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Factors Affecting Green Purchase Behavior of Bangladeshi Customers: A Study on Energy Saving Lamp

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Abstract: Environment pollution is one of the major threats for all the living beings. Due to this increased pollution, customers are now more conscious about their consumption patterns which in turn, lead to purchase green products. The main objective of this study is to identify factors affecting green purchase behavior of Bangladeshi customers. The study is conducted on specific green product that is energy saving lamp. A survey of 150 respondents was conducted in Dhaka city through self-administered questionnaire. The statistical tool employed in this study was factor analysis. Eighteen variables related to green purchase behavior have been identified. After factor analysis, these variables form seven factors based on eigenvalue which are eco-friendly attitude, green value added features, green value based pricing, societal persuasion, green-promotional strategies, eco-friendly packaging, eco-friendly image. This will help green marketers to formulate more effective strategies based on these factors to reach target group of customers in Bangladesh.

Keywords: Green product, Eco-friendly attitude, Green value added features, Green value based pricing, Societal persuasion, Green-promotional strategies, Eco-friendly packaging, Eco-friendly image.

Introduction

The rapid growth of economy and technological development has some negative impacts on the environment such as global warming, ozone layer depletion, water and air pollution etc. These impacts create major environmental deterioration and catastrophe for the living beings. Thus, environmental problems have become one of the major issues for the societies, governments, as well as business organizations. Statistics shows that 30-40 percent of environmental deterioration is occurred due to unhealthy consumption pattern of customers. Therefore, a change towards eco- friendly consumption patterns is needed (Chekima et al. 2015).

According to Hartmann and Ibanez (2006), most of the developing countries are now trying to make sustainable living place and taking initiatives to promote green marketplaces. These initiatives encouraged consumers to move on for eco-friendly alternatives based on socio-demographic segments.

In the course of unraveling the problem of green purchase behavior amongst Bangladeshi consumers, this research is motivated by Akter, (2012) who claimed that inadequate information on green purchase intention and green behavior of Bangladeshi consumers, making it complex for existing and potential green product producers and marketers to enter and retain a position in the Bangladeshi's market. Previously, most of the researches conducted on green purchase intention or green purchase behavior of green product. Very few studies were conduct on specific green product. Thus, the researcher identified and investigated relevant factors that influence consumers to purchase energy saving lamp which is considered as green product. This study will be expanding related works from several studies in the past (i.e: Laroche, Bergeron & Barbaro, 2001; Lee, 2008; Wahid, Rahbar & Tan, 2011, Akter, 2012) and also adding additional variables and context.

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Literature Review

According to Chen and Chai (2010), green product refers to the product which has very low impact on environment which includes the strategies with recycled materials, and reduced harmful materials in the process of packaging. Pavan (2010) defined that green products are the products which protect environment by reducing pollution and toxic agents from the production as well as conserving energy to a greater extent.

From the above definition, it can be said that energy saving lamp is an eco-friendly or green product because it saves 80% energy, and cut down greenhouse gas emissions. It is made from non toxic materials compared to traditional light made from mercury (Woodford,C., 2016).

Over the past few decades, consumption of goods and services has tremendous impact on the environment that leads to global warming, increased environmental pollution, and declines in flora and fauna (Chen and Chai, 2010). Now, customers are more conscious about environmental issues like environmental degradation, green house effect which create a strong desire to purchase green products and services (Kalafatis, Pollard & Tsogas, 1999; Laroche, Bergeron & Barbaro, 2001; Roberts, 1996).

Consumers always evaluate the net benefit of a product or service between what is received and what is given in terms of consumer's environmental desires. Based on this benefit, customers finally purchase green products (Patterson and Spreng, 1997). Energy saving lamp does not *emit ultraviolet light* or infrared light and contain no harmful mercury. It consumes less energy and last for a long time. It also reduces utility bill of the customer. If consumers have higher perceived value regarding green product, they are more likely to purchase green product (Chang and Chen, 2008).

