

Green Purchase Intention on Consumer Decision Making towards Green Products

Nilaksana Lavan¹ and F. B. Kennedy^{1*}

¹Department of Management, Faculty of Commerce and Management, Eastern University, Sri Lanka.

Authors' contributions

This work was carried out in collaboration between two authors. Author NL designed the study, performed the statistical analysis and wrote the first draft of the manuscript. Author FBK guided and supervised the whole study. Both authors read and approved the final manuscript

Article Information

DOI: 10.9734/AJEBA/2017/36563

Editor(s):

- (1) O. Felix Ayadi, Interim Associate Dean and JP Morgan Chase Professor of Finance, Jesse H. Jones School of Business, Texas Southern University, TX, USA.
(2) Chen Zhan-Ming, School of Economics, Renmin University of China, China.

Reviewers:

- (1) Yarhands Dissou Arthur, University of Education Winneba, Ghana.
(2) Roma Ryś-Jurek, Poznan University of Life Sciences, Poland.
Complete Peer review History: <http://www.sciencedomain.org/review-history/21677>

Original Research Article

Received 31st August 2017
Accepted 24th October 2017
Published 1st November 2017

ABSTRACT

Aims: Growing concerns on environmental friendly products, due to increased environmental issues. Although Green Electronic Product is one of the solutions to save the environment and reduce the pollution in the present world. This study is to contribute to the body of knowledge in this area of Consumer Decision Making towards Green Electronic Products. This study specially investigates the influence of Green Purchase Intention on Consumer Decision Making towards Green Electronic Products.

Study Design: It is a descriptive research. The study considers Green Purchase Intention as independent variable with two appropriate dimensions as Behavioural Attitude and Subjective Norm and Consumer Decision Making as dependent variable with three suitable dimensions as Product Characteristics, Consumer Individual Characteristics and Environmental Characteristics

Place and Duration of Study: It was conducted in Manmunai North Divisional Secretariat Area, Batticaloa District in Sri Lanka during the period between June 2016 and December 2016.

Methodology: 200 respondents who resides at Manmunai North Divisional Secretariat Area, Batticaloa District in Sri Lanka were taken for this study. The convenience sampling method was applied. Respondents who are aware and purchase green electronic products was only taken to

*Corresponding author: E-mail: kennedybharathy@yahoo.co.uk;

administer questionnaires regarding green purchase intention and consumer decision making. Data was collected through closed ended questionnaires and the analysis was conducted by SPSS Statistics, which are Univariate, Bivariate analysis.

Results: Green Purchase Intention as an independent variable has High Level attribute of the Consumer Decision Making (Mean X_1 =4.22 and SD = 0.356). With individual analysis, the consumers have high level of attribute towards Green Electronic Products buying decision on both Behavioral Attitude (Mean = 4.33) and, Subjective Norm (Mean = 4.11). Consumer Decision Making towards Green Electronic Product has High Level attribute of the Consumer Decision Making (Mean X_4 =4.19 and SD= 0.32). And the consumers have High Level of attribute on Product Characteristics (Mean =4.18), Consumers' Individual Characteristics (Mean = 4.18) and Environmental Characteristics (Mean = 4.21). Results indicate that there is statistically linear significant and positive relationship ($r = .532$, $p < 0.01$) between Green Purchase Intention and Consumer Decision Making. Co-efficient of Determination (R^2) is 0.343 and Adjusted R- Square is 0.337 indicate a Lower relationship between Green Purchase Intention's dimensions and Consumer Decision Making towards Green Electronic Products.

Conclusion: The study found that this independent variable dimensions indicate high level in Consumer Decision Making towards Green Electronic Products. The findings of the present study suggest that the Green Purchase Intention is having the strong positive relationship with Consumer Decision Making towards Green Electronic Products. Eventually, this report recommends some actions for improving the role of Green Purchase Intention in influencing the Consumer Decision Making towards Green Electronic Product market.

Keywords: Green purchase intention; consumer decision making; green electronic products.

