

# Sources of Consumers Awareness toward Green Products and Its Impact on Purchasing Decision in Bangladesh

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## Abstract

Consumers' green products awareness is significant in indicating the way of the green products buying decision. This study aims to investigate the sources of consumers' awareness toward green products and its impact on purchasing decision. The data is collected from 300 respondents by survey method through a structured questionnaire with five-point Likert scales & multiple items. Convenience and judgmental sampling method are used. Data are analysed using frequency analysis, mean, standard deviation and regression analysis. The study has found that promotional activities on eco-friendly products and reference groups significantly influence consumers green products awareness. Majority of the respondents are aware of green products. This study also reveals that green products awareness as the critical factor, which significantly affects consumers green purchasing decision. This paper can contribute to this green awareness issues. The company can be benefited knowing sources of green products awareness. Those it can aid green awareness development along with green products offer to consumers.

**Keywords:** green product, awareness, purchase decision, sources of awareness, impacts on purchase

## 1. Introduction

The sum entire of all ambience of living creatures, together with natural forces and other breathing things, which offer conditions for upliftment and growth, are in danger and damage (Business Dictionary). The actors and forces outside marketing that influence marketing management's ability to create and keep up successful relationships with target customers and environmental issues also accelerate marketing activities as environmental marketing activities (Kotlar & Armstrong, 2009). Environmental issues like depletion of natural resources, changing the weather, global warming is most talked about topics now a day. This problem may directly or obliquely influence the way one treats, specifically while making a purchase decision. The voracity of people and intention to acquire maximal with minimal caused in a tarnishing the essential supporting structures of life such as land, water and air (Smith, 2009). In this global warming situation, green products can reduce the environmental deterioration. A green product is can be expressed as eco-friendly, non-toxic recyclable, yielded by organic constituents and substance having a positive effect on the human being. The customer always favours to buy a green product from popular and recognized firms (Suki, 2013). Consumers of green products cut down to purchase those products which are detrimental for people and pollute the atmosphere during the production, use or dispose of those goods. Businesses are applying different exceptional promotional campaigns and tactics to develop the green product. Green products convey the information to the consumer about the eco-benefits about using product and these green products also to aid to inspire and fetch the alteration in consumer buying behaviour positively (Carlson & George, 1995). As consumers prefer green product widely, green products are becoming market leader day by day. Thus, it is raising the demand for the eco-friendly product around the world (Wahid & Rahbor, 2011). The movement for green is observed to be growth at a radical speed all over the world. Consumers are also showing right activities and responsive behaviour regarding environmental movement. Because of the changes in consumer behaviour due to environmental awareness and intentions to do better for ecology, more and more eco-friendly products are launching to market (Shruti, 2014). Green marketing (Offering Green products) concept incorporates a wide range of activities for establishing the consumer rights, saving the environment and meeting the consumer needs or wants and preferences. In the present world, consumers are more aware of their safety of life and want everything would

be environment-friendly products and making the green world. Green marketing struggles with fraudulent practices, grey marketing, food contamination and protect consumers from impudence businessman. The green marketing concept is already activated all over the world. Green awareness has changed the role of consumers to demonstrate their accountability to save the world before buying activities (Cherian & Jacob, 2012). Consumers have a tendency to assess the features of a specific green product sensibly and regard its influence on the environment (Gan et al., 2008; Prakash, 2002). Green awareness appreciates the products which are less detrimental to the environment, all living creatures, and most prominently, biodegradable (Borin et al., 2013; Tiwari et al., 2011). Many companies take support to develop an environment-friendly product to fascinate the customer. While some apply green awareness strategies for developing new products and can increase the volume of sales successfully by adopting green marketing activities (Raska, 2012). Green consumers are aware about environmental pollution; therefore, they confirm impacts of consuming product to environmental pollution and try to maintain it at zero level (Tiwari et al., 2011). Meanwhile, consumers give importance of environmental products to save the environment, the consumers then transform their concern through buying actions and purchasing the eco-friendly products (Moser, 2015; Young et al., 2010). Green consumers are willing to pay premium price because they know that this additional payment will bring green benefits for themselves and society. Besides, green products give an impress of being coherent to a progressive environmental regime which prepares us always with positive environmental mind (Florenthal & Arling, 2011; Young et al., 2010). Environmental damage can be reduced by designing, consuming, and labelling eco-friendly products and for this consumer awareness is essential to be successive. Green products consumers become more careful about ambience preservation (Delafrooz et al., 2014).

