911	0.367125	0.714452
R5	0.319235	0.334121	0.299221	0.388001	0.347325	0.314012	0.698014
R6	0.401111	0.346214	0.496332	0.296102	0.445012	0.300811	0.701365
R7	0.458012	0.412325	0.303810	0.358514	0.358001	0.358013	0.648123

APPENDIX D: PLS SEM STRUCTURAL MODEL OUTPUT

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
EK -> ICG	0.167301	0.169477	0.086963	0.086963	2.923810
GR -> ICG	0.086476	0.100525	0.098135	0.098135	0.881189
ICG -> GCB	0.137726	0.132177	0.146302	0.146302	2.941385
SEC -> GCB	0.563492	0.563630	0.137427	0.137427	4.100313
SEC -> ICG	0.557007	0.551629	0.095342	0.095342	5.842172
WCG -> ICG	0.123000	0.114285	0.060248	0.060248	2.041560

APPENDIX E: MODERATING EFFECT OUTPUT

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)
ICG -> GCB	0.143071	0.267419	0.181357	0.181357	0.878884
ICG * R -> GCB	0.817183	0.060509	0.356949	0.356949	2.793017
R -> GCB	0.194856	0.327211	0.258684	0.258684	0.820260

APPENDIX F: DEMOGRAPHY OF THE RESPONDENTS

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	193	75.7	75.7	75.7
	Female	62	24.3	24.3	100.0
	Total	255	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20-24 years	76	29.8	29.8	29.8
	25-29 years	85	33.3	33.3	63.1
	30-34 years	29	11.4	11.4	74.5
	35-39 years	11	4.3	4.3	78.8
	40-44 years	14	5.5	5.5	84.3
	45-49 years	6	2.4	2.4	86.7
	50-54 years	12	4.7	4.7	91.4
	55-59 years	13	5.1	5.1	96.5
	60-64 years	6	2.4	2.4	98.8
	65 - above	3	1.2	1.2	100.0
	Total	255	100.0	100.0	

Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Service Holder	88	34.5	34.5	34.5
	Self-employment	47	18.4	18.4	52.9
	Unemployed	14	5.5	5.5	58.4
	Housewife	17	6.7	6.7	65.1
	Student	81	31.8	31.8	96.9
	Retired	8	3.1	3.1	100.0
	Total	255	100.0	100.0	

Monthly Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Under Tk 10000	25	9.8	9.8	9.8
Tk 10000-20000	72	28.2	28.2	38.0
Tk 20000-30000	86	33.7	33.7	71.8
Tk 30000-50000	37	14.5	14.5	86.3
Tk 50000-100000	25	9.4	9.4	95.7
Tk 100000 and above	10	3.5	3.5	100.0
Total	255	100.0	100.0	

Education

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Primary Education	11	4.3	4.3	4.3
Diploma	37	14.5	14.5	18.8
Doctoral	26	10.2	10.2	29.0
SSC	18	7.1	7.1	36.1
Bachelor's degree	106	41.6	41.6	77.6
Post-doctoral	20	7.8	7.8	85.5
HSC	10	3.9	3.9	89.4
Masters	24	9.4	9.4	98.8
No formal education	3	1.2	1.2	100.0
Total	255	100.0	100.0	

APPENDIX G: DESCRIPTIVE STATISTICS

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Religiosity	255	3.00	7.00	5.8461	.68444	-.666	.153	.877	.304
GCBehaviour	255	2.00	7.00	5.5387	.53088	-1.086	.153	1.909	.304
WCgreen	255	2.00	7.00	5.8957	.50154	-1.082	.153	1.233	.304
ICgreen	255	2.00	7.00	5.5618	.45297	-1.045	.153	2.134	.304
SEC	255	2.00	7.00	5.2753	.41616	-.439	.153	-.054	.304
EK	255	2.00	7.00	5.6337	.60701	-.748	.153	1.676	.304
Valid N (listwise)	255								

APPENDIX H: PROFILE OF EXPERTS

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LIST OF PUBLICATIONS

Journal Publications – 03

1. Md. Shariful Haque¹, Md. Aminul Islam², and Rosni Bakar³, ‘Identification of Factors And Development of A Theoretical Framework For Green Consumption Behavior in perspective of Muslim Consumers in Developing Countries’. Published in the International Journal of Ethics in Social Sciences, *Volume 6, No. 1, July 2018*.
2. Md. Shariful Haque¹, Md. Aminul Islam², and Rosni Bakar³, ‘Relationship between Behavioral Intention to Consume Green Products and Green Consumption Behavior and the Effect of Religiosity as Moderator: A Study on Bangladeshi Muslim Consumers’. Accepted for Publication in the International Journal of Ethics in Social Sciences, *Volume 6, No. 2, December 2018*.
3. Mithila Barua¹, Md. Shariful Haque², Shafiqur Rahman³, and Md. Mahmudul Hasan Roka⁴, ‘Perception and Awareness of Bangladeshi Companies to Go for Green Marketing: A Study on Mobile Phone Sector’. Published in Australia and New Zealand Journal of Social Business, Environment and Sustainability, *Volume 1, Issue 1, October 2015 [20-32]*.

Conference Publications – 02

1. Md. Shariful Haque¹, Maleha Murtaz², ‘Green Financing in Bangladesh: Trends and Constraints’, Presented in the 1st International Conference on “Finance for Sustainable Growth and Development”, and published in the proceedings with ISBN, Conference held on 15th March 2018 at University of Chittagong, Bangladesh
2. Nubaira Tajrin Nova¹, and Md. Shariful Haque², ‘Awareness & Attitude of University Students towards Green Banking: A Study on Selected Private Universities in Chittagong’, Presented in the 4th International Integrative Research Conference on Education, Governance and Development (Insearch 2017) at Comilla in Bangladesh, held on 18-19 December 2017