1. INTRODUCTION

Today, society is cluttered with marketing activities, and these activities surrounded us constantly. The main issue behind the successful marketing activity is that the environmental pollution and for the remedy all marketers have focused and adopted the concept of "Green Environment" [1]. Today we can see a growing concern on environmental friendly products due to increased environmental issues faced by in the world. Industries, factories, vehicles, household appliances, heaps of garbage and extreme pollution have altered environmental conditions and distributed our biome. The domain of eco-friendly product is very wide so this study concerns on Green Electronic Products. Green Electronic Product is one of the solutions to save the environment and reduce the pollution in the present the world [2].

Yam-Tang and Chan [3] found the strong positive relationship between Green Purchase Intention and Consumer Decision Making towards Green Electronic Products. Green Purchase Intention is simply defined as an Intention to buy a service or product which is less or not harmful for the society and environment. It can also be defined as an internal wish, desire and willingness of the

people to buy a less harmful and environmental friendly product. The study fundamentally purposes that the Green Purchase Intention can have impacts on Consumer Decision Making towards Green Electronic Products, since the marketing perspectives endorse that these Green Purchase Intention influence Consumer Decision Making on purchasing Green Electronic Products [4]. Therefore this study attempts to investigate the relationship between Green Purchase Intention and Consumer Decision Making Manmunai North Divisional Secretariat area in Batticaloa District.

In Sri Lankan context, there were a few researches have been undertaken regarding this issue, so to fill this empirical gap and get to know how significantly the Green Purchase Intention can play role in Consumer Decision Making of Green Electronic Products specially the people who resides in the Manmunai North Divisional Secretariat, the specific research question of this study is,

"Does Green Purchase Intention can influences on Consumer Decision Making towards Green Electronic Products special reference to Manmunai North Divisional Secretariat area in Batticaloa District?"

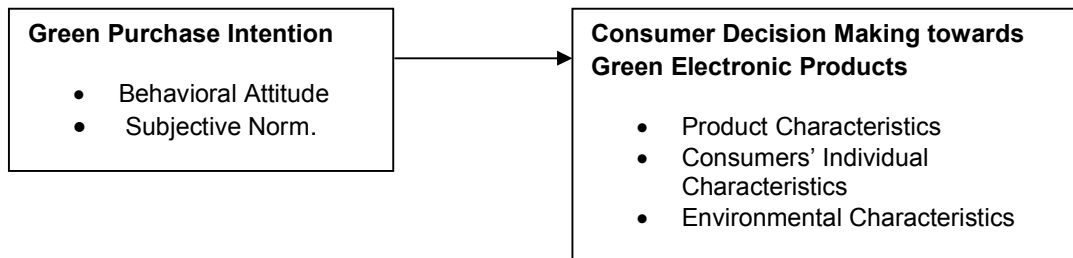


Fig. 1. Conceptualization framework

Source: Yasmin Hassan & Marjan Nor Amalina Mohd Nor (2013)

Table 1. Sampling framework

Study setting	Customers in Batticaloa district
Unit of analysis	Customers in Manmunai North Divisional Secretariat Division
Sample size	Two Hundred (200) Customers
Sample method	Convenient Sampling Technique

Source: Survey Data, 2016

2. MATERIALS AND METHODS

In this study, the Consumer Decision Making towards Green Electronic Products are examined with the help of independent variable of Green Purchase Intention. The diagram shows conceptualization frame work to determine the Consumer Decision Making towards Green Electronic Products and its combined variable (see above Fig. 1).

Primary data are collected through structured questionnaires with closed statements measured with Likert's scale (1= strongly disagree and 5= strongly agree. Two hundred (200) respondents who are consuming Green Electronic Product. These numbers of respondents are selected by convenience sampling technique (see above Table 1).

3. RESULTS AND DISCUSSION

3.1 Independent Variable: Green Purchase Intention and Its Dimensions

Green Purchase Intention is evaluated by two dimensions, such as, Behavioral Attitude and Subjective Norm. Green Purchase Intention as an independent variable has High Level attribute of the Consumer Decision Making (Mean X_1 =4.2216 and see Table 2). In addition, most of the consumers expressed generally a common opinion regarding the variable of Green Purchase Intention (Standard Deviation = .35515). With

individual analysis, the consumers have high level of attribute towards Green Electronic Products buying decision on both Behavioral Attitude (Mean = 4.3325) and, Subjective Norm (Mean = 4.1106).