Consumers purchasing decisions are always influenced by several sources such as family, friends, colleagues, salespeople, and celebrity (Maram & Kongsompong, 2007). According to Kalafatis, Pollard & Tsogas (1999) that peer group influence was the most critical factor in determining the UK respondent's purchasing intention toward eco- friendly products.

A lower price will attract a large segment of consumers to buy green product. When the market is price sensitive, a lower price will be a more successful strategy for the company. If the price of the green product is higher, green marketer should focus on product differentiation through green product's benefits. In this way, consumer will be realized about the value of the green product, and also they will be ready to pay extra premium for the product (Emgin and Turk, 2004).

Product packaging has an impact on the consumer's buying decision. D'Souza, Taghian & Peretiatkos (2006) said that packaging with eco-friendly characteristics will change customer perceptions and increase the likelihood to purchase green product. Likewise, Barber (2010) and Juwaheer, Pudaruth & Noyaux, (2012) also said that green packaging has an impact on consumer purchase intention. Therefore, it can be inferred that packaging with green concept is a new marketing trend that has an impact on consumer purchase intention.

Availability of the product increases the likelihood of purchase. If green or organic foods are not available in store, it can be barrier to their purchase (Byme et al. 1991; Davies, Titterington and Cochrane, 1995). According to Vermeir and Verbake (2006) have said that many consumers are encouraged to purchase green product but finally they don't make purchase due to lack of availability.

Several sales promotion tools like discount, free gift, buy one get one free, rebate, sweepstake, contests can used to induce customer to make purchase decision.

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If the consumers are more preemptive with their environmental behaviors, they will have better attitudes toward green advertising. Therefore, Green advertising is one of the best ways to reach those customers who are already involved in green behaviors (Davis, 1994).

Credibility is the one of the significant factor to create a positive image in the mind of the target customers (Keller, 1998). If green marketers create a trustworthy relationship with green consumer, customers will definitely purchase green product. Likewise, green companies should make differentiated with non-green companies through taking proactive measures in environmental sustainability and creating a more desirable place in the mind of the target customer based on environmental philosophy (Okada and Mais, 2010).

Research Gap

Our environment is polluting day by day by the destructive behavior of human beings. To protect our environment and species from destruction, we need to purchase energy saving lamp, eco-friendly product which will keep environment free from contamination. At present, purchase of energy saving lamp is a very common affair in Bangladesh but we don't have sufficient research on this regard. Although many researches of green purchasing behavior had been conducted in both developed and developing countries, most of the researchers focused on identifying general factors that influence customers to purchase green product. Very few researches were conducted on factors affecting green purchase behavior in specific category of product like energy saving lamp. Therefore, this paper is an endeavor to find out the influential factors affecting Bangladeshi customers to purchase energy saving lamp, known as green product.

Significance of the Study

This study will be beneficial for green producers, businesses, and sellers who want to promote energy saving lamp to the customers. It will provide insights to green producers to formulate better marketing strategies based on green factors for encouraging the consumers to purchase energy saving lamp in Bangladesh. It will also provide some valuable guidelines to green marketers to increase customer awareness and understand market potentials regarding green product in Bangladesh.

This study will be useful for the academicians because it will provide new idea and knowledge to fill the gap regarding what really persuade customers to make purchase decision of energy saving lamp in Bangladesh.

Objectives of the Study

The broad objective of this research is to identify the factors that influence Bangladeshi consumers to purchase energy saving lamp. Energy saving lamp is a green product because it has no harmful impact on natural environment. To be specific, the study has the following objectives:

- To understand the consumer behavior of purchasing green product.
- ◆ To identify factors that influence consumers to purchase energy saving lamp in Bangladesh.
- To recommend some actions plan for green marketers on the basis of this research findings.

Research Methodology

The nature of the study is basically descriptive. Descriptive researches are those researches

that describe the existing situation instead of interpreting and making judgments (Creswell, 1994).