Bangladeshi consumers must adopt environmentally sound behaviours to keep up the clean environment. By location, Bangladesh falls in the coastal region. Bangladesh is going to be worst sufferers due to the impact of quick climate change throughout the globe. The coastal areas of Bangladesh are different from rest of the country because of different socio-political consequences and their unique geophysical characteristics that often limit people's ingress to syntactic resources and perpetuate risk and vulnerabilities. Bangladesh's coast is the most significant victim of natural disasters and profoundly affected by climate change with problems including soil erosion, flooding and cyclones salinity and waterlogging. Therefore, this study aims to study sources of green product awareness and its' impact on purchasing decision in Bangladesh.

Achieving the objective, this paper is allocated into the following segments. Firstly, the literature review and conceptual framework are provided based on past literature. Secondly, methodologies are explained which are applied on the study. Next part of the study is presented with the results and discussion. After that, the conclusions and implications are described for the interested parties like a business, researcher, etc. Finally, the limitations and further research scope are represented.

## **2. Literature Review and Conceptual Framework**

According to American Marketing Association (2017) have defined green marketing based on impact of marketing activities on pollutions, energy resources and non-energy resource consumption where relationship is presented in terms of positivity and negativity of those factors. Polonsky (1994) stated that environmental marketing includes a broader array of organizational actions such as product adjustment, variations to the manufacture procedure, delivery change and more and to satisfy human needs or wants, all activities consist green or environmental marketing. And it is designed to create and facilitate an interchange intended so that the fulfilment of these needs and wants will happen with least harmful effect on the nature. Environmental sustainability is defined as a green marketing approach that involves developing strategies that keep up the environment in balance along with profits for the company. It is a significant but difficult social target, and many companies are taking at least some actions to save and preserve the environment (Kotler & Armstrong, 2009). People believe that natural resources are favourable and less damaging to the environment (Schlegemich et al., 1996). A green product is referred as naturally produce, bio-degradable non-toxic, non-experimental on creatures, contamination free, nominally packed with natural and permitted constituents (Ottman, 1993). Environmentally friendly activities deal, for instance, with better pollution controls, energy-efficient operations, and recycled materials (Kotler & Armstrong, 2009). People who are concerns about environmental safety, follow green buying behaviour and consume green product are considered as green consumer (Yazdanifard & Yan, 2014). Consumers whose buying behaviour is influenced by environmental concerns will be considered as green consumers (Shrum et al., 1995). Buying green products, insulating home with new equipment, buying environment-friendly and energy-efficient cars are green purchase behaviours (Shabani et al., 2013). Consumers who concern more about the environmental issues have the more possibility to purchase green products (Yeonshin & Sejung, 2005). Consumers green buying process refers to the self-regulating relationship between consumption of green product deriving from needs, wants and choices.

Effects of cultures, conditions and demography of people have influences on those needs (Kotler et al., 2009). Willingness to pay more for eco-friendly products does not always indicate green buying behaviour, some green buyers may be price sensitive (Mandese, 1991). According to Barr & Gilg (2006), environment protectionists are highly concern about environmental issues and play significant role for the betterment of environment where it is possible. Negative insights are possible to reduce if the benefits of green product can be communicated through the package or through media advertisement (Luchs et al., 2010). Population explosion and excess consumption of resources have led environment more polluted for which awareness among green consumers raise. So the industries face the pressure to follow environmental ethics in manufacturing process. The claim for green product and green concepts begin to rise when environmental awareness, governing pressure for eco-technology in manufacturing and public health and safety concerns start to increase among people (Srinivas, 2015). Researchers and marketing experts have presented different concepts to identify patterns of green buying behaviour. Those buying behaviour specifies decision regarding when and where to purchase the green products. People may adopt distinct principles to assess the green product in terms of their need fulfilment by considering types of buying and anticipation of performance (Blackwell et al., 2006). Consumers who consider the ecological effect on their consumption pattern and ready to alter their buying actions is recognised as green consumers (Florenthal & Arling, 2011; Luzio & Lemke, 2013; Ritter et al., 2015; Tiwari et al., 2011). Green marketing research is also considering green buying decision as vital issue to explore. The green buying behaviour can be described as interest to favour green corporations (Laroche et al., 2001), accomplishment of the buying actions (Sharma, 2010), implementing a ecological usage outline (Young et al., 2010) and inclination to pay extra currency to purchase eco-friendly offers (Hasan & Ali, 2015; Laroche et al., 2001).