3.2 Dependent Variable: Consumer Decision Making and Its Dimensions

Consumer Decision Making towards Green Electronic Product is evaluated by three dimensions such as, Product Characteristics, Consumers' Individual Characteristics and Environmental Characteristics. Consumer Decision Making towards Green Electronic Product has High Level attribute of the Consumer Decision Making (Mean X_4 =4.1898 and see Table 3).

In addition, most of the consumers expressed generally a common opinion regarding the variable of Consumer Decision Making (SD = .31924) and with the individual analysis, the consumers have High Level of attribute on Product Characteristics (Mean =4.1825), Consumers' Individual Characteristics (Mean = 4.1818) and Environmental Characteristics (Mean = 4.2050).

3.3 Relationship between Green Purchase Intention and Consumer Decision Making Towards Green Electronic Products

The correlation analysis is taken to explain the correlation between Green Purchase Intention

Table 2. Overall measures of independent variable

Description	Green purchase intention x_1	Behavioral attitude x_2	Subjective norm x_3
Mean	4.2216	4.3325	4.1106
SD	.35515	.43329	.43540
Decision attribute	High Level	High Level	High Level

Source: Survey Data, 2016

Table 3. Overall measures of dependent variable

Description	Consumer decision making towards green electronic products x_4	Product characteristics x_5	Consumers' individual characteristics x_6	Environmental characteristics x_7
Mean	4.1898	4.1825	4.1818	4.2050
SD	.31924	.53352	.34938	.43497
Decision Attribute	High Level	High Level	High Level	High Level

Source: Survey Data, 2016

and Consumer Decision Making towards Green Electronic Products. Results indicate that there is statistically linear significant and positive relationship ($r = .532$, $p < 0.01$) between them. Thereby, accept the Hypothesis H_1 - i.e., Green Purchase Intention has a significant influence on Consumer Decision Making. There was a strong positive correlation between the Green Purchase Intention and Consumer Decision Making towards Green Electronic Products. It is reflect of the role of Green Purchase Intention positively influencing the Consumer Decision Making in a stronger manner. It is stated in the following Table 4.

Behavioral Attitude and Consumer Decision Making towards Green Electronic Products, the correlation of coefficient (r) for Behavioral Attitude and Consumer Decision Making was 0.293^{**} , significant at 0.000 level, then the correlation was significant and the two variables were linear related. There was a positive correlation between the Behavioral Attitude and Consumer Decision Making towards Green Electronic Products.

Subjective Norm and Consumer Decision Making towards Green Electronic Products, the correlation of coefficient (r) for Subjective Norm and Consumer Decision Making was 0.577^{**} , significant at 0.000 level, then the correlation was significant and the two variables were linear related. There was a strong positive correlation between the Subjective Norm and Consumer Decision Making towards Green Electronic Products.

Both dimension having the positive relationship with the consumption decision of Green Electronic Products but however Subjective Norm is having a strong positive relationship with its Green Electronic Products consumption decisions $.577$ respectively. To further know the impact of each dimension under Green Purchase Intention on Consumer Decision Making the simple linear regression analysis was undertaken and it's shown in the Table 6.

According to the Table 6 the significance is at F Change (0.000) the Co-efficient of Determination (R^2) is 0.283 and Adjusted R- Square is 0.279 indicates an Lower relationship between Green Purchase Intention and Consumer Decision Making towards Green Electronic Products. The linear combination of the two independent dimensions such Behavioral Attitude and Subjective Norm strongly predicts the actual dependent variable of Consumer Decision Making.

The B coefficient for Green Purchase Intention is 0.478. This mean that on average, if go up one point on the Green Purchase Intention improves by 0.478 units, and it has the positive relationship with Green Purchase Intention and Consumer Decision Making.

Hence, the equation for Consumer Decision Making can be written as follows:

$$Y = 2.172 + 0.478(\text{Green Purchase Intention})$$

Multiple Linear Regression Analysis to further know the impact of each dimension under Green

Purchase Intention on Consumer Decision Making, the Multiple Linear Regression analysis was undertaken and it's shown in Table 8.