Sampling Design

This study focused on the individuals as sampling elements, who are job holders and students, and therefore, can judge their satisfaction level from the energy saving lamp. Students include SSC, HSC, Graduate, and Post graduate level whose monthly family income is considered in the income level. The respondents are within the age of 18 to 45 above years of Dhaka city in Bangladesh, and time is July 2016. Generally two types of method can be used as sampling technique, one is probability sampling and the other is non-probability sampling (Malhotra and Dash, 2011). Convenience sampling method of non-probability sampling technique has been used in this study because researcher can quickly reach desired number of participants by utilizing this method to draw from the nearby population (Malhotra and Dash, 2011). Hatcher (1994) recommended that the number of subjects should be lager of 5 times the number of variables; it should be 100 (hundred). Gorsuch (1983) recommended at least 100 samples is appropriate for factor analysis. Based on these literatures, one hundred fifty (150) samples are selected for this research.

Instruments and Measures

Primary and secondary data are used for this study. The researcher conducts a survey to collect the primary data from the respondents. Primary data is collected from the respondents by a structured questionnaire. Secondary data has been collected from various sources like journal, books, article, websites, reports etc.

Considering the nature of the study, data were collected through a structured questionnaire using 5-point Likert scale where Strongly Disagree=1, Disagree=2, Neutral=3, Agree=4, and Strongly agree=5 to collect information about the factors of green purchasing behavior among Bangladeshi consumers.

The questionnaire was designed in two parts. In part-I, to identify respondents' specific demographic criteria including gender, age, income level, occupation and education and in part-II- it includes 18 variables of green purchase behavior.

Data Analysis

The data were analyzed using the Statistical Package of the Social Science (SPSS), employed both the descriptive and inferential analysis techniques (factor analysis). In this study, factor analysis is used to identify key dimensions affecting green purchase behavior of Bangladeshi customers. Principal components using Varimax with Kaiser Normalization method is used to achieve this purpose.

Limitations of the Study

In this study, there are some limitations which are given below

- ♦ The data has been collected through convenience sampling that leads to the issue of generalization.
- The sample frame of the study was limited to area of Dhaka City; if data have been collected from different cities it would have altered the results.
- This study conducted on specific green product. As a result the respondents' response might vary for different categories of green products. Future research should address this issue.

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Variables	Respondents N= 150	Frequency (%)
Gender		
Male	84	56%
Female	66	44%
Age (Years)		
18-25	28	19%
26-35	45	30%
36-45	56	37%
Above 45	21	14%
Income Level (Monthly)		
Below 20000BDT	9	6%
21000-35000 BDT	65	43%
36000-45000 BDT	41	28%
Above 45000 BDT	35	23%
Education Level		
SSC	9	6%
HSC	14	9%
Graduation	65	43%
Post-graduation	62	42%
Occupation		
Business	67	45%
Service	56	37%
Students	27	18%

Table1: Demographic Profile of the Respondents

 Table -1 presents the demographics profile of the customer of energy saving lamp which
includes gender, age, income level, education and occupation. From this study, it has been found that males (56%) purchase more energy saving lamp compared to females (44%).In case of age group, 26 to 45 (67%) are mostly the green purchaser. The respondents whose income level is 21000-35000 (43%) is mostly buy energy saving lamp. Finally, the respondents who are gradated and post graduated (85%) as well as involve in business profession (45%) mainly buy energy saving lamp.

Reliability of Data

The reliability of a measure indicates the degree to which measures are free from random error and therefore yield consistent results (Zikmund, et al. 2012). Cronbach alpha is the most common measure of internal consistency or reliability. Nunnaly (1978) has said that 0.7 is acceptable reliability coefficient but some studies 0.600 also considered acceptable (Gerrard, Cunningham and Devlin, 2006).

Table 2:	Reliability	Statistics
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Cronbach's Alpha	N of Items
.657	18

In this research, Cronbach's alpha is .66, close to .70, which indicates a high level of internal consistency among 18 variables. These results of reliability ensure a proper ground for further analysis.