Many studies and surveys which look into the consumers' awareness cover on diverse issues and area and examine the aspects affecting the awareness of the green product towards green products buying decision. Rather & Rajendran (2014) Studied on consumer awareness of green products and its impact on green buying behaviour in Jammu & Kashmir. The study found the level of awareness and buying behaviour. But this survey did not take into account sources of consumer's awareness of green products. Desai (2015) researched on consumer awareness towards environmental-friendly buildings in Pune City. The research found that most of the respondents agreed that eco-friendly buildings are durable and they are made of quality construction materials. Most of the respondents were considering that green create buildings were not easy to keep up, and such buildings are constructed with recycled materials. But it did not show impacts of awareness in a purchase decision. Suki (2013) worked on green awareness and its relationship with consumers' purchasing decision in Malaysia. The study found price information and brand image significantly affects green buying decision. Young people were more concern and females were deemed as part of rising consumer group in Malaysia. But the study did not take into account environmental concern for purchasing choice of green products and it was conducted in Malaysia, not in Bangladesh. Kumar et al. (2012) studied perception along with awareness of young generation towards green products in India. The research found that majority of the respondents knows the green products where men were more conscious of green products. It also concluded that people believe in better quality of green product and considered it as worthy for environmental betterment. But it had surveyed on only youngsters in India not all classes.

Demographic profile is the key concern of researchers to investigate through their study in environmental marketing field. But factors such as environmental concern, knowledge, eco-friendly products, social media, promotional activities etc. can be influential on eco-friendly products. Again a significant literature gap has flowed in Bangladesh perspective by not evaluating any prognostic relationships that may be aware toward green products. The past researchers have not high lightened the predictive relationship environmental concern, knowledge, eco-friendly products, social media, promotional activities on eco-friendly products and reference groups with green products awareness in Bangladesh context. The research purpose is to examine the sources of consumer's awareness of green products and its impact on purchasing decision in Bangladesh. Therefore the study will measure green products awareness creation regarding environmental concern, knowledge, eco-friendly products, social media, promotional activities on eco-friendly products and reference groups.

### *2.1 Conceptual Framework*

Consumer prefers those green products that are associated with the environment. Some studies have indicated that assessment of environmental concern are made by product features, the exactness of green product promise to perform, information on the products and its facilities (Forkink, 2010; Luchs et al., 2010). Consumers are worried about the environment which arises from their interest in ecological balance and problem reducing the tendency of consumers. Besides, consumers are more worried about the environment (Murphy et al., 1978). Thus, it is expected that:

H1: There is a significant relationship between consumers' environmental concern and green products awareness.

Awareness and knowledge play effective role in different types of consumer behaviour (McEachern & Warnaby, 2008; Hartlieb & Jones, 2009; Donoghue & De Klerk, 2009; Chartrand 2005 and Dommeyer & Gross, 2003). Hartlieb & Jones (2009) explains the significance of moral labelling for civilising green products awareness role. Eco-packaging helps to build positive image and judgement of consumers. Thus it creates awareness about green products by enhancing knowledge of different critical aspects and also influences consumers' decisions or behaviours. Knowledge can be related to awareness and effect consumer purchasing choices or movements (McEachern & Warnaby, 2008). According to McEachern & Warnaby (2008), knowledge can be segmented into system knowledge, action-related knowledge, and useful knowledge and all of them provide guidelines for buying decision-making. Thus, it is expected that:

H2: There is a significant relationship between knowledge and green products awareness.

Consumer prefers to buy an environment-friendly product from popular and renowned firms (Suki, 2013). Eco-friendly products change the thinking of buying decisions. Positive thinking is established on the mind of people by eco-friendly products (Suki, 2013). Benefits of green product are achieved in different ways: positive personal value, sign of less environmental pollutions and allow making profit. These consumers support the making the profit of those green product. Green marketing can be key strategies to appeal consumer and modify buying behaviour because of environmentalism. Consumption experience can influence behaviour intensions such as knowledge, awareness etc. (Triantafillidou & Siomkos, 2014). Therefore, becoming more and more familiar with green products could influence awareness toward green products among consumers. Thus, it is expected that:

H3: There is a significant relationship between eco-friendly products and green products awareness.