The non-standardized constant Statistic 2.214 show that the model would predict if all of the two dimension variables were Zero. The B coefficient for Behavioral Attitude is 0.080. This means that on average, if go up one point on, the Consumer Decision Making will change by 8%. The B for Subjective Norm is 0.396. This means that on average, if go up one point on Subjective Norm the Consumer Decision Making will change by 39.6%.

Therefore, the study can conclude that, each unit increase in Behavioral Attitude (X1) and Subjective Norm (X2), the Consumer Decision Making towards Green Electronic Product while increase by 0.08 and 0.396 units respectively.

Hence, the equation for Consumer Decision Making can be written as follows:

$$Y = 2.214 + 0.080(\text{Behavioral Attitude}) + 0.396(\text{Subjective Norm})$$

Hypothesis test and ANOVA test analysis is performed to find out the results for the following research question of, Does Green Purchase Intention can influences on Consumer Decision Making towards Green Electronic Products special reference to Manmunai North Divisional Secretariat in Batticaloa District?"

Therefore in order to ensure, whether Green Purchase Intention is significantly having an influence on Consumer Decision Making, the following hypothesis has formulated.

H₁: the Green Purchase Intention is significantly influence on Consumer Decision Making towards Green Electronic Products.

According to the Table 4 specifies, ANOVA test p-value is .000, hence it is less than 0.05. Therefore, the decision is reject the H₀. Also the Table 3 indicating that correlation between Green Purchase Intention Consumer Decision Making towards Green Electronic Product is .532, Strong positive relationships at the significant level of 0.000. Therefore there is enough evidence to conclude that there is a significant influence on Consumer Decision Making towards Green Electronic Products by Green Purchase Intention.

Table 4. Correlation between green purchase intention and consumer decision making

Pearson correlation		
Consumer decision making		
Green purchase intention	(Pearson correlation)	.532**
	Sig. (2-tailed)	.000

** Correlation is significant at the 0.01 level (2-tailed). List wise N=200
Source: Survey Data, 2016

Table 5. Partial correlation between each green purchase intention's dimensions and consumer decision making towards green electronic products

Green purchase intention's dimensions	Consumer decision making	
Behavioral attitude	Correlation	.293**
	Significance (2-tailed)	.000
Subjective norm	Correlation	.577**
	Significance (2-tailed)	.000

Source: Survey Data, 2016

Table 6. Simple linear regression analysis

R square	Adjusted R square	Change statistics		
		R Square change	F change	Sig.F change
.283	.279	.283	78.061	.000

a. Predictors: Green Purchase Intention (Constant)
b. Dependent Variable: Consumers Buying Decision Making
(Source: Survey Data, 2016)

Table 7. Linear regression analysis for green purchase intention and consumers decision making towards green electronic products

Model	Non-standardized Coefficients		Sig.
	B	Std. Error	
Constant	2.172	.229	.000
Green Purchase Intention	.478	.054	.000

Dependent Variable: Consumer Decision Making

(Source: Survey Data, 2016)

Table 8. Multiple regression analysis

R	R square	Adjusted R square	Std error of the estimate	Change statistics		
				R Square Change	F change	Sig.F.change
0586	.343	.337	026000	.343	51.510	0.000

a. Predictors: (Constant), Behavioral Attitude, Subjective Norm

b. Dependent Variable: Consumers Decision Making

(Source: Survey Data)

Table 9. Regression model

Model	Non-standardized coefficients		Sig.
	B	Std.error	
Constant	2.214	.220	0.000
Behavioral Attitude	0.080	.045	.078
Subjective Norm	0.396	.045	.000

a. Dependent Variable: Consumer Decision Making

(Source: Survey Data)

Table 10. ANOVA test

Model	Sum of quares	Df	Mean Square	F	Sig.
Regression	5.735	1	5.735	78.061	.000 ^a
Residual	14.546	198	0.073		
Total	20.281	199			

a. Predictors: (Constant), Green Purchase Intention

b. Dependent Variable: Consumer Decision Making

(Source: Survey Data, 2016)