Analysis and Findings

This study is to find out major factors of green purchase behavior among Bangladeshi consumers. From the literature review, eighteen variables (18) have been chosen and the reliability test justifies the accuracy of the selected variables. The next section interprets the sampling adequacy measurements (KMO) and Barlett's test of sphericity for ensuring the appropriateness of factor analysis.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure	of Sampling Adequacy.	.629
Bartlett's Test of Sphericity	Approx. Chi-Square	850.372
	df	153
	Sig.	.000

Kaiser- Meyer- Oklin (KMO) measures the sampling adequacy for factor analysis. Kaiser's (1974) recommended that the value of KMO in between 0 .5 to 0 .7 is mediocre, 0.7 to 0.8 is good, and above 0.9 is superb. From the above table-3 shows that the KMO measure of sampling adequacy for this study is .629 which is acceptable and good one to conduct factor analysis.

Barlett's test of sphericity is used to examine the hypothesis that the variables are uncorrelated in the population (Malhotra and Dash, 2011).

Ho: There is significant indifference of all factors affecting energy saving lamp purchase decision.

H1: There is significant difference of all factors affecting energy saving lamp purchase decision.

From the above table-03, it is shown that the value of Chi-square test is 850.372 with 153 degrees of freedom. The test is significant at significance level 0.000 (p < .000) which signifies the rejection of null hypothesis. It means there is a significant difference between the factors affecting energy saving lamp purchase decision.

Now, Factor analysis has been conducted by extracting the principal components using Varimax with Kaiser Normalization method. Only a small set of factors is kept and the reaming factors are considered as either irrelevant or non-existent.

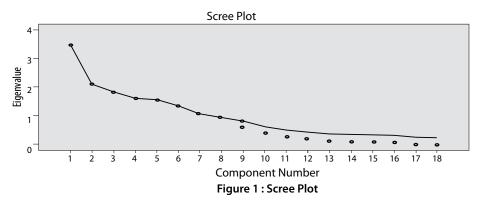
	Initial Eigenvalues Extraction Sums of Squared Rotation Sums of Square							Jared		
	J			Loadings		1	Loadings			
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	3.475	19.306	19.306	3.475	19.306	19.306	2.581	14.341	14.341	
2	2.109	11.715	31.021	2.109	11.715	31.021	2.445	13.583	27.924	
3	1.835	10.193	41.214	1.835	10.193	41.214	1.831	10.170	38.094	
4	1.601	8.893	50.106	1.601	8.893	50.106	1.710	9.502	47.597	
5	1.565	8.692	58.798	1.565	8.692	58.798	1.700	9.442	57.039	
6	1.345	7.473	66.271	1.345	7.473	66.271	1.592	8.844	65.883	
7	1.062	5.900	72.171	1.062	5.900	72.171	1.132	6.289	72.171	
8	.921	5.115	77.286							
9	.803	4.460	81.746							
10	.614	3.409	85.156							
11	.487	2.704	87.859							
12	.417	2.314	90.173							
13	.361	2.006	92.179							
14	.358	1.987	94.166							
15	.327	1.819	95.985							
16	.287	1.593	97.578							
17	.238	1.324	98.902							
18	.198	1.098	100.000							

Table 4 : Total Variance Explained

Extraction Method: Principal Component Analysis.

Total variance explained shows how much of the total variance among all the chosen variables explain and the first factor will always explain the most. An eigenvalue indicates how much of the total variance of all variables is covered by the factor.

From the above table -4, it is shown that the eigenvalue is over 1 having seven (7) factors. The cumulative percentage for seven (7) factors is 72.171 % where first factor explained 19.306% of the total variance, the rest are 11.715, 10.193, 8.893, 8.692, 7.473, 5.900 respectively.



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Scree plot is a plot of eigenvalues against the number of factors in the order of extraction. The plot consists of a distinct break between the steep slop of factors. So the number of factors is determined at the point the scree starts (Zikmund et al. 2012). In the figure above, the scree begins at factor seven (7).