Mayfield (2008) explains that social media is online or electronic media which opportunities involvement, openness, preservation, community, and connectedness amongst online users. It can be considered as a means for customers to become familiar with the green products, and thus it will develop awareness concerning green product (Macdonald & Sharp, 2003). Mohammadian & Mohammadreza (2012) have found strong relationship between social media and generation of green consciousness. Thus, it is expected that:

H4: There is a significant relationship between social media and green products awareness

Green advertising communicates benefits of using green products such as less resource and energy for manufacturing products, sustainable sources, less harmful for environment and society etc. (Chang, 2011). Those messages impact on consumers' awareness and motivate to buy green products. Ginsberg & Bloom (2004) have observed that advertisement and package provide information such as environmental safety, recyclability etc. affect positive intensions to purchase green products in America. Thus, it is expected that:

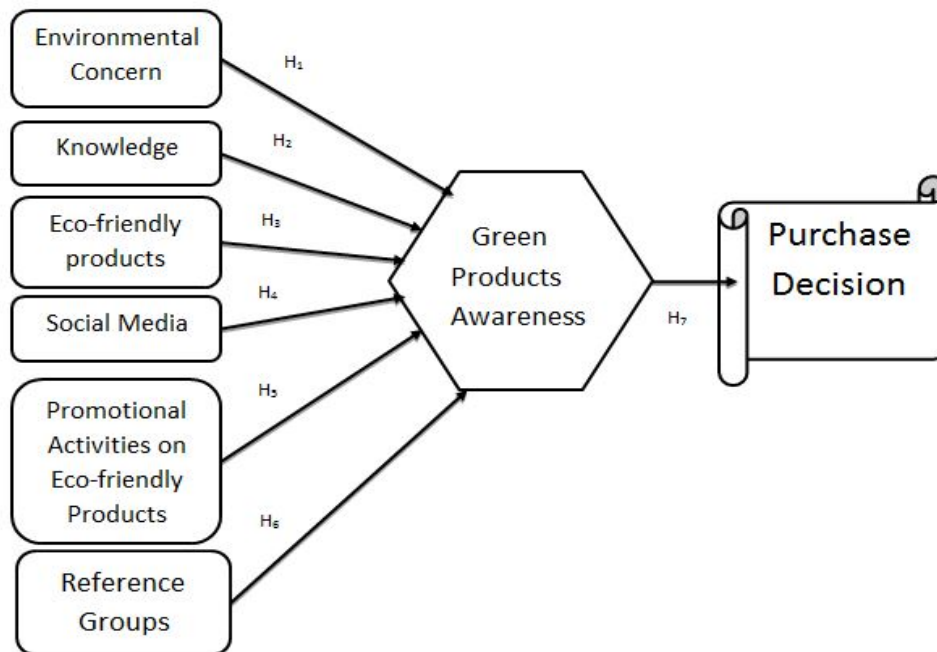
H5: There is a significant relationship between promotional activities on eco-friendly products and green products awareness.

According to Solomon (2006), the reference group can be defined as those people whose attitudes or principles are followed by others and therefore sometimes it influences on other purchasing behaviour. People prefer to follow their reference group's values, norms, attitudes or beliefs and try to adopt those on their own as a guide for awareness and behaviour (Mowen & Minor, 2000). Reference groups can enforce several kinds of influence on people: their behaviour and attitude can be transformed to its followers, through customs of reference group followers need may generate etc. (Mowen & Minor, 2000). Influence of reference group is also identified to discuss attitude-behaviour in ecological consumerism using social dilemma theory to find variance between green and non-green buyers (Gupta & Ogden, 2009). Thus, it is expected that:

H6: There is a significant relationship between reference groups and green products awareness.

Green products awareness refers to the ability of consumer to identify the product with green recognition and recall. Green products awareness can benefit businesses to launch the new green product and progress sales of current products (Markwick & Fill, 1997). Unfamiliarity with the green product may cause less interested to purchase an eco-friendly product (Glegg et al., 2005). Firms which can generate awareness and give more attentive on the green product will affect purchasing decisions of their consumers. People pay attentions for those companies who can aware environmental benefits of their green products. Moreover, changes of buying behaviours are also occurred because of green product awareness (Ottman, 1993). Thus, it is expected that:

H7: There is a significant relationship between green products awareness and green purchase decision.