4. CONCLUSION

This study considers Green Purchase Intention as an independent variable and as the Consumer Decision Making towards Green Electronic Products is dependent variable. The both variables individually have high level attributes of the customers and further it is illustrated by the Pearson's Correlation analysis, indicates that positive significant linear relationship between these two variables. The correlation coefficient (r) was 0.337 at the 1% level. This implies that Consumer Decision Making can be predicted with Green Purchase Intention. Based on the research findings Green Purchase Intention is where influencing more on the Consumer Decision Making towards Green Electronic Products. The most noteworthy findings were the

predictive model for buying decision of green electronic products explained almost 33.7% of the variance, thus clearly influenced by the Green Purchase Intention. The study is, particularly surveyed the Green Electronic Product consumers from the Manmunai North Divisional Secretariat area in Batticaloa District. A buyer's decisions can be influenced by Green Purchase Intention such it includes Behavioral Attitude and Subjective Norm. These dimensions having the positive influence on Consumer Decision Making towards Green Electronic Products. Yasmin and Marjan [5] have proven in their research paper of "Understanding Consumer Decision Making Towards Green Electronic Products", that Green Purchase Intension of Consumers has significantly influencing in their Decision Making towards Green Electronic Products at the

significant level of 0.000. This study also has the same positive effect of Green Purchase Intention on Green Electronic Products Buying Decision Making. The importance of knowledge and the impact of lack of knowledge in the decision-making process have been demonstrated in numerous studies [6]. Their studies also support this research finding. The consumption is beginning with the consumer decision making of each individuals and the buying decision of the consumers can influence by Green Purchase Intention. According to Chen [6] and Beckford et al. [7] research studies, GPI is a significant predictor of GPB, which means that purchase intention is positively affect the probability of a customer decision that he will buy Green Electronic Products.

Marketers and government will increase the visibility of Green Electronic Product in order to have a higher environmental awareness among consumers [8]. Marketers should motivate consumers to purchase green electronic product by posting some relevant environmental awareness advertisement in order to arouse the morality of human. In future Electronic Products manufactured must focused to introduce new effective Green Electronic Products, because it will be help to reduce environment issues and increase consumer health and usage. This study focuses on independent variable Green Purchase Intention to explain Consumer Decision Making towards Green Electronic Products and to explore the relationship between them. However, it is explicit that there may be other variable to be considered to explain this variation. Future studies can be devised to identify those additional variable for explaining the Consumer Decision Making.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Bloom ED, Jaypee S. Willingness to pay for environmental quality: Testable empirical implications of the growth and environment literature: Comment. *Journal in Economic Analysis & Policy*. 2004;3(1).
2. Conraud-Koellner E, Rivas-Tovar L. Study of green behavior with a focus on mexican individuals. *Business*. 2009;13:539-543.
3. Yam-Tang EPY, Chan RYK. Purchasing behaviors and perceptions of environmentally harmful Products. *Marketing Intelligence & Planning*. 1998;16(6):356-362.
4. Kim HY, Chung JE. Consumer purchase intention for organic personal care products. *Journal of Consumer Marketing*. 2011;28(1):40-47.
5. Yasmin H, Marjan NAMN. Understanding consumer decision making towards green electronic product. *South East Asia Journal of Contemporary Business, Economics and Law*. 2013;2.
6. Chen YS. Green organizational identity: Sources and consequence. *Management Decision*. 2011;49(3):384-404.
7. Beckford CL, Jacobs C, Williams N, Nahdee R. Aboriginal environmental wisdom, stewardship, and sustainability: Lessons from the Walpole Island First Nations, Ontario, Canada. *The Journal of Environmental Education*. 2010;41(4):239-248.
8. Rizwan M, Khan AA, Misbah KA, Nawaz I, Tahir S, Siddique A, Gillani SNA. Measuring the scope of green products in developing countries: A myth breaking study. *American Journal of Scientific Research*. 2013;85:32-46.

© 2017 Lavan and Kennedy; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<http://sciencedomain.org/review-history/21677>