The factor loading for the Varimax Rotated Component Matrix is shown below. Factor loading indicates that how strongly correlated a measured variable is with that factor or to what extent does a variable load on a factor (Zikmund et al. 2012). In this study, factor loading with the variable more or equal .5 is taken.

	Component								
	1	2	3	4	5	6	7		
Global Warming and Green House Effect	.856	.108	.058	007	.146	045	.062		
Environment Pollution	.881	.087	.030	017	.165	.068	022		
Protect Environment	.820	.144	.004	058	.051	.077	.117		
Energy Saver	.120	.800	056	.067	.021	.127	212		
Non toxic Materials	.202	.779	.124	.003	.054	.015	043		
Reduced Utility Bill	004	.749	135	.083	.222	017	043		
Last long	.110	.728	047	119	075	151	.353		
Premium Price	.067	134	.000	094	.097	.054	.836		
Family influence	.040	031	107	031	.086	.868	.080		
Colleague Influence	.020	.043	.121	.025	096	.869	083		
Advertisement	243	068	.670	.172	.006	.053	.173		
Discount	.084	025	.888	022	.024	012	.055		
Billboard	.288	.003	.715	098	048	026	222		
Reusable Packaging	122	.031	031	.892	018	.074	046		
Biodegradable Packaging	.080	.016	.061	.894	.000	075	.009		
Good Reputation	.195	.050	.019	.005	.891	037	030		
Environment management	.105	.140	024	028	.875	.029	.113		
Availability	.329	.137	.073	.183	035	104	.360		

Table-5: Rotated Component Matrixa

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

From the table-5, it is clearly shown that seven (7) rotated factors along with loading that have been extracted. First factor has highly positive correlation with **Q1**, **Q2**, and **Q3** which explain information about global warming and green house effect, environment pollution, protection of environment. Thus, **Factor1** might be called as "Eco-friendly Attitude".

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Factor 2 has highly positive correlation with Q4, Q5, Q6 and Q7 which explain value added features of energy saving lamp including energy saver, non toxic material, reduced utility bill, last long. Thus, Factor 2 could be named as "Green Value added Features".

Factor 3 has highly positive correlation with Q11, Q12, and Q13 which explain attractive green advertisement, trustworthy billboard, discount benefit. Thus, Factor 3 could be named as "Green-promotional Strategies".

Factor 4 has highly positive correlation with Q14 and Q15 which explain reusable packaging, biodegradable packaging of energy saving lamp. Thus, Factor 4 could be named as "Eco-friendly Packaging".

Factor 5 has highly positive correlation with Q16and Q17 which explains company reputation about environment management. Thus, Factor 5 could be named as "Eco-friendly Image".

Factor 6 has highly positive correlation with Q9 and Q10 which explains customer's learning about green product from family members, colleagues. Thus, Factor 6 could be named as "Societal Persuasion".

Factor 7 has highly positive correlation with Q8 which explain customer willingness to pay high price for green product. Thus, Factor 7 could be named as "Green Value based Pricing".

Recommendations

The study was conducted for the purpose of knowing about Bangladeshi consumers green purchase behavior and identifying factors that motivates to purchase energy saving lamp. After the analysis of survey result, the findings of the study indicate that eco-friendly attitude, green value added features, green value based pricing, societal persuasion, green-promotional strategies, eco-friendly packaging and eco-friendly image mostly influence the majority of Bangladeshi customers to purchase energy saving lamp.

In case of eco-friendly attitude, customers are aware about global warming and green house effect which motivate them to purchase energy saving lamp. Green marketers can motivate customers through green awareness programs such as arranging seminars on benefits of green products to the environment at different public places. These seminars can also be arranged at different schools, colleges and universities and demonstrate how green purchase will benefit our society and future generation in long run.