**Figure-1: Proposed Research Model**

Figure 1. Proposed research model

### 3. Research Methodology

This study is quantitative. For collecting primary data, the personal interview has been conducted. From the secondary sources, the literature review has been developed. Structural questions have prepared consists of 35 items for data collections. Five issues are related to demographic variables such as gender, age, occupation, education and monthly income. Twenty-eight questions are about sources of green awareness which influence consumers purchase green products. Thus section 2 is composed of awareness measures by using five point Likert scales (from 1= 'Strongly disagree' to 5= 'Strongly agree'), there is first question with five propositions which are linked to the environmental concern (environment betterment, consumer's responsibility, serious issue, contribute to saving my planet earth, avoid non green), the second question with three propositions which are linked to the knowledge ( have education, have learned, attended conference) , the third question with three propositions which are linked to the eco-friendly products (benefits, past used, marketing offering), the fourth question with three propositions which are linked to the social media ( have learned from Facebook, twitter etc, social media , available information ), the fifth question with five propositions which are linked to promotional activities(ads with green themes & message, labels green, better health, creating awareness and enough to buy) and the sixth question with five propositions which are linked to reference groups ( friends & colleagues, family pressure, friends ask, culture/region, celebrities)to create green products awareness. Seventh question Green products awareness consists of four statements (clearly and completely, satisfied, recommend, purchase green products in future).Two multiple items scale questions deal with the consumer green purchasing behaviour. Applying the convenience and judgemental sampling techniques, primary data is collected through the personal interview with 300 respondents. Cronbach's Alpha is 0.837 for 28 items of variables which suggest that the examination instrument is reliable to evaluate all hypotheses reliably and free from random error. Data collected from questionnaires are analysed by applying several statistical tools like mean, standard deviation and regression analysis by using SPSS 16.0.

### 4. Results and Discussions

#### 4.1 The Demographic Profile of Respondents

Table 1 presents the different frequency and percentages of the demographic profile of respondents. Most of the respondents are males (70.3%) while females are 29.7%. It is observed that respondents are mostly in the age groups 18–25 years old (59.3%), known as young. Besides, young generation are highly concern about anything

new to the society and react to different situation faster than any other age class. So this study considers maximum number of participants from this group. The second highest of respondents are in the age categories 26-40 years (21.7 %). The third highest of respondents are in the age categories 41-55 years (15.7%), and minority of respondents are in the age categories 56 years above (3.3%). These young people tend to have been more concerned about the green environment and influenced a purchasing decision. With regards to educational qualification, 38.3% of respondents are undergraduate, 31.3% of respondents are postgraduate, 27.7% of respondents are graduate, and 2.7% of the respondents are others. These most of respondents are undergraduate, and minorities of respondent are others. Also about employment status, the majority of respondents are students (55.3%), the second highest of respondents are in-service (23.7%), and the third highest of the respondents are own business (12.7%). Lastly, the fourth highest of respondents are homemakers (5.7%), the fifth highest of respondents are agriculture (2.0%) and minority of respondents are others (0.7%). It presented that respondents are the majority in the income level below 20,000(47.3%), the second highest of respondents are income level 20,000-50,000 (38.3%), the third highest of respondents are income level 50,000-80,000(11.7%) and a minority of respondents are income level 80,000 above (2.7%).

Table 1. The demographic profile of respondents

	Frequency	Percentage
<b>Gender</b>		
Male	211	70.3
Female	89	29.7
<b>Age</b>		
18-25 Years	178	59.3
26-40 Years	65	21.7
41-55 Years	47	15.7
56 Years +	10	3.3
<b>Education Qualification</b>		
Undergraduate	115	38.3
Graduate	83	27.7
Postgraduate	94	31.5
Others	8	2.7
<b>Employment Status</b>		
In service	71	23.7
Own business	38	12.7
Agriculture	6	2.0
Homemaker	17	5.7
Student	166	55.3
Others	2	0.7
<b>Monthly Income</b>		
Below 20,000	142	47.3
20,000-50,000	115	38.3
50,000-80,000	35	11.7
80,0000 above	8	2.7

#### 4.2 Sources of Consumers Awareness

Table 2 reveals a total picture of different sources of consumer awareness towards green products by expressing respondents' opinion on various issues related to creating awareness. Majority of respondents have agreed Promotional activities ( $M=3.67466$  &  $SD=0.798378$ ) become the most significant factors in sources of

consumers green products awareness. Environmental concern (M=3.56266 & SD=0.862316) is the second essential factors in sources of consumer's green products awareness. Eco-friendly products (M=3.4834 & SD=0.9402667) become the third significant factors. Social media (M=3.3689 & SD=0.96213) is the fourth significant factors. Reference groups (M=3.206 & SD=0.929534) are the fifth significant factors in sources of consumer's green products awareness. Knowledge (M=3.01667 & SD=1.001687) is the less significant factors in sources of consumer's green products awareness.