Findings show that Bangladeshi customers are influenced to buy energy saving lamp because of green value added features including the benefits of energy saver, non-toxic, reduced utility bill, and longevity. Marketers should focus on improving the green value added features of the green product because customers are mostly attracted to these features which lead to purchase green product.

In case of green promotional strategies, it is important to create mass awareness among Bangladeshi customers through advertisement with eco-friendly features. Marketer should also offer different sales promotion like discount which will induce customers to trial green product.

Findings also show that eco-friendly packaging is another motivator that leads to purchase energy saving lamp. So, green marketer should use reusable and biodegradable packaging in their product.

It has been found that eco-friendly company image can create positive vibe in the mind of

the target customers. Thus, firms should give more attention on environment management.

Findings suggest that societal persuasion including family member influence and peer group influence leads Bangladeshi customers to purchase energy saving lamp. Therefore, Green marketers can use buzz marketing by cultivating some opinion leaders within the reference group to spread information about green products and its benefits to others in their communities. Marketers can also use viral marketing which means internet based word-of-mouth marketing by different social networking sites like Facebook, Twitter etc. to encourage young people to buy green products. In such a way, green marketers can create a desirable place in the mind of target customer in Bangladesh

Last factor of this study is green value added pricing. Bangladeshi customers are willing to pay extra price for the product which is environment friendly. So, marketers should include more green features with the products if the price of the green product is high.

Finally, energy saving lamp is an environment friendly product which saves both energy and money. But it contains a small amount of mercury, which is toxic and tough to get out of the environment. Therefore, *safe disposal of energy saving* lamp is an urgent need. To solve this critical issue, both green marketers and government can take different positive initiatives. Green marketers can offer *free take-back program* of old energy saving lamps at retailer stores for the purpose of safe disposing them. Marketers can encourage customers by offering a discount on next purchase or a mini gift to make this program successful. On the other hand, local city corporations are ultimately responsible for waste disposal. They can take initiatives to collect old energy saving lamps from the dustbin and dispose them safely.

Conclusion

Environmental pollution is one of the major problems in Bangladesh and it becomes more sever with the passage of time. In this situation, energy saving lamp can play a pivotal role to reduce environment pollution to greater extent. Factor analysis is conducted in this study in order to find out motivating factors that lead customers to purchase energy saving lamp. Principal component analysis identifies 7 factors from 18 variables. From this study, it has been shown that the most influential factors to purchase energy saving lamp are eco-friendly attitude, green value added features, green value based pricing, societal persuasion, green-promotional strategies, eco-friendly image and eco-friendly packaging. Findings of this study will provide new understanding on the profile of Bangladeshi consumers in purchasing energy saving lamp. Thus, local and foreign green marketers should focus on these factors to develop customer-oriented marketing strategies especially those who are selling energy saving lamp in Bangladesh.

References

Akter, J. (2012). Consumer attitude towards Green Marketing in Bangladesh. *Journal of ASA University Review*, 6(1), 160-161.

Barber, N. (2010) Greenwine packaging: Targeting environmental consumers. *International Journal of Wine Business Research*, 22(4), 423-444. DOI 10.1108/17511061011092447.

Byme,P.J.,Toensmeyer,U.C.,German,C.L, & Muller, H.R.(1991). Analysis of consumer attitude toward organic produce purchase likelihood. *Journal of Food Distribution Research*, 22(2), 49-62.

Chang, H. H., & Chen, S. W. (2008). The impact of online store environment cues on purchase intention: Trust and perceived risk as a mediator. *Online Information Review*, 32(6), 818-841.

Chekima, B., Wafa,S.A., Wafa,S.K., Igau, O.A.,Chekima, S. (2015). Determinant Factors of

Consumers 'Green Purchase Intention: The Moderating Role of Environmental Advertising. *Journal of Asian Social Science*, 11(10), 318.doi:10.5539/ass.v11n10p318.

Chen, T. B., & Chai, L. T. (2010). Attitude towards the environment and green products:

consumers' perspective. Management Science and Engineering, 4 (2), 27 – 39.

Creswell, J.W. (1994).Research Design: Qualitative and Quantitative Approaches. Thousand Oaks. London: SAGE.

D'Souza, C., Taghian, M., Lamb, P., & Peretiatkos, R. (2006). Green products and corporate strategy: An empirical investigation. *Society and Business Review*, 1(2), 144-157. DOI 10.1108/17465680610669825.

Davies, A., Titterington, A.J., & Cochrane, C. (1995). Who buys organic food? A profile of the purchases of organic food in northern Ireland. *British food journal*, 97(10), 17-23.

Davis, J.J. (1994). Consumer Response to Corporate Environmental Advertising Journal of Consumer Marketing, 11(2), 25-37.

Emgin, Ovgu, Turk, & Zehra (2004). "Yesil Pazarlama" Mevzuat Dergisi, (7), 78.

Gerrard, P., Cunningham, J.B. and Devlin, J.F. (2006). Why consumers are not using internet banking: a qualitative study. *Journal of Services Marketing*, 20 (3), 160-8.

Gorsuch, R.L. (1983). Factor Analysis (2nd ed.). Hillsdale, NJ: Erlbaum.

Hartmann, P. & Ibanez, V. A. (2006). Green value added. *Marketing Intelligence & Planning*, 24(7), 673-80.

Hatcher, L.(1994). A step–by-step Approach to Using the SAS-System for Factor Analysis and Structural Equation Modeling. Cary, NC: SAS Institute, Inc.

Juwaheer, T.D., Pudaruth, S., & Noyaux, M. (2012). Analysing the impact of green marketing strategies on consumer purchasing strategies on consumer purchasing patterns in mauritius. *World Journal of Entrepreneurship, Management and Sustainable Development*, 8(1),36-59. DOI 10.1108/20425961211221615.

Kalafatis, S. P., Pollard, M., East, R., & Tsogas, M. H. (1999). Green marketing and Ajzen's theory of planned behaviour: a cross-market examination. *Journal of Consumer Marketing*, 16(5), 441-460.

Keller, K.L. (2010). Strategic Brand Management: Building, Measuring and Managing Brand Equity. Prentice Hall, New Jersey.

Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, 18(6), 503-520.

Lee, K. (2008). Opportunities for green marketing: young consumers. *Marketing Intelligence and Planning*, 26(6), 573-586.

Malhotra, N.K. and Dash, S. (2011). Marketing Research: An Applied Orientation. 6th Edition, Pearson, Delhi.

Maram, H. K., & Kongsompong, K. (2007). The power of social influence: East-West comparison on purchasing behavior. *Proceeding of International Marketing Conference on Marketing and Society* 2007.

Nunally, J. C. (1978). Psychometric Theory (2nd ed.). New York: McGraw Hill.

Okada, E.M., & E.L. Mais, 2010. Framing the green alternative for environmentally conscious

consumers, sustainability accounting. *Management and Policy Journal*, 1(2), 222-234. DOI 10.1108/20408021011089257.

Patterson, P.G., & Spreng, R.A. (1997). Modelling the relationship between perceived value, satisfaction and repurchase intentions in a business-to-business, services context: An empirical examination. *International Journal of Service Industry Management*, 8(5), 414-434.

Pavan Mishra, P. S. (2010). Golden rule of green marketing. *Green Marketing In India: Emerging Opportunities and Challenges*, 3, 6.

Roberts, J. A. (1996). Green consumers in the 1990s: profile and implications for advertising. *Journal of Business Research*, 36, 217–231.

Vermeir, I.,& Verbake,W.(2006). Sustainablefood consumption:Exploring the consumer attitude-behavioral intention gap. *Journal of Agriculture and environment Ethics*, 19(2), 169-194.

Wahid, N.A., Rahbar, E., & Tan, S, S. (2011). Factors Influencing the Green Purchase Behavior of Penang Environmental Volunteers. *International Business Management*, 5(1), 38-49.