Table 2. Descriptive statistics analysis

S.No.		Mean	Std.Dev.
<b>Environmental Concern</b>			
1.	Green product is environmental betterment	3.8400	0.67025
2.	Environmental issues are consumer responsibility	3.6900	0.76322
3.	Deterioration of the environment is a serious issue	3.7400	0.82137
4.	Saving planet earth	3.7700	0.87921
5.	Avoid buying nongreen	2.7733	1.17753
	Average	3.56266	0.862316
<b>Knowledge</b>			
1.	Have education of environment & green products	3.2533	0.95158
2.	Have learned of green products	3.0800	0.98157
3.	Have attended conference/seminar	2.7167	1.11078
	Average	3.01667	1.001687
<b>Eco-Friendly Products</b>			
1.	Benefits of green products	3.8767	0.75056
2.	Past used of green products	3.4000	0.99833
3.	Various marketing offering	3.1867	1.07191
	Average	3.4834	0.9402667
<b>Social Media</b>			
1.	Have learned from Facebook, Twitter, YouTube, etc.	3.8000	0.78446
2.	Social media aware of green products	3.4867	0.90511
3.	Green products information are available	2.8200	1.19682
	Average	3.3689	0.96213
<b>Promotional Activities on Eco-friendly Products</b>			
1.	Ads with green themes & message about saving environment	3.5733	0.81661
2.	Labels are good sources of green information	3.6733	0.75400
3.	Green products are better for health as well as environment	3.6100	0.77884
4.	Creating awareness about green products	3.5967	0.78061
5.	Enough information to buy green products	3.9200	0.86183
	Average	3.67466	0.798378
<b>Reference Groups</b>			
1.	Friends & colleagues have informed	3.6067	0.80047
2.	Pressure of family members to know	2.8533	0.96346
3.	Friends ask for idea	3.4233	0.86793
4.	Culture /region affect to green aware	2.7500	1.07300
5.	Green aware for celebrities	3.3967	0.94284
	Average	3.206	0.929534

4.3 Green Products Awareness

Table 3 depicts that majority of the respondents (43.0%) Agree about the awareness of green products. Among rest of respondents (41.0% somewhat, 8.3% disagree, 4.7% strongly agree, and 2.3% strongly disagree) are level of awareness regarding green products. Hence most of the respondents are aware of green products. Moreover, 45.0% respondents agree that they are satisfied regarding green products. Also, 73.0% respondents agree to recommend friends, family, and others.

Table 3. Green product awareness

	Green Product Awareness		Satisfy Regarding Green Products		Recommend Friends, Family & Others		Purchase in Future	
	f	%	f	%	f	%	f	%
Strongly Disagree	7	2.3	6	2.0	2	0.7	2	0.7
Disagree	25	8.3	14	4.7	4	1.3	3	1.0
Somewhat	123	41.0	132	44.0	34	11.3	19	6.3
Agree	131	43.0	135	45.0	219	73.0	195	65.0
Strongly Agree	14	4.7	13	4.3	41	13.7	81	27.0

4.4 Purchasing Behaviour

Table 3 presents that most of the respondents (65.0 % agree & 27.0 % strongly agree) will purchase green products in future. According to Table-4, 59% respondents buy green product regularly when they need, and over 60% respondents are interested in purchasing green product always and often. So consumers have positive attitudes towards green product purchase.

Table 4. Green buying

	Frequency	Percentage
<b>Frequently Buy</b>		
Once a week	16	5.3
Once a Fortnight	11	3.7
Once a Month	49	16.3
Once a Year	47	15.7
Regular when needed	177	59.0
<b>Repeat Purchase in Future</b>		
Not At All	19	6.3
Sometimes	91	30.3
Often	95	31.7
Always	95	31.7

4.5 Result of Regression Analysis

4.5.1 Predict the Relationship between Factors and Consumers Green Awareness

Table 5 presents that correlation coefficient value (R) is equal to 0.350 which recommends that there is a reasonable positive correlation between green products awareness and environmental concern, knowledge, eco-friendly products, social media, promotional activities on eco-friendly products, reference group. Moreover, coefficient of determinant (R<sup>2</sup>) is 0.123 which indicate that due to independent factors (environmental concern, knowledge, eco-friendly products, social media, promotional activities on eco-friendly products and reference groups) dependent variable varies only 12.3 %. It implies that there is the impact of other factors on green products awareness. These aspects are expected to be discovered in upcoming study.



#### 4.5.2 Confirm the Model Fitness

Table 5 reveals that regression analysis is accomplished to recognise the relationship between environmental concern, knowledge, eco-friendly products, social media, promotional activities and reference group with their green products awareness. Six hypotheses are anticipated, and results are computed in Table 5 and demonstrated in Figure 2. F-value is 6.834 with a significant level 0.000 which is less than 0.01 and it assures model fitness for regression analysis.