Woodford,C. (2016). How do energy-saving lamps work. Available at <u>www.explainthatstuff.</u> <u>com/energysavingfluorescentlamp. html</u>

Zikmund, W. G., Babin, B.J., Carr, J.C., Adhikari. A., & Griffin, M. (2007). Business Research Method: South Asian Perspective, (8th ed.). Cengage Learing India Pvt. Ltd.

Appendix

		Scale			Cronbach's	
	Scale Mean		Corrected	Squared	Alpha	
	if Item			Multiple	if Item	
	Deleted	Deleted	Correlation	Correlation	Deleted	
Global Warming and Green house effect	49.2867	60.206	.525	.641	.601	
Environment Pollution	49.2533	61.224	.539	.684	.602	
Protect Environment	49.2867	61.763	.490	.532	.608	
Energy Saver	49.3267	68.530	.306	.503	.638	
Non toxic Materials	48.9800	67.510	.418	.496	.628	
Reduced Utility Bill	49.1133	69.954	.266	.435	.643	
Last long	49.1133	69.443	.242	.399	.645	
Premium Price	50.1533	72.265	.048	.186	.669	
Family influence	50.6400	71.440	.088	.380	.664	
Colleague Influence	50.4133	71.586	.112	.390	.659	
Availability	50.5267	68.842	.233	.150	.646	
Advertisement	50.5733	73.119	.012	.276	.673	
Discount	50.2067	68.004	.240	.481	.645	
Billboard	50.2267	67.519	.218	.414	.649	
Reusable Packaging	50.1733	73.379	.027	.488	.667	
Biodegradable Packaging	49.9333	70.479	.143	.477	.657	
Good Reputation	50.7467	67.331	.309	.510	.636	
Environment management	50.3267	67.778	.308	.485	.637	

A-1: Reliability Measures : Item-Total Statistics

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	Initial	Extraction
Global Warming and Green house effect Environment Pollution	1.000	.774
	1.000	.817
Protect Environment	1.000	.718
Energy Saver	1.000	.724
Non toxic Materials	1.000	.668
Reduced Utility Bill	1.000	.637
Last long	1.000	.711
Premium Price	1.000	.743
Family influence	1.000	.782
Colleague Influence	1.000	.790
Advertisement	1.000	.576
Discount	1.000	.801
Billboard	1.000	.656
Reusable Packaging	1.000	.821
Biodegradable Packaging	1.000	.816
Good Reputation	1.000	.836
Environment management	1.000	.812
Availability	1.000	.308

A-2: Communalities

Extraction Method: Principal Component Analysis.

A-3 : Component Matrix

	Component							
	1	2	3	4	5	6	7	
Global Warming and Green house effect	.738	.342	058	029	.101	303	085	
Environment Pollution	.745	.347	080	.096	.096	301	162	
Protect Environment	.706	.292	100	.081	.007	344	.002	
Energy Saver	.546	522	.221	.115	278	.065	102	
Non toxic Materials	.626	334	.242	038	300	.113	.031	
Reduced Utility Bill	.503	567	.112	031	075	.208	.024	
Last long	.509	378	.019	236	302	003	.402	
Premium Price	.077	.256	243	035	.172	.016	.762	
Family influence	.063	.044	119	.854	025	.081	.157	
Colleague Influence	.025	.082	.142	.842	218	.057	.052	
Advertisement	168	.332	.509	040	071	.339	.238	
Discount	.105	.595	.500	129	251	.319	.070	
Billboard	.213	.533	.386	093	319	.126	227	
Reusable Packaging	107	281	.636	.170	.519	163	.028	
Biodegradable Packaging	.041	131	.660	.017	.551	238	.030	
Good Reputation	.480	.099	186	016	.495	.532	179	
Environment management	.476	.009	223	.025	.450	.577	008	
Availability	.331	.100	.135	127	.113	207	.314	

Extraction Method: Principal Component Analysis. a. 7 components extracted.