#### 4.5.3 Factors Influencing Consumers' Green Products Awareness

The outcomes in Table 6 and Figure 2 agree that consumer' environmental concerns don't significantly influence their green products awareness ( $\beta_1 = 0.041$ ;  $t\text{-value} = 0.619$ ;  $p > 0.05$ ). Thus, H1 is not accepted and suggesting that customers' environmental concerns don't influence their green products awareness (Suki, 2013). This study is dissimilar to the conclusions of Gan et al. (2008), where the study has found a relationship between environmental concern and awareness. Next, H2 substantiate that consumers 'knowledge don't significantly influence their green products awareness ( $\beta_2 = 0.076$ ;  $t\text{-value} = 1.154$ ;  $p > 0.05$ ). Therefore, H2 is not accepted. Consumers' knowledge has no effects on their green product awareness. Next, H3 substantiates that eco-friendly products do not significantly influence their green products awareness ( $\beta_3 = 0.019$ ;  $t\text{-value} = 0.256$ ;  $p > 0.05$ ). So, H3 is not accepted. Eco-friendly products have no effects on their green product awareness. The result of the study presented that eco-friendly products are not influenced consumers green awareness (Souza'D et al., 2006; Suki, 2013). Next, H4 substantiates that social media don't significantly influence their green products awareness ( $\beta_4 = 0.046$ ;  $t\text{-value} = 0.666$ ;  $p > 0.05$ ). As a result, H4 is also not accepted. Social media has no effects on consumers green products awareness.

Table 5. Predict the relationship between factors and consumers green awareness & Confirm the model fitness

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	23.571	6	3.929	<b>6.834</b>	<b>.000</b>
	Residual	168.429	293	.575		
	Total	192.000	299			
	R					0.350
	R Square					0.123
	Adjusted R Square					0.105
	Std.Error of Estimate					0.75818

The outcomes of regression analysis for H5 as presents in Table 6 and Figure 2 indicate that promotional activities on eco-friendly products as the critical factor, which significantly affects consumers green products awareness ( $\beta_5 = 0.161$ ;  $t\text{-value} = 2.618$ ;  $p < 0.05$ ). Thus, there is a significant relation between promotional activities on eco-friendly products and consumers' green products awareness. The results for H6 as shown in Table 6 and Figure 2 indicate that reference groups as another critical factor, which significantly affects consumers green product awareness ( $\beta_6 = 0.167$ ;  $t\text{-value} = 2.756$ ;  $p < 0.05$ ). Thus, there is a significant relation between reference groups and green products awareness.

Table 6. Factors influencing consumers' green products awareness

Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	<b>1.021</b>	.404		2.527	<b>.012</b>
Environmental Concern	.059	.095	.041	.619	.536
Knowledge	.081	.070	.076	1.154	.249
Eco-friendly Product	.024	.093	.019	.256	.798
Social Media	.051	.077	.046	.666	.506
Promotional Activities	.250	.095	<b>.161</b>	<b>2.618</b>	<b>.009</b>
Reference Groups	.235	.085	<b>.167</b>	<b>2.756</b>	<b>.006</b>

#### 4.5.4 Predict the Relationship between Green Awareness and Purchase Decision

Table 7 exposes that the value of correlation coefficient (R) is 0.268 and recommends a reasonable positive correlation between green products awareness & green purchase decision. However, only 7.2 % (R-square values of 0.072) difference in the green purchase decision is counted because of green products awareness effect. So it infers other factors influence on the green purchase decision which are not observed.

#### 4.5.5 Confirm the Model Fitness

Regression analysis is executed to identify the relationship between green products awareness and purchase decision. Last hypothesis is projected, and results are represented in Table 7 and shown in Figure 2. F-value is 23.107 with a significant level 0.000 which is less than 0.01 and it assures model fitness for regression analysis.

Table 7. Predict the relationship between green awareness and purchase decision &amp; confirm the model fitness

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.755	1	7.522	<b>23.107</b>	<b>.000</b>
	Residual	112.911	298	.340		
	Total	121.667	299			
	R				0.268	
	R Square				0.072	
	Adjusted R Square				0.069	
	Std. Error of Estimate				0.61555	

#### 4.5.6 Consumers' Green Awareness Influences the Green Purchase Decision

The results of multiple regression analysis for H7 as presents in Table 8 and Figure 2 indicate green products awareness as the essential factor, which significantly affects their green purchase decision ( $\beta_{11} = 0.268$ ;  $t\text{-value} = 4.807$ ;  $p < 0.05$ ). Thus, the significant relation between green products awareness and green purchase decision. Suki (2013) also found that there is a significant relation between green products awareness and green purchase decision.

Table 8. Consumers' green awareness influence the green purchase decision

Variable	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
Constant	3.441	.155		<b>22.174</b>	<b>.000</b>
Green product awareness	.214	.044	<b>.268</b>	<b>4.807</b>	<b>.000</b>

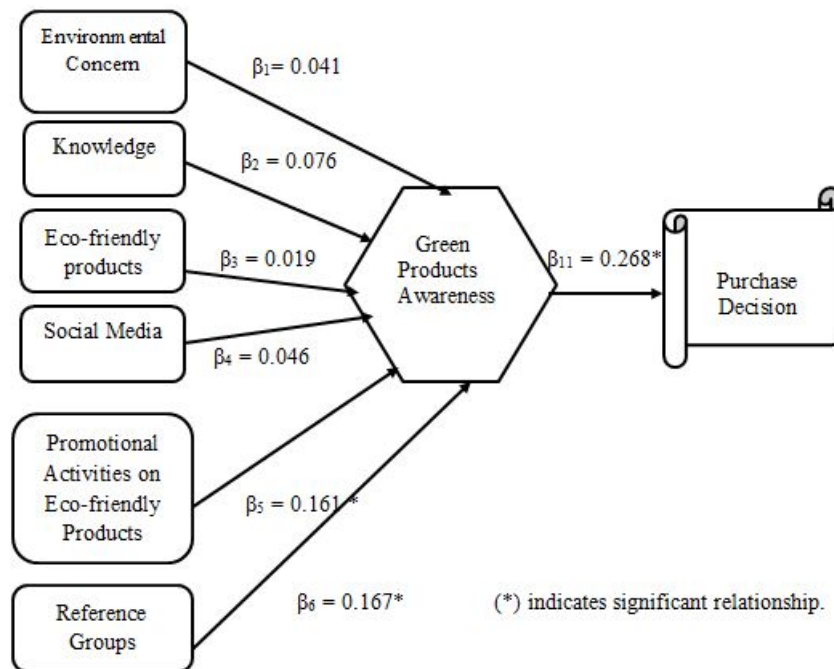


Figure 2: The Results of the Full Model

Figure 2. The results of the full model

## 5. Conclusion and Implications

The study has been conducted with an objective to explore the sources of consumers' awareness toward green products and its impact on purchasing decision. Different green products source is important tools to guide the consumers' green products awareness. This research examines environmental concern, knowledge, eco-friendly products, social media, promotional activities on eco-friendly products and reference groups influence consumers to green products awareness and its impact on their purchasing decision. From the results of regression analysis, the research is found that promotional activities on eco-friendly products and reference groups significantly affect consumers' green products awareness. Promotional activities on eco-friendly products are the most influential factor that has positively influenced their green products awareness. Reference groups should be informed to encourage green products awareness. This study indicates that reference groups as the critical factor, which significantly affects their green products awareness. The study is revealed that consumers' environmental concerns do not affect the green products awareness. The outcomes of the study found that consumers' environmental concerns are not influenced consumers green awareness (Suki, 2013). The study is in dissimilar to the results of Gan et al. (2008), which found that consumers are concerned about the environment. Respondents' knowledge & Social media have no effects on consumers green product awareness. Eco-friendly products are not affected their green product awareness. The result of the study presented that eco-friendly products are not influenced consumers green awareness (Souza'D et al., 2006; Suki, 2013). As the consumers are getting more awareness about green products, it influences purchasing decision. Most of the respondents are aware of green products. This study reveals that green products awareness as the crucial factor, which significantly affects their green purchase decision. Thus, there is a significant relation between green products awareness and green purchase decision. The outcomes of the study depicted that consumers green products awareness are influenced their green purchase decision (Suki, 2013).

The outcomes of this study can be beneficial for both researchers and practitioners. For researchers, it provides guidelines for understanding awareness patterns, level, and their relative importance. Along with literature for future research, this study indicates ways to find out more profound factors which affect awareness of consumers. Besides, this study provides practical guidance and relevant suggestions to the business people and marketing experts to promote the strategies for enhancing green product awareness as environmental issues are opportunities to generate consumer demand.

## 6. Limitation and Further Research

The study is restricted in Bangladesh only, and the result may not apply to other places. This data may not be the real representative of overall Bangladeshi consumers' view because of sample size. Further research is instructed to develop the generalizability of the sampling by extending the sample size. The study is found few influences of the independent variable. So there may be some other variable which may influence green products awareness. Those factors are left for future research